

EFFECTS OF INTEREST RATES ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN KISII COUNTY, KENYA

^{1*} **Janeffer Murage**
muragejaneffer6@gmail.com

^{2**} **Dr. James Muya**
muyajn@gmail.com

^{3***} **Dr. Vitalis Mogwambo**
mogwambov@yahoo.com

^{1,2} *Kisii University, Kenya*

³ *Jaramogi Oginga Odinga University of Science and Technology, Kenya*

Abstract

Deposit Taking SACCOs play a significant role in the growth of the economy by allowing clients to deposit money. They also allow customers to take loans that they can use to invest in various ventures. DTSS adopt various strategies to ensure the loans issued to customers are well serviced and generate income to support effective and efficient operations of the DTSSs. Among the strategies adopted is the use of interest rates where customer deposits act as collateral. However, there is a dearth of literature on the effects of interest rates as a loan management strategy on the financial performance of Deposit Taking SACCOs in Kisii County. Therefore, this study sought to determine the effect of interest rates on financial performance of Deposit Taking SACCOs in Kisii County. To realize the objective of the study, a descriptive survey research design that comprised of the seven DTSSs operating in Kisii County was adopted. The DTSSs are: Gusii Mwalimu SACCO, Kenya Achievers SACCO, Wakenya Pamoja SACCO, Egerton SACCO, Mwalimu National SACCO, Afya SACCO and vision point SACCO. Census sampling technique was adopted. Seventy respondents were sampled and they included staff in the following cadres; Chief Executive Officers, Credit Managers, Finance Managers, Internal auditors and Loan field Officers. Questionnaires were utilised to gather primary data. Data was analyzed using descriptive and multiple regression. The study revealed that interest rate had a positive effect on financial performance of DTSSs in Kisii County. It was also revealed that all DTSSs adopted interest rate technique as a strategy to generate income from the loans issued. The study however recommends that DTSSs should review their interest rates regularly based on the cap set by the central bank, this will assist in controlling the borrowing rate, enhance the repayment of the loans hence improving the financial performance of the DTSSs and also allow the DTSSs to effectively compete with commercial banks.

Keywords: *Deposit Taking, Effects, financial performance, Interest rate, loans, SACCOs*

Introduction

The Deposit Taking Sacco Societies (DTSSs) is an integral part of the larger Sacco sub sector in Kenya which is majorly concerned with Deposit Taking and Non-Deposit Taking Sacco Societies. The deposits taken by the DTSSs are non-withdrawable but instead they are used as collaterals for loans and they are refundable upon withdrawal of membership (SASRA, 2014). When the DTSSs issue loans to clients, they ensure the loans are performing and profitable. This is done through charging interest for all loans issued. Interest rates are techniques adopted by lenders to ensure loans issued to customers are serviced and ensure the organization generates income to ensure efficient and effective operations. Various studies have been conducted on the

effect of interest rates on repayment of loans. A study by Al- Mamun, Sazali, Malarvizhi, and Mariapun (2011) revealed that there was a high loan repayment when the loan was interest free. Repayment performance is a key indicator of the financial performance of the DTSSs. However, the DTSSs need money to run their operations, therefore, they must charge interest to pay salaries, and manage their various operations. While Edakasi and Apunyo (2011) revealed that high interest rate significantly contributes to poor business performance among commercial banks. This therefore implies that DTSSs must strike a balance on how to strategically set desirable interest rates that could contribute to enhanced loan repayment and better business performance. It is on this background that the study sought to determine the effect of interest rates adopted by DTSSs in Kisii County on their financial performance.

Literature Review

Effect of Interest Rate on Financial Performance of DTSSs

Loans acquired to be put in long term capital investments are usually repaid in a series of monthly, semi-annual and annual repayments. The amount to be paid is usually obtained using various ways; equal total payments per period (amortization), equal payments over specified time period with a balloon payment due at the end to repay the balance and equal principal payments per time period. When the first method is used, the payment is inclusive of accrued interest on the unpaid balance together with some principal. The second way puts into consideration of accrued interest on the unpaid balance plus equal amount of principal and lastly the balloon method is meant to reduce the payment period (Gutierrez and Dalsted, 2012).

Interest can be categorized as either short-term or long term. Long term loans have interest rates which seem to be constant within the repayment period while the short term loans keeps on changing from time to time. Generally, interest rates for long-term loans tend to be lower as compared to shorter loans which are slightly higher. Traditional finance theory puts it clear that as the loan size expands interest rate tend to rise in order to accommodate the increased risks associated with the loan. On the other hand, interest rates in local banks are well explained by the characteristics of the borrower. However, for international banks, interest rates are determined by considering the characteristics of operational factors. Interest rates are a major concern to both lenders and borrowers in any given financial institutions. Increased interest rates in financial institutions results to reduced customer borrowing and loan repayment capacity leading to increased number of loan defaulters (Edakasi and Apunyo, 2011).

The potential impact of interest rates on financial performance has been a great concern of the policy makers in various financial institutions and bankers. The earnings of DTSSs and other financial institutions are greatly affected by uncertain changes in interest rates. Therefore, interest risk comes as a result of exposing the financial institutions profitability to volatile interest rates. Hence DTSSs have a great challenge since they provide financial services to the poor and take care of their costs while aiming at escaping bankruptcy (Mwangi, 2014). The firm's financial performance is highly influenced with risk and growth. The market value is conditioned with the company's results; therefore the company market value can be changed by the level of risk exposure (Appiah, 2011).

Kariuki and Ngahu (2016) conducted a study on effect of interest rates on loan performance of Microfinance Institutions in Naivasha Sub-County, Kenya. Using survey research design, he connoted that there was a strong relationship between loan repayment and the interest rates charged by SACCOs. The study further revealed that the interest rates charged on the borrowed loan lead to loan defaulting which in turn leads to loan non-performance. Customers also default in loan repayment because short term loans attract higher interest rates as compared to long term loans (Kariuki and Ngahu, 2016).

Ndegwa, Waweru and Huka (2016) conducted a study that sought to determine the influence of interest rate on financial performance of Micro Financial Institutions (MFIS) in Imenti North Sub-county. This study adopted a descriptive survey research design. The study consisted of 42 correspondents from the 14 MFIS operating in Imenti North Sub County. Correlation and regression results revealed that interest charged by MFIs significantly influenced their financial performance. To ensure uptake of loans by DTSSs, the DTSSs should charge interest rates within the range being charged by commercial banks.

Mwangi (2014) inquired into the influence of lending rates on financial performance MFIs in Kenya. Multivariate regression model was used to analyze the data. It was reported that the relationship between lending rates and financial performance of MFIs was strong and positive. This study further revealed that MFIs are mainly established to serve the poor populace by giving them cheaper credit. However, due to high interest rates charged by MFIs hinder the poor from accessing credit which has resulted in poor financial performance of MFIs due to low uptake of loans.

Ridder (2010) conducted a study to determine whether the interest rates that were charged by MFIs were too high for the poor or not. It was revealed that due to high operational costs, MFIs are forced to charge high interest rates so that they can offset their expenses. However, Ridder (2010) argues that high interest rates work against the core purpose of establishing DTSSs which is to serve the poor. The study concluded that the high interest rates are not a true reflection of the profitability of the MFIs since the money is used to offset the high operational costs. Therefore, the present study seeks to provide empirical evidence on the relationship between interest rate charged and financial performance of DTSSs in Kisii County.

Chikalipah (2014) conducted a study to determine the determinants of MFIs lending interest rates in sub-Saharan Africa. This study utilized the unbalanced panel data comprising of 292 MFIs drawn from 34 Sub-Saharan African (SSA) countries between 2003 to 2011. Findings revealed that the following factors influence lending rates in SSA; finance costs, operating expenses, return on assets and inflation. Findings in this study did not reveal whether lending rates influenced MFIs financial performance or not. Therefore, there is need to conduct a study to determine the effect of interest rates on the financial performance of DTSSs.

A study conducted by Onyekachi and Okoye (2013) sought to determine the influence of lending rate on the financial performance of Nigerian Deposit Money Banks between 2000 and 2010. To arrive at the conclusions, data econometrics and time series analysis were utilized. It was reported that bank lending rate positively and significantly influenced the financial performance of Nigerian deposit money banks.

Financial Performance

Financial performance will entail the measurement of return on investment, level of profitability, and return on asset (Gatuhu, 2013). Level of profitability was used to measure financial performance among micro-finance institutions in a study done by Muiro, Oluoch and Ajang (2018). A number of researchers utilised profitability as a measure of financial performance in the study on the effect of loan management on organizational performance among commercial banks (Muiro, Oluoch and Ajang, 2018; Nduwayo, 2015). They revealed that when loans are effectively managed, the return on investment is higher which is further reflected on the level of profits generated by the commercial banks. This study therefore utilised staff perception to determine the level of profitability of the DTSSs. In particular, emphasis was laid on the perceived effect of interest rates on financial performance of the DTSSs in Kisii County.

Research Methodology

This study adopted a descriptive survey research design of the seven Deposit Taking SACCOs operating in Kisii County; Gusii Mwalimu SACCO, Kenya Achievers SACCO, Wakenya Pamoja SACCO, Egerton SACCO, Mwalimu National SACCO, Afya SACCO and vision point SACCO (SASRA, 2017). Seventy staff were sampled through Census sampling technique and it included all staff in the following cadres; Chief Executive Officers, Credit Managers, Finance Managers, Internal auditors and Loan field Officers. Census sampling technique was adopted because the target population was deemed small, therefore there was need to include everybody in the study since Mugenda and Mugenda (2003) asserts that in small populations all targeted units should be involved in the study. Table 1 depicts the target population of the study based on different cadres in the seven DTSSs operating in Kisii County. Data was collected using questionnaire. Validity and reliability of the questionnaire were determined before the questionnaire was distributed to research participants. Experts reviewed the questionnaire and confirmed that the questions were a valid measure of what was being measured thus ensuring its validity (Joppe, 2000). Split half method was used to calculate Cronbach’s alpha from the data that was collected from a pilot study in Wakenya Pamoja SACCO in Nyamira County. It generated a Cronbach value of 0.65 which was acceptable because Creswell (2016) reports that a Cronbach value of 0.60 is acceptable for a scientific study. The gathered data was analysed using both descriptive (mean, percentages and standard deviation) and inferential statistics (multiple regression).

Table 1: Targeted population

DTSSs Name	Chief executive officer	Credit manager	Finance manager	Internal auditor	Field officers	Total
Gusii Mwalimu	1	1	1	1	6	10
Kenya Achievers	1	1	1	1	5	9
Wakenya Pamoja	1	1	1	1	9	13
Egerton	1	1	1	1	2	6
Vision Point	1	1	1	1	5	9
Mwalimu National	1	1	1	1	11	15
Afya	1	1	1	1	4	8
Total	7	7	7	7	42	70

Source: Field Data

To determine the effect of interest rate on financial performance of DTSSs, the following model was utilised;

$$Y = \beta_0 + \beta_1 X_1$$

Where Y=Financial Performance of DTSSs (profitability level).

β_0 , and β_1 = regression coefficients

X_1 -Interest rate

Findings and Discussions

Designation of Respondents

Participants were requested to indicate their designation; findings are presented in figure 1.

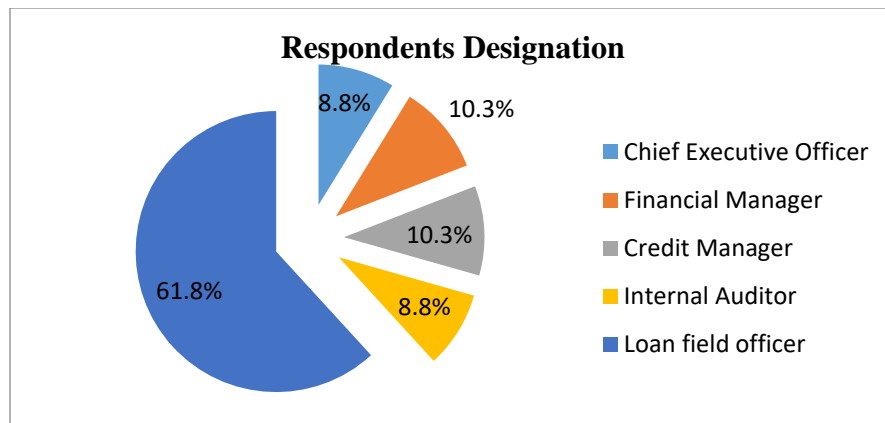


Figure 1: Designation of the Respondents

Source: Field Data (2018)

Figure 1 reveals that 61.8% of the respondents were loan field officers, financial managers and credit managers represented 10.3% of the respondents respectively, while internal auditors and chief Executive Officers represented 8.8% of the respondents respectively. This implied that the respondents were experienced enough to provide informed knowledge on effects of interest rates on financial performance in the DTSs in Kisii County.

Effects of Interest Rates on Financial Performance of DTSs

Table 2 shows the analysis of various indicators of interest rates in relation to the financial performance of DTSs in Kisii County, Kenya. The analysis was based on a five point Likert scale as shown: Strongly Agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1).

Table 2: Showing effects of interest rates on financial performance

	N	Minimum	Maximum	Mean	Std. Deviation
The SACCO uses interest rate as the most appropriate loan management technique	68	4.00	5.00	4.7206	.45205
The SACCO uses interest rates to control loan volume more so by increasing or decreasing interest rates	68	1.00	5.00	4.5000	.76295
Volatile interest rates affects the profitability of the SACCO	68	1.00	5.00	4.3235	.90506
Different loan products attract different interest rates depending on the risks involved	68	1.00	5.00	4.2941	.79286
Setting of interest rate depends on the characteristics of the borrower	68	1.00	5.00	4.1029	1.03865
Setting of interest rate depends on the characteristics of operational factors	68	1.00	5.00	4.0294	1.20905
Short term loans attracts high interest rates which in turn leads to high rate of non-performing loans	68	1.00	5.00	4.0147	.98485
Interest rate risks is highly considered when approving and disbursing loans	68	1.00	5.00	3.7059	1.19774
Aggregate mean and Standard deviation				4.211	0.91790125

Source: Field Data (2018)

From table 2, the SACCO uses interest rate as the most appropriate loan management technique had the highest mean of 4.7206, the SACCO uses interest rates to control loan volume by increasing or decreasing interest rates had a mean of 4.500. Volatile interest rates affects the profitability of the SACCO had a mean of 4.3235, different loan products attract different interest rates depending on the risks involved and had a mean of 4.2941, setting of interest rate depends on the characteristics of the borrower had a mean of 4.1029, setting of interest rate depends on the characteristics of operational factors had a mean of 4.0294, Short term loans attracts high interest rates which in turn leads to high rate of non-performing loans had a mean of 4.0147 and Interest rate risks is highly considered when approving and disbursing loans had a mean of 3.7059.

According to Oxford and Burry-Stock (1995) if the mean score is between 3.5-5.0 it is considered to be high, medium if it is between 2.5-3.4 and low if it is between 1.0-2.4. Therefore, if the mean scores are ≥ 3.5 , then it means that the level of agreement with the statements that sought to determine the influence of interest rate on financial performance was high. The average mean for all the variables under interest rate was 4.211, therefore showing a high level of agreement with the statements. This can be taken to imply therefore that interest rate has an influence on financial performance of DTSSs.

Multiple Regression Analysis

Beta Coefficients

The beta coefficient of the variables from the analysis are presented in Table 3. The regression model was written as: Financial Performance = $\beta_0 + \beta_1 X_1$

Table 3: Coefficients

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.634	.802		.790	.432
	Interest rates	.137	.174	.118	.787	.434

a. Dependent Variable: Financial Performance of DTSSs

$$Y = 0.634 + 0.137X_1$$

The Beta Coefficients in the regression model show that interest rate had a positive relationship with financial performance. Additionally, the effect of interest rate on financial performance was not statistically significant because the p-values was greater than 0.05 at 0.434. The beta coefficients for interest rate were 0.137 which implied that a unit change in interest rate resulted into a 0.137 positive change in the financial performance of the DTSSs. Therefore, it was concluded that interest rate had a positive effect on the financial performance of DTSSs. However, the effect is not significant because the p-value is 0.434 which is greater than 0.05. These finding concur to findings by Ndegwa, Waweru, and Huka (2016) that reported that interest charged by MFIs influenced their financial performance. However, the study by Ndegwa, Waweru, and Huka (2016) had a significant influence unlike the present study whose influence was not significant. This finding contradicted findings by Mwangi (2014) and Onyekachi and Okoye (2013) that revealed that there is a strong and significant relationship between lending rates and financial performance of MFIs and Nigeria deposit money banks respectively. This finding agreed with findings by Kariuki and Ngahu (2016) that interest charged by micro-

finance institutions in Naivasha had an influence on loan repayment which further influenced financial performance of the MFIs. If the interest rate charged was higher, the level of loan default will be higher therefore poor financial performance. However, the study by Kariuki and Ngahu (2016) had a significant relationship unlike the current study. Therefore, interest rate charged by DTSs can determine whether they succeed financially or not. However, there is need for DTSs to charge interests within the range of commercial banks so that they can gain a competitive advantage and improve loan uptake.

Conclusion

This study sought to establish the effect of interest rate on financial performance of DTSs in Kisii County. Results revealed that interest rate had a positive effect on financial performance of DTSs. However, this influence was not statistically significant. The conclusion that interest rate had a positive effect on financial performance of DTSs was based on the result of the regression analysis that revealed that a unit change in interest rate resulted in a 0.137 positive change in the financial performance of DTSs. This positive effect was not significant because the p-value of 0.434 was greater than 0.05.

Recommendations

DTSs should set their interest rates within the rates that are set by commercial banks. This will ensure they are competitive therefore enhancing loan uptake. Additionally, the DTSs should set their interest rates within the ranges that are set by the Central bank of Kenya. This will enhance adequate control of the borrowing and repayment of loans thus enhancing financial performance of DTSs.

References

- Al- Mamun, A., Sazali, A.W., Malarvizhi, C.A., & Mariapun, S. (2011). *Examining the Critical Factors Affecting the Repayment of Microcredit Provided by Amanah Ikhtiar Malaysia*. *International Business Research*, 4(2), 93-102.
- Appiah, W. B. (2011). *Factors Influencing Loan Delinquency in Small and Medium Enterprises in Ghana Commercial Bank Ltd. (Unpublished Masters Theses, Kwame Nkrumah University of Science and Technology)*.
- Chikalipah, S. (2014). *What influences Microfinance Lending Interest Rates in Sub-Saharan Africa*. *Executive Business Centre, Bournemouth University, Bournemouth, UK*.
- Creswell, J.W. (2016). *A concise introduction to Mixed Methods*. *Research Sage Publication Michigan, USA*.
- Edakasi, S., & Apunyo, B. (2011). *Effect of Interest Rates on Loan Repayment: A Case Study of Equity Bank, Masindi Branch. (Unpublished Undergraduate Theses, Makerere University)*.
- Gatuhu, R. N (2013). *The effect of credit management on the financial performance of Microfinance Institutions in Kenya*. (Unpublished Masters Theses, University of Nairobi).
- Gutierrez, P.H., & Dalsted, N.L. (2012). *Long-Term Loan Repayment Methods. (Unpublished Masters Theses, Colorado State University)*.
- Joppe, M. (2000). *The Research Process*. Available at: <http://www.ryerson.ca/~mjoppe/rp.htm>. [Retrieved on 6 November, 2017].

- Kariuki, M.W., & Ngahu, S. (2016). *Effect of Interest Rates on Loan Performance of Micro-finance Institutions in Naivasha Sub-County, Kenya. International Journal of Economics, Commerce and Management, 4(4), 549-566.*
- Mugenda, O.M., and Mugenda, A.G. (2003). *Research methods: Quantitative and qualitative Approaches. Nairobi: African Centre for Technology Studies.*
- Muiru, M.S, Oluoch, W.O. Ajang, J.J. (2018). *Effect of loan portfolio management on the profitability of Deposit Taking Microfinance Institutions in Nairobi, Kenya. International Journal of Economics, Commerce and Management, 4(2).*
- Mwangi, N. S. (2014). *The effect of lending interest rates on financial performance of deposit taking micro finance institutions in Kenya. (Unpublished Master of Science in Finance thesis, University of Nairobi).*
- Ndegwa, C.M., Waweru, G., Huka, G. (2016). *Influence of interest rate on financial performance of MFIS in Imenti North Sub County, Kenya. International Journal of Economics, Commerce and Management, 4 (11), 289-304.*
- Nduwayo, A. (2015). *Effect of loan management on the financial performance of Commercial Bank: The Case of Bank of Kigali (B.K). East African Journal of Science and Technology, 5(1).*
- Onyekachi, R., & Okoye, V. (2013). *Effect of bank lending rate on the performance of Nigerian deposit money banks. (Unpublished Masters research project, Ebonyi State University, Nigeria).*
- Oxford, R.L., and Burry-Stock, J.A. (1995). *Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL). System, 23(1), 1–23.*
- Ridder, M. D. (2010). *Microfinance in Tanzania: Are the interest rates that MFIs charge excessive and too high for the poor? (Unpublished Master's Thesis, Universiteit Van Amsterdam).*
- Sacco Societies Regulatory Authority (SASRA.) (2014). *An annual report on the operations and performance of Deposit-Taking Sacco Societies (DT-SACCOs) in Kenya. SASRA.*
- Sacco Societies Regulatory Authority (SASRA). (2017), *schedule of SACCOs licensed to operate in Kenya. Available at: <http://www.sasra.go.ke/index.php/resources/sacco-supervision-reports/category/15-licensed-saccos#.W3AUd7hRXIU> [Retrieved on 10 January 2018].*