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INFLUENCE OF LOAN INSURANCE POLICY ON FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVES IN KAKAMEGA COUNTY, KENYA

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ABSTRACT

This study investigated the influence of loan insurance policy on financial performance SACCOs in Kakamega County, Kenya. The study adopted descriptive survey and targeted 143 senior management staff from 13 SACCOs located in Kakamega County from where a sample size of 105 was selected using stratified random sampling technique. The study used structured questionnaire as the main research instrument. A pilot study was conducted among 20 senior management staff of SACCOs in Vihiga County, Kenya, so as to check research instrument's validity and reliability. Statistical Package for Social Sciences version 24 was used in data analysis. Descriptive statistics (percentages, frequencies, mean, and standard deviations) were computed. A total of 97 respondents out of the sampled 105 respondents returned completely filled questionnaires representing a response rate of 92.4%, thus good for generalizability of research findings to a wider population. The results showed that loan insurance policy significantly influences financial performance of SACCOs in Kakamega County. That is; loan insurance policy (independent variable) was significant predictor of SACCO performance (dependent variable). The study concluded that loan insurance policy impacts positively on SACCO's financial growth in the sense that convenient loan insurance rates or premiums can assist to cover non-performing loans which subsequently impact on financial growth of a SACCO. It was recommended that SACCOs should embrace this new concept of loan insurance covers as strategic form loan loss provisioning so as to check on non-performing loans ratios which always influence financial performance of SACCOs.

Key Words: Loan Insurance, Financial Performance of SACCOs

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INTRODUCTION

In relation to SACCO financial performance, Keiteny (2013) asserts that a loan either long term or short term is a major asset and revenue generator of a SACCO which affects the financial performance of all types of SACCOs. The financial performance of financial institutions depends on return on assets (ROA) invested in the business. Therefore when analyzing these SACCOs' financial performance the researcher is concerned with loans advanced, the non performing loans and insurance premiums recovered in a given financial year, all these expressed to total assets and total value of loans respectively.

Locally, the Sacco industry is part of the cooperative sector in Kenya, which has impacted on lives of many Kenyans over the years. The sector may be categorized into financial and non-financial cooperatives. Non-financial cooperatives deal with the marketing of members' produce and services such as dairy, livestock coffee, tea, handicrafts and many more similar cooperatives. On the other hand financial cooperatives comprise Sacco's, housing and investment cooperatives. The Deposit-taking Sacco Societies (DTSs) is part of the larger Sacco sub-sector in Kenya which comprises the deposittaking and the non-deposit taking Sacco Societies. The non-deposit taking segment is composed of those Sacco Societies whose business is limited to mobilization of deposits (non-withdrawable) for purposes of lending to members. The deposits are non-withdrawable in that they may be used as collaterals for loans only and can only be refunded upon the member's withdrawal. (SACCO supervision annual report, 2015).

In Malaysia, for the period 1996 to 2002 a study done by (Ahmad *et al.*, 2004) compared social SACCOs and conventional SACCOs. Their results revealed that variables namely, management efficiency and weighted average of total assets had positive relationships with loan defaulting. However, the study didn't pin point how specific loan policies on loan default costs in the SACCO portfolios affect their financial performance.

Magali (2014) on effectiveness of loan portfolio management in Rural SACCOS in Tanzania, disclosed that the quality of loan portfolio was positively influenced by the loan size while the influence of gender and location of the borrowers were not significant. The study further observed that rural SACCOS used portfolio diversification, collateral, guarantors, letter from the village/ward government offices and the affidavit from the lawyer as credits risk mitigation techniques. The findings further revealed that revealed that fluctuation of the price of agricultural produce threatened the quality of loan portfolio. In view of this, the research recommended that SACCOS should seek the effective insurance services, use the effective software for loan management, search the market for agriculture produce, write off non repaid loans, enhance the repayment of overdue loans and revise the loan policies in order to improve the quality of the loan portfolio in the SACCOS.

Statement of the Problem

SACCOs in developing countries have remained the most popular instrumental players in the provision of financial products and other services compared to any other financial institutions. They provide savings, credit and other investment support to a large portion of the population. This is why SACCOs in different sectors and environments must develop loan policies to guide their operations, ensure best business practices are adhered to, and guarantee maximum loan recovery (Ergetew, 2015).

However, most researches on SACCO performance have been on credit management practices with little regard to loan policies. For instance Council of Credit Unions, (2009) indicated that SACCOs in rural areas have been experiencing problems including diseconomies of scale of credit, high interest rate on loan, and very short-term loans. Such problems have caused high rate of default in most developed economies without knowing that crafting viable loan policies can help solve such problems. Magali (2014) on effectiveness of loan portfolio management in rural SACCOS in Tanzania disclosed

that the quality of loan portfolio was positively influenced by the loan size and recommended that SACCOs should revise the loan policies in order to improve the quality of the loan portfolios.

Further, most researches on loan policies have been based in banks and Micro finance institutions which have even yielded inconclusive study results (Pandey (2004); Agarwal (2009); Ojeka (2012); Byusa and Nkusi (2012); Arishaba (2011); Sindani (2012); Moti, et al. (2012); Tengey (2014), with few empirical studies in SACCOs (Maiti, 2015). It is therefore against this backdrop that this study endeavored to investigate the influence of loan policies on financial performance SACCOs in Kakamega County, Kenya.

Objectives of the Study

The general objective of this study was to evaluate the influence of loan insurance policy on financial performance SACCOs in Kakamega County.

The research hypothesis was;

 $\mathbf{H_o}$: Loan insurance policy does not significantly influence financial performance of SACCOs in Kakamega County.

LITERATURE REVIEW

Balanced Portfolio Theory

The portfolio theory approach is also relevant and plays an important role of financial lending institutions and loan performance (Nzongang & Atemnkeng, 2006). According to the Portfolio balance model of asset diversification, the optimum holding of each asset in a wealth holder's portfolio is a function of policy decisions determined by a number of factors such as the vector of rates of return on all assets held in the portfolio, a vector of risks associated with the ownership of each financial assets and the size of the portfolio. It implies portfolio diversification and the desired portfolio composition of commercial banks are results of decisions taken by the financial institutions management. Further, the ability to obtain maximum profits depends on the feasible set of assets and liabilities determined by the

management and the unit costs incurred by the financial lending institutions for producing each component of assets (Nzongang &Atemnkeng, 2006). This theory applies in this study in that, financial performance of SACCOs can be determined by among other factors, loan portfolio issues such as lending, loan collection, loan insurance and loan security policies.

Empirical Review

Nizar and Javed (2007) did a study on the use of loan security in terms of collateral in the Islamic microfinancing sector. The Islamic system of banking and finance, in its essence, is believed to contribute to the emergence of a just and growing healthy economy by giving small enterprises the opportunity to obtain finance on participatory basis in which a collateral would not be necessary. Muslim economists argue that since the Islamic system is a system based on participatory financing then Islamic banking would not depend on tangible collateral as much as Interest based/Western banking. Western/Interest based banking system generally provides credit to those clients who are able to offer sufficient tangible collateral that gives them legal entitlement to tangible assets in the event of default. However, in the long run this banking policy further widens the already large income gap between the upper and lower classes of the society. Furthermore, the existence of collateral requirements makes banks indifferent to the efficiency or success of the business being financed by the loan, as many inefficient micro-businesses may secure credit by the virtue of collateral. Conversely, many efficient micro-businesses/ microentrepreneurs may not find access to credit because they are not able to provide sufficient collateral (Nizar & Javed, 2007).

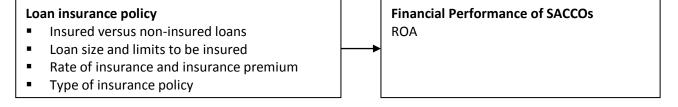
Therefore, once collateral requirements are removed, it becomes crucial for MFIs to screen projects on the basis of their feasibility; if a project is unsuccessful then it will not be able to make repayments to the bank hence the bank is bound to screen projects vigilantly. There has been a debate among the Muslim economists on whether

collateral is required for Islamic financing activities; Muslim economists have given theoretical justifications that as the profit and loss sharing arrangements, like the equity financing, implies risk sharing, it also by-passes the collateral requirements because in their views, this would improve the efficacy of the credit market (Nizar &Javed, 2007).

In India, Muslim Funds, registered under the Charitable Trust Act of the Government of India, are not entitled by rule to invest depositors ' money. Furthermore, these Muslim Funds do not practice any of the Islamic principles of financing such as mudaraba, musharaka or murabaha. The study has shown that as inferred by the afforested information, Muslim Funds in India are heavily dependent on the collateral for their existence. Since they operate under the rules of the Charitable Trust Act rather than the banking laws of India, they

are required to collect collateral or any type of special security (Segrado, 2005).

Central Bank of Sudan (2007) asserts that the and local international experience demonstrated that the best type of guarantee is a viable project, a good client and close follow-up. Hence any recommendations advocating the adoption of lenient collaterals as a form of extending outreach must be supported by the implementation of best practice in terms of loan analysis, loan product design, risk and delinquency management procedures, actions before and after loan disbursement, and close monitoring. To adopt such practices, banks interested in financing SACCOs should restructure their services in an efficient manner and adopt mechanisms, which make them nearer to the targeted clients. Intensive training to the sales force will be crucial for ensuring proper assessment of projects' viability and client's credibility.



Independent variables

Figure 1: Conceptual Framework

METHODOLOGY

This study utilized descriptive survey design. That is, a descriptive survey design helps the researcher to collect information that describe, explore and help the investigator understand social life. The target population of the study was 143 senior employees of all the 13 SACCOs in Kakamega County. The sample size of this study was determined by Taro Yamane's proportional sampling technique formula. A sample size of 105 senior management staff was selected using stratified random sampling technique. The study used structured (close ended) questionnaire to get uniform responses from respondents. The data collection tool adopted a 5point likert scale where the respondents selected

Independent Variable

their appropriate response from the structured questionnaires. A pilot study was conducted on 10 senior management staff of SACCOs in Vihiga County. The quantitative data collected was analyzed by the use of descriptive statistics using Statistical Package for Social Sciences (SPSS 24) and presented through percentages, means, standard deviations and frequencies.

FINDINGS

Loan Insurance Policy and financial performance of SACCOs

This study assessed objective the influence of loan insurance policy on financial performance of SACCOs in Kakamega County, Kenya. Respondents

were asked to respond to 6 statements namely; (i) Insured loans are easily recovered that non-insured loans (ii) The rate of insurance affects loan performance (iii) Loan insurance terms affects loan performance (iv) Type of insurance policy and

premium influences loan performance (v) Loan insurance restrictions affects loan performance and (vi) Generally loan insurance policy influences loan repayment. The results were presented in the table 1.

Table 1: Descriptive Statistics; Loan Insurance Policy

Frequency and Percentage (%)										
Statement	5	4	3	2	1	Mean	Std. Dev			
1. Insured loans are easily recovered that non-insured loans	5(5.2)	30(30.9)	23(23.7)	22(22.7)	17(17.5)	2.84	0.883			
2. The rate of insurance affects loan performance	13(13.4)	48(49.5)	4(4.1)	27(27.8)	5(5.2)	3.38	0.847			
3. Loan insurance terms affects loan performance	15(15.5)	55(56.7)	8(8.2)	10(10.3)	9(9.3)	3.39	0.952			
4. Type of insurance policy and premium influences loan performance	12(12.4)	58(59.7)	9(9.3)	12(12.4)	6(6.2)	3.60	0.857			
5. Loan insurance restrictions affects loan performance	10(10.3)	51(52.6)	17(17.5)	15(15.5)	4(4.1)	3.49	0.812			
 Generally loan insurance policy influences loan repayment Valid N (listwise) 97 Grand mean =3.373 	15(15.5)	50(51.5)	13(13.4)	10(10.3)	9(9.3)	3.54	0.955			

From table 1 there were mixed reaction about the statement that insured loans are easily recovered that non-insured loans because while 30.9% of respondents agreed, 5.2% strongly agreed while 23.7% were uncertain and 22.7% disagreed. This meant that possibly most SACCOs in Kakamega County had not yet implemented insurance policy on loans; because a small percentage on loan insurance cover can be viewed as hidden deductions by customers who might opt out from SACCOs that have implement the insurance policy. However, a good percentage of respondents agreed (49.5%) and strongly agreed (13.4%) that the rate of insurance affects loan performance. This implied that if the rate of loan insurance cover is high, most customers would experience difficulties opportune repayment of loans thus contributing to high loan delinquency rates. This was closely supported by most respondents who agreed (56.7%) and strongly agreed (15.5%) that loan insurance terms affects loan performance; while 52.6% and 10.3% of respondents agreed and strongly agreed respectively that loan insurance

restrictions affects loan performance. Therefore, perceived harsh loan insurance terms have adverse effect on affected SACCOs total loan ratio since few customers would come to SACCOs with harsh loan insurance terms to secure a loan.

Further, most respondents agreed (59.7%) and strongly agreed (12.4%) that type of insurance policy and premium influences loan performance; implying that loan insurance policy with convenient rates or premiums attract more customers compared to loan insurance policy with unbearable rates or premiums. In Summary, most respondents agreed (51.5%) and strongly agreed (15.5%) that generally loan insurance policy influences loan repayment. Some SACCOs have adopted this policy but inform of non-refundable risk deductions on monthly basis without members feeling that they are actually paying an insurance cover for their membership to the SACCO.

Inferential Analyses

Linear Regression Analysis

Linear regression analyses were computed to test the study hypotheses; that is, to test the influence of loan insurance policy on financial performance (ROA) of SACCOs in Kakamega County, Kenya.

Table 2: Direct effect of Loan Insurance Policy on financial performance of SACCOs

Model Summary

Change Statistics Std. Error of Adjusted R the Square F R Sig. F Change df1 Model R R Square Square **Estimate** Change df2 Change 1 .815^a .665 .661 .66135 188.416 1 95 .000 .665

ANOVA ^b							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	82.410	1	82.410	188.416	.000ª	
	Residual	41.551	95	.437			
	Total	123.961	96				
		•	Coeffic	cients ^a	•		

		Unstanda	rdized Coefficient	Standardized s Coefficients			
Model		В	Std. Error Beta		t	Sig.	
1	(Constant)	.569	.212		2.677	.009	
	Loan Insurance Policy	.838	.061	.815	13.726	.000	

a. Dependent Variable: ROA

The model summary in table 2 showed that R squared was 0.665 which implied that 66.5% of variation in the financial performance of SACCOs in Kakamega County was explained by loan insurance policy while other factors not in the model accounted for 33.5% variation in the financial performance of SACCOs in Kakamega County. Further coefficient analysis revealed that there exists a positive and significant effect of loan insurance policy on the financial performance of SACCOs in Kakamega County (β = 0.838 (0.061); at p<.01). The results therefore implied that a single reinforcement of loan insurance policies by SACCOs in Kakamega County would lead to 0.838 unit improvement in the financial performance of SACCOs in Kakamega County. Therefore, the linear regression equation model was;

 $Y = 0.569 + 0.838X_3 + \varepsilon$ Where: Y = financial performance of SACCOs in Kakamega County

X₃ = loan collection policy

 ε = error term.

Hypothesis testing

Study Hypothesis H_0 stated that there is no significant relationship between loan insurance policy and financial performance of SACCOs in Kakamega County, Kenya. The study results indicated that there exists a positive and significant influence of loan insurance policy on the financial performance of SACCOs in Kakamega County, Kenya (β = 0.187 (0.085), at p<0.01. **Hypothesis** H_0 was thus rejected. The results therefore implied that a single reinforcement of an affordable loan insurance policy by SACCOs in Kakamega County, Kenya would lead to 0.187 unit growth in the financial performance of SACCOs in Kakamega County, Kenya. These study results were supported by Ayay & Sene, (2013) who asserted that loan

insurance acts as a buffer against loan defaulting yet this area has not really been researched on.

CONCLUSIONS AND RECOMENDATIONS

Research hypothesis H₀ stated that loan insurance policy does not significantly influence financial performance of SACCOs in Kakamega County. From descriptive statistics, there were mixed reaction about the statement that insured loans were easily recovered that non-insured loans while 30.9% of respondents agreed, 5.2% strongly agreed while 23.7% were uncertain and 22.7% disagreed. This meant that possibly most SACCOs in Kakamega County had not yet implemented insurance policy on loans; because a small percentage on loan insurance cover could be viewed as hidden deductions by customers who might opt out from SACCOs that had implement the insurance policy. However, a good percentage of respondents agreed (49.5%) and strongly agreed (13.4%) that the rate of insurance affects loan performance. This implied if the rate of loan insurance cover is high, most customers would experience difficulties opportune repayment of loans thus contributing to high loan delinquency rates. This was closely supported by most respondents who agreed (56.7%) and strongly agreed (15.5%) that loan insurance terms affects loan performance; while

52.6% and 10.3% of respondents agreed and strongly agreed respectively that loan insurance restrictions affects loan performance. Therefore, perceived harsh loan insurance terms would have adverse effect on affected SACCOs total loan ratio since few customers will come to SACCOs with harsh loan insurance terms to secure a loan.

The study concluded that loan insurance policy also impacts positively on SACCO's financial growth in the sense that convenient loan insurance rates or premiums can assist cover non-performing loans which would subsequently impact on financial growth of a SACCO.

The study recommended that SACCOs should embrace this new concept of loan insurance covers as strategic form loan loss provisioning so as to check on non-performing loans ratios which always influence financial performance of SACCOs.

Areas for further research

A comparative study can be done on SACCOs but purely using secondary data for a span of like five years to assess the trend in SACCOs' financial performance before and after implementing particular loan policies. Another study can be done using non-financial measures of SACCO performance so as to compare results.

REFERENCES

- Adams, J., Khan, H. ., Raeside, R., & White, D. (2007).Research methods for graduate business and social science students. *New Delhi: SAGE Publications India Pvt Ltd.*
- Agarwal, S., Ambrose, B. W., Chomisengphet, S., & Liu, C. (2009). *Journal of Financial Intermediation, 15, 444* 469.
- Ahmad, N. H. & Nizam.A, S. 2004. Key Factors Influencing Credit Risk of Savings And Credit Co-Operative Society's Savings And Credit Co-Operative Society: A Malaysian Case. *Review of Financial Economic, Savings and Credit Co-Operative Society's Research And Training. (IRTI).*
- Arishaba (2011) Debt policy and performance of MFIs: Evidence from Uganda. *Journal of Risk Finance, 8,* 364-379.
- Asantey T & Tengey G (2014). External Factors Affecting the Growth of Micro and Small Enterprises (MSEs) in Ethiopia: A Case Study in Shire Indasselassie Town, Tigray. European Journal of Business and Management, 6(34)

- Altman, (1971). "Argentinean Banks, Credit Growth and the Tequila Crisis: A Duration Analysis. 21(6, 849-870.
- Atieno, R. (2006). Femake participation in the labour market: the case of the informal sector. *Journal of Financial Intermediation*, 15.
- Ayayi, A. G., & Sene, M. (2010). What Drives Microfinance Institution's Financial Sustainability. *The Journal of Developing Areas.* 44(1), 303-324.
- Babbie, E. (2002). The basics of social research. Belmont: CA: Wadsworth Publishing.
- Balkenhol, B. 1999. Credit Unions and the poverty challenge: Extending outreach, enhancing sustainability. Geneva: International Labour Organization.
- Binks, M.R. & Ennew, C.T. (1992) "Information asymmetries and the provision of finance to small firms" *International Small Business Journal 11, No.1 pp 35-46.*
- Binks &Ennew. (1997) Small business and relationship banking: the impact of participative behavior, entrepreneurship; *Theory and practice vol. 21, No.4 pp 83- 92.Ed Macmillan*
- Brown, S. ., Venkatesh, V., &Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems (1st ed., Vols. 1–37). MIS Quarterly.
- Byusa & Nkusi (2012), The Impacts of Credits Risk Management on Profitability of Rural Savings and Credits Cooperative Societies (SACCOS). *International Journal of Management Sciences and Business Research*, 2(12).
- Central Bank of Sudan (2007). Collateralization & Guarantees in the Expansion of microfinance in Sudan. Unicons Consultancy Ltd. Amarat. Khartoum.
- Cooper, D., & Schinder, P. (2010). Business Research methods (8th Ed.). New Delhi: tata McGraw hill.
- Coyle F (2000). Flawed loan policy and loan default: Evidences from Bangladesh. *Journal of Accounting, Business and Management, Vol. 11.*
- Council of Credit Unions (WOCCU) (2009) Statistical report, WorldCouncil of Credit Unions, Washington D.C.
- Deakins, D., Hussain, G. (1999) "Risk assessment with asymmetric Information" *International Journal of Bank Marketing .Vol12,pp 24-31.*
- Edwards, P. & Turnbull (1994). Finance for small and medium sized enterprises. Information and the income gearing challenge. International. *Journal of marketing vol. 12 no.6.Pp.3-9.*
- Ekumah & Esse I, (2003). "Micro credit and the Poorest of the Poor: Theory and Evidence from Bolivia", World Development, Vol. 28, No. 2, pp 333-346, Elsevier Science Ltd
- Eppy, I. (2005) Perceived Information Asymmetry, Bank lending Approaches and Bank Credit Accessibility by Smes in Uganda (Unpublished thesis) Makerere University.
- ErgeteweTemecheMolla(2015) Determinants Of The Financial Performance Of Saccos In South
- Wollo Zones A Paper Presented In The Ethiopian Cooperative Development Conference Hawasa University May 7-8, 2015
- Esendi, K (2013).Credit risk management on loan portfolio among SACCO's in Kenya. Unpublished MBA project

- Greenbaum, James, W. E., Naya, S. & Meier, G. M. (1991.Asian development: Economic success and policy lessons. Wisconsin: University of Wisconsin Press
- Hair, E.Jr., Black, W. C., Babin, B.J., Anderson, R. E., & Tatham, R.L. (2006). Multivariate data analysis (6thed,). New York: Macmillan
- Hannah Kariathi (2015). Determinants Of The Finance Performance Of Saving And Credit Cooperative Society In The Banking Sector In Kenya. Unpublished Masters project.
- Hesse, H., &Cihak, M. (2007). Cooperative Banks and Financial Stability. IMF working paper. IMF.
- Kallberg L & Udell, J (2003). MFIs and Financial Stability. IMF working paper. IMF.
- Keiteny, J N (2013) The Relationship Between Loan Default And The Financial Performance Of Saccos In Kenya, Unpublished Maters thesis. University Of Nairobi
- Koopahi N & Bakhshi Y(2002)Microfinance handbook: *An institutional and financial perspective*. Washington DC: Worldbank Publications.
- Kothari, C.R., (2008). Research Methodology: Methods and Techniques, New Age International Publishers
- Kuo, M, Miglo, A. (2010). The Pecking Order, Trade-off, Signaling, and Market-Timing Theories of Capital Structure: a Review. *Working Paper. University of Bridgeport*
- La Ferrara, E. (2003). Kinship groups and reciprocity: a model for credit transactions in Ghana. *American Economic Review*, *93*(35), *1730 1751*.
- Magali, D (2014) Influence of Credits Risk Management on Profitability of Rural Savings and Credits Cooperative Societies (SACCOS) in Tanzania. *International Journal of Management Sciences and Business Research*, 5(14).
- Maiti,S (2015) a survey of credit risk management practices by SACCOS in Nairobi (Masters Thesis). *Unpublished MBA Dissertation, University of Nairobi*.
- Markowitz H.M (1992), Portfolio Selection. Journal of Finance, Vol 7 no1.
- Miller C (2008) Market Timing and Capital Structure. The Journal of Finance, 57(1), 1-32
- Moti, M Masinde, C Mugenda, R and Sindani V (2012). Credit Management System and Loan
- Performance: Empirical Evidence from Micro Finance Sector in Kenya.
- Mugenda, O. M., & Mugenda, A. G. ((1999), Research design and Methodology, Acts Press, Nairobi.
- Mugenda, O. M., & Mugenda, A. G. ((2003), Research design and Methodology, Acts Press, Nairobi.
- Nizar, Shariq & Javed Ahmed Khan (2007) "Collateral (Al-Rahn) as Practiced by Muslim Funds of North India". Islamic Econ. Vol. 17, No. 1, pp17-34.
- Nzongang C & Atemnkeng, H (2006). Using Collateral to Secure Loans. Business Review, Q2 pp. 9-16.
- Ojeka, Stephen A. (2012). Credit Policy and its Effect on Liquidity in Companies in Nigeria. *The Journal of Commerce, Vol. 3, No. 3 pg 10-19.*
- Pandey D (2004). Financing R&D in Mature Companies: An Empirical Analysis. *Economics of Innovation and New Technologies*, 19(6).

- Pagano & Jappelli, 1993). "Analysis of a company's liquidity based on its financial statement". *Journal of Commerce, Vol. 5, No. 3; 15-20.*
- Paxton, J. A. (1996). Determination of successful group loan repayment. Columbus: Ohio State University
- PWHC, 2002. Effective Collection Policy. "KASNEB Publishers, Nairobi
- SACCO annual supervision report, (2015)Deposit Taking SACCOs. SACCO Societies Regulatory Authority. In house Publication.
- SASRA. (2018). The SACCO supervision Annual Report: The Annual Report on the performance of Deposit-Taking SACCO societies (DT-SACCOs) in Kenya. Annual Report.
- SASRA.(2017). SACCO Supervision Report.SACCO Societies Regulatory Authority. SACCO Societies Act. Annual Report.
- Saunders, M., Lewis, P. & Thornhill, A. (2012). Research methods for business students (6th ed.). Harlow: Pearson.
- Segrado, Chiara. (2005). Case study "Islamic microfinance and socially responsible investments", MEDA Project.
- Sindani, E. (2012). Effectiveness of Credit Management System on Loan Performance: Empirical Evidence from Micro Finance Sector in Kenya. Unpublished Master's Thesis.
- Steel, W. F., & Andah, D. O. (2004). Rural and microfinance regulation in Ghana: Implications for development and performance of the industry. Paper presented at the International conference on Ghana at the Half Century.
- ViktarFedaseyeu (2014) Debt Collection Agencies And The Supply Of Consumer Credit. *Bocconi University,* Research Department, Federal Reserve Bank of Philadelphi