African Journal of Rural Development, Vol. 2 (2): April - June 2017: pp.175-182 ISSN 2415-2838

Institutional determinants of credit utilization in the savings and credit cooperatives in Soroti district, Uganda

D. ALIO[1],* J.J. OKIROR [1], J.G. AGEA[1], F.B. MATSIKO[1] and W. EKERE[2]
[1]Department of Extension and Innovation studies, Makerere University, P.O. Box 7062, Kampala, Uganda
[2]Department of Agribusiness and Natural Resource Economics, Makerere University, P.O. Box 7062, Kampala, Uganda
***Corresponding Author**: deborah.alio@yahoo.com

ABSTRACT
Rural credit schemes have been espoused as key avenues for reducing rural poverty. Their success, however, continues to be hampered by institutional inefficiencies and poor allocation of loans. This study examined the institutional factors influencing credit utilization in Savings and Credit Cooperatives (SACCOs) in Soroti district of Uganda. Two hundred fifty seven (257) respondents were randomly selected for study from 13 SACCOs that were purposively selected from the five sub counties which constituted the district. Data were collected in a cross-sectional survey and in-depth interviews. Quantitative data were analyzed using Statistical Package for Social Scientists (SPSS). Logit regression was used to determine the institutional factors influencing credit use decisions. Results of descriptive analysis showed that major credit terms used by SACCOs included, collateral (74.5%), quarantorship (70%) and savings (51%). Major incentive offered by the SACCO included gifts (67.4%). However, there was inefficient credit management within the SACCOs with only 25.2% of the respondents receiving training on an annually basis and 29.6% of the respondents being monitored on a quarterly basis. SACCO recovered loans from the members through the sale of collateral (63.2%). Results of the regression analysis showed that access to extension services, collateral requirement, monitoring of loan utilization, saving habits, loan contract characteristics and duration of membership in the SACCO influenced credit utilization. Thus, SACCOs can improve access and utilization of rural credit by organizing rural households into groups and providing extension services. The findings further suggest that mandatory monitoring and training of borrowers on loan utilization would enhance SACCO performance.

Key words: Credit management, credit terms, credit utilization, incentives, saving and credit cooperatives, Soroti, Uganda

RÉSUMÉ
Les programmes de crédit rural ont été proposés comme moyens clé de réduction de la pauvreté rurale. Leur succès, cependant, est toujours entravé par l'inefficience institutionnelle et une mauvaise répartition des prêts. La présente étude a examiné les facteurs institutionnels qui influencent l'utilisation du crédit dans les coopératives d'épargne et de crédit dans le district de Soroti en Ouganda. Deux cent cinquante-sept (257) personnes ont été choisies de façon aléatoire dans une étude sur 13 coopératives sélectionnées à dessein dans les cinq comtés qui constituaient le district. Les données ont été collectées à travers une enquête transversale et des entretiens approfondis. Les données quantitatives ont été analysées à l'aide du logiciel SPSS. Une régression Logit a été utilisée pour déterminer les facteurs institutionnels influençant les décisions sur l'utilisation des crédits. Les résultats de l'analyse descriptive ont montré que les principaux termes de crédit utilisés par les coopératives, étaient des garanties (74,5%), une quarantaine (70%) et des épargnes (51%). Les incitatifs majeurs offerts par les coopératives comprenaient des cadeaux (67,4%). Cependant, il y a eu une gestion inefficace de crédit par les coopératives, avec seulement 25,2% des répondants recevant annuellement des formations et 29,6% des répondants suivis chaque trimestre. Les emprunts ont récupérés chez les membres après la vente de garantie (63,2%). Les résultats d'analyse de régression ont montré que l'accès aux services de vulgarisation, les exigences en matière de garanties, le suivi de l'utilisation des prêts, les habitudes d'épargne, les caractéristiques des contrats de prêt et la durée d'adhésion au coopératives influençaient l'utilisation du crédit. Ainsi, les coopératives peuvent améliorer l'accès et l'utilisation du crédit en organisant les ménages ruraux en groupes et en leur

Received: 31 August 2016
Accepted: 08 May 2017
Published: 30 June 2017

fournissant des services de vulgarisation. Les résultats suggèrent en outre que le suivi obligatoire et la formation des clients sur l'utilisation des prêts permettent une meilleure performance des coopératives.

Mots clés: Gestion du crédit, termes de crédit, utilisation du crédit, motivations, coopératives de d'épargne et de crédit, Soroti, Ouganda

INTRODUCTION

Savings and credit cooperatives (SACCOs) have become critical financial institutions in the provision of credit in the rural areas of developing countries. As of 2011 the SACCOs served an estimated 120 million members in 87 countries around the world, helping members increase their incomes (Kwai and Urassa, 2015). In Uganda there are 2,069 functional SACCOs serving 1,273,108 members (UCSCU, 2012). However their success is plagued by institutional inefficiencies (Absanto and Aikaruwa, 2013; Nyambane *et al.,* 2015) and poor utilization of loans for intended purposes (Akerele *et al.,* 2010; Muhumuza, 2013). Studies carried out in Uganda (Kamuhanda, 2010; Muzigiti and Schmidt, 2013) mainly focused on gender imbalance in the membership and management of SACCOs. These studies were limited to the SACCOs supported by the Financial System Development (FSD) programme. Another study by Muzinduki (2008) looked at the inclusion and exclusion of the poor from SACCOs while Muhumuza (2013) evaluated loan utilization and management of State sponsored rural credit schemes in Uganda. However, there is scanty research on institutional factors affecting use of credit for intended purposes in SACCOs in Uganda. An understanding of institutional factors affecting use of credit will inform policy on appropriate lending terms and credit management practices necessary for sustaining income generating activities and borrowing among rural households. Therefore, this study sought to analyze the credit terms offered to SACCO members, the credit incentives available to SACCO members, the loan recovery strategies used by the SACCOs and the institutional factors influencing credit utilization.

LITERATURE SUMMARY

Credit contracts can be conceived as principal-agent relationships under which the financial institution is the principal and the firm owner is the agent managing the principal's capital (Whittam *et al.,* 2015). However due to asymmetric information the agent may not manage the credit in accordance with the credit contract. The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers (Auronen, 2003; Wambugu, 2010) often leading to adverse selection and moral hazard (Whittam *et al.,* 2015). Adverse selection (hidden information) and moral hazard (hidden action) and ensuing credit market failures can create inefficiency at both the micro and the macro level via underinvestment, overinvestment and poverty traps.

Many policies have been initiated to address asymmetric information problems (Karlan and Zinman, 2009). For example, the management view of stakeholder theory (Donaldson and Preston, 1995) holds that practices such as training, monitoring of borrowers, provision of incentives and extension services to members can be mechanisms for enhancing financial performance and improving incomes of the rural poor using SACCOs.

Stakeholder management requires, as its key attribute, simultaneous attention to the legitimate interests of key stakeholders which is vital for both the establishment of organizational structures and general policies and in case-by-case decision making. It is the responsibility of managers and the management function to select activities and direct resources to obtain benefit for legitimate stakeholders. For this reason, the rational choice institutionalism argues that institutions are arrangements of rules and incentives and the members of the institutions behave in response to those basic components of institutional structure (Peters, 2000). Thus, the specific objectives of the study were to analyze the credit terms offered to SACCO members, examine the credit incentives available to SACCO members, investigate the credit management strategies used by SACCOs and determine the institutional factors influencing credit utilization.

METHODOLOGY

The study was conducted between January and April 2015 in Soroti District of Uganda. The study used a cross-sectional design whereby data were collected at a single point involving both qualitative and quantitative research approaches. This design was preferred because it enables the researcher to collect a lot of data in a short and limited time (Mugenda and Mugenda, 1999). The qualitative approach gave precise and testable expression to quantitative ideas. The population for the study comprised all SACCO members. A sampling frame of SACCOs in Soroti District was obtained from the District Commercial Officer. Thirteen out of 30 SACCOs were purposively selected basing on the active SACCOs that submitted monthly loan status reports to the District Commercial Officer and those that were operational.

Two hundred fifty seven (257) out of 780 respondents were randomly selected based on Krejcie and Morghan, 1970)'s formula $S=X^2NP\ (1-P)/d^2\ (N-1) + X^2\ P(1-P)$, where S=required sample size, X^2= the table value of Chi- Square for 1 degree of freedom at 95 percent desired confidence level (0.05)=3.841, N= the population size, P= the population proportion (assumed to be 0.50 since this would provide the maximum sample size), d= the degree of accuracy expressed as a proportion (0.05). The formula was used because it provided an appropriate means of calculating sample sizes of known population sizes.

Primary data were collected using structured questionnaires with closed and open ended questions. The questionnaires essentially focused on generating information related to the credit terms, credit incentives and credit management mechanisms employed by the SACCOs. A check list of key informants was also used to collect data. In-depth interviews were done with 13 Key informants (KIs) comprising one credit officer from each SACCO. According to Kwai and Urassa (2015) KIs are necessary to validate and complement information gathered through the questionnaires.

Data were analyzed using Statistical Package for Social Science software (SPSS) version 16. Descriptive statistics were used to describe the credit terms, credit incentives and credit management mechanisms used by the SACCOs. The binary logistic regression model was used to determine institutional factors influencing credit utilization is specified below.

Model Specification

The determinants of credit utilization were estimated using the following model:

$Ln\ (P_i/l\text{-}P_i) = A0+A_1X_1+.........A_{12}X_{12}+e_i$

Where;

P_i= probability of farmers to utilize credit for intended purpose

$l\text{-}P_i$=probability of farmers not utilizing credit for intended purpose

AI (1, 2. 3, 4..........12) = regression coefficients

X_i (1, 2, 3, 4 ....12) = independent variables

And e_i= error term

The independent variables specified as factors influencing farmers' decision to access and utilize credit for intended purpose were derived through literature and are defined below:

X_1=Access to extension services (Dummy, 1= yes; 0 = Otherwise)

X_2=Collateral requirement (Dummy, 1= yes; 0 = Otherwise)

X_3=Supervision (Dummy, 1= yes, 0=Otherwise)

X_4=Contractual agreement (Dummy, 1= yes, 0=Otherwise)

X_5=Membership of cooperative (Dummy, l =yes, 0=0therwise)

X_6=saving habit (Dummy, l =yes, 0=0therwise)

X_7= Training (Dummy l=Yes, 0=Otherwise)

X_8=Loan period (days)

X_9=Interest rate reduction (Dummy l=Yes, 0=Otherwise)

X_{10}=Duration of cooperative membership (Years)

X_{11}=Duration of training (Years)

X_{12}=Loan processing period (weeks)

RESULTS

Characteristics of savings and credit cooperatives (SACCOs) in Soroti district.

The study sought to identify some of the major prevailing conditions for accessing and utilizing credit facilities offered by SACCOs. Usually, favourable terms such as asset collateral, guarantors, savings and deposit are known to improve access to credit and its utilization. The results of the study as presented in Table 1 indicated that collateral requirement is the most dominant term of credit as indicated by 74.5% of the respondents. This is followed by quarantorship (70%), and savings (51%). Other credit terms included holding account with the SACCO (36%) and initial deposit of the loan amount (32.8%).

The study also sought to identify the incentives available for motivating well repaying borrowers. Provision of incentives to well repaying borrowers improves access to credit and its utilization. Incentives such as extension of loan period and reduction of interest rate have been reported to improve access to credit and its utilization (Tumwine, 2015). Table 2 shows that while 29% of respondents indicated

Table 1. Credit terms to SACCO members

Credit terms	Frequency (N=655)	Percentages
Collateral	184	74.5
Quarantorship	174	70.0
Savings	128	51.0
Initial deposit	81	32.8
Holding account	89	36.0

Multiple response

Table 2. Incentives offered to SACCO members

Credit incentives	Frequency (262)	Percentages
Interest rate reduction	24	10.2
Extended loan period	39	16.5
Exchange visits to other SACCOs	11	4.7
Gifts (T-shirts)	159	67.4
No credit incentives offered	29	12.3

Multiple response

no incentives are provided by the SACCOs, a total of 67.4% of respondents indicated that SACCOs offer gifts such as T-shirts to member who perform well in terms of repayment. Also, 39% of the respondents indicated extension of loan periods and 24% indicated interest reduction as incentives for repaying the loans.

Credit management within SACCOs. The study further examined the credit management practices employed by the SACCO to ensure effective utilization of credit. Provision of support services such as frequent trainings and monitoring of loan utilization accompanied by efficient and favourable loan recovery mechanism improves utilization of credit (Nyambane *et al.,* 2015). As indicated in Table 3, 52% of the respondents indicated that SACCOs did not provide additional support to borrowers. However, some support provided included: providing business advice (26.8%), provision of compulsory business training (17.9%) to potential or those intending to borrow, business monitoring and supervision (19.9%), enterprise selection (4.7%) and provision of credit incentives (3.2%).

There was strong partnership between NGOs and SACCOs as the leading institutions providing training on credit utilization (73%). Other micro finance institutions such as commercial banks (14.2%) and government agencies (13.8%) lagged behind with limited contributions towards training on credit utilization at community level. The frequency of training was intermittent with only 25.2% of the respondents receiving the training on an annually basis. During the training, the major issues addressed were saving (67.7%), records keeping (48.8%) and cash flow (35.4%). Field visits were however irregular with 29.6% of the respondents being visited on a quarterly basis. Often than not, SACCO's recovered loans from the members through the sale of collateral (63.2%) and this affected the pattern with which the members often borrowed subsequent loans.

Institutional factors influencing credit utilization. The binary Logit model was used to examine the institutional factors influencing farmers' decisions to use credit for intended purpose among SACCO borrowers. As observed in Table 3, the Nagelkerke R^2 was 0.322, meaning that 32.2% of the variation in credit utilization was due to 12 variables entered in the model while the 67.8% was due to variations not included in the model. Only two of the fitted variables had the expected signs (Collateral need and extension service) while the rest of the variables did not meet the expected signs as they all reflected negative signs. The extension and advisory services had a positive coefficient of (2.667) and this was significant at ($P<0.05$). However, collateral, monitoring, saving, strict agreement and experience in credit use had negative coefficients of 0.365, 0.045, 0.127, 0.309 and 0.885, respectively. Collateral was significant at (P< 0.05), monitoring and saving were significant at (P<0.01) while loan contract and duration of membership were significant at (P<0.1).

Table 3. Credit management mechanisms employed by SACCOs

Credit management mechanisms	Percentage (%)
Support towards credit utilization (%)	
Monitoring	19.9
Extension services	28.9
Training	17.9
Business selection	3.7
No support all	52
Financial institutions offering training	
SACCO	29.3
Commercial bank	14.2
Government Institution	13.8
NGOs	29.6
None	34
Frequency of trainings	
Every time loan is disbursed	4.93
Weekly	2.5
Monthly	12.3
Quarterly	6.7
Annually	25.2
Rarely	49.7
Never	1.8
Areas covered by training (%)	
Records keeping	42.8
Saving	63.8
Cash flow	37.5
Others	46.7
Frequency of monitoring	
Weekly	1.7
Monthly	8.6
Quarterly	29.6
Never	63.1
Loan recovery mechanisms	
Sale of collateral	63.2
Use of savings	25.3
Reminders by loans officers	39.1
Legal action	17.8
Guarantors	22.1

DISCUSSION

The results in Table 2 indicate that the use of collateral (74.5%) was a major requirement for households to access credit from SACCOs in the study area. The Chairperson- Soroti SACCO said, "Savings is one of the requirements for one to access credit and loans are given to members when they have three times their savings on their accounts." Kwai and Urassa (2015) argued that accumulation of savings leads to more income that can in turn be invested in income generating activities. The results also indicate that only limited credit incentives were provided by SACCOs as indicated by 67.4% of the respondents. This implies that there were limited provision of incentives to motivate borrowers to utilize credit effectively in the study area. Moreover (67.5%) of respondents reported sale of collateral as the major method used by the SACCOs to recover loans. The implication is that lack of collateral for loans could be a factor limiting access and utilization of credit from the SACCOs in the study area. Similar observations were made by Isitor *et al.* (2014). The results further reveal that the majority (63.1%) of the borrowers had never been monitored by SACCO staff on credit utilization. This suggests that there is limited monitoring of borrowers on credit utilization and as such incidences of credit diversion into unintended non-productive purposes was high in the study area and hence high default rates. The finding is line with assertions of Bichanga and Aseyo (2013) who indicated that inability to have close monitoring on the use of credit of acquired loan could lead to inefficient use and high default rate among the cooperative members.

Results of the regression analysis revealed that extension service was significant at 5% and was positively related to credit utilization. This implies that interaction with the extension agents increases the awareness of borrowers on the existence of credit facilities and hence utilization of credit. These results corroborate with the findings of Olorunsanya *et al*. (2009).

Collateral need was significant at 5% and negatively related to credit utilization indicating that utilization of credit decreases with increase in collateral need. This finding agrees with Jain and Parveen (2014) argument that collateral requirement is a major factor limiting access to credit among rural households, but disagrees with Isitor *et al.* (2014) who obtained a positive and significant relationship between possession of collateral and credit utilization. The divergent results is probably due to differencs in management and sensitization of the target beneficiaries in the two studies. Monitoring was significant at 1% and negatively related to credit utilization. This suggests that supervision reduces misuse of loans for nonproductive purposes. The result is similar to the findings of other scholars such as Tesfay (2014) who indicated that supervision decreased misuse of loans for nonproductive purposes.

Saving habit was significant at 1% and negatively related to credit utilization. This suggests that the higher the savings requirement, the lower the probability of borrowers accessing and utilizing credit for intended productive purposes. The result is contrary to the findings of Tebeje *et al.* (2015) who found a positive and significant relationship between saving habit and credit service utilization. On the other hand, duration of membership was significant at 10% and negatively related to credit utilization in the study area. This suggests that the more the years of experience in utilizing credit from the credit institution the more likely the probability of borrowers investing credit in intended productive purposes decreases. This result is similar to that of Tesfay (2010) who reported that households who had experience in credit use tended to develop reputation, credit worthiness and know well on how to utilize the credit appropriately. Lastly, loan contract was significant at 10% and was negatively related to credit utilization, an indication that the credit terms in the study area were stringent and limited access and utilization of credit for intended productive purpose. The finding agrees with Ladele *et al.* (2015) argument that failing to comply with terms of contract given by the credit institution could make loan recovery process by credit officers a difficult task resulting in high rate of default.

CONCLUSIONS AND IMPLICATION

The results obtained in this study reveal that extension service, collateral requirement, monitoring, saving, loan contract and duration of membership were the major significant institutional factors determining credit utilization. Based on the results obtained in the study, the following should be followed in offering rural credit schemes. First, rural households should be organised into groups and associations so as to increase access and utilization of credit by reducing on collateral requirement. Secondly, there is need for mandatory monitoring of borrowers on loan utilization to ensure use of credit for intended purposes. Third, there should be training of rural households on the importance of savings culture. Fourthly, extension services should be provided to rural households and others for increased awareness and accessibility of credit from SACCOs.

ACKNOWLEDGEMENT

This study was funded by the Carnegie Corporation of New York through the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) for which we are most grateful. We also thank the SACCO members in Soroti for participating in the study.

Table 4. Regression results for institutional factors influencing credit utilization

Variable	β	Exp (β)	Sig
Extension service	0.981	2.667	0.029**
Collateral requirement	-1.007	0.365	0.041**
Monitoring	-3.148	0.043	0.000***
Saving with Sacco	-2.0764	0.127	0.002***
Loan contract	-1.174	0.309	0.085*
Membership in association	-1.514	0.220	0.139
Training	-0.417	0.659	0.318
Extended loan period	-0.274	0.760	0.622
Duration of membership	-0.123	0.885	0.077*
Loan processing period	-0.025	0.976	0.732
Period of training	0.057	1.059	0.339
Interest rate reduction	-0.271	0.763	0.668

-2 Log likelihood=168.077a, Cox and Snell R^2=0.240, Nagelkerke R^2=0.322, * significant at 10%, ** significant at 5%, *** significant at 1%.

STATEMENT OF NO CONFLICT OF INTEREST

We the authors of this paper hereby declare that there are no competing interests in this publication.

REFERENCES

Absanto, G. and Aikaruwa, D. 2013. Credit rationing and loan repayment performance: the case study of Victoria savings and credit cooperative society. *Global Advanced Research Journal of Management and Business Studies* 2 (6): 328-341.

Akerele, E.O., Aihonsu, J.O.Y., Ambali, O. I. and Oshisanya, K.P. 2014. Factors affecting loan repayment performance among members of cooperative thrift and credit society in Yewa North Local Government Area, Ogun State, Nigeria. *Greener Journal of Agricultural Sciences* 4 (6): 238-244.

Auronen, L. 2003. Asymmetric information: theory and applications. In: Seminar of Strategy and International Business. Helsinki University of Technology, Helsinki.

Bichanga, K.W. and Aseyo, L. 2013. Causes of default within micro finance institutions in Kenya. *Interdisciplinary Journal of Contemporary Research in Business* 4 (12): 316-333.

Donaldson, T. and Preston, L.E. 1995. The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review* 20 (1): 65-91.

Fiorillo, A. 2006. The effects of wholesale lending to SACCOs in Uganda. Case study, Kampala, Uganda.

Isitor, U., Babalola, D. A. and Obaniyi, K. S. 2015. An analysis of credit utilization and farm income of arable crop farmers in Kwara State, Nigeria. *Global Journal of Science Frontier Research* 14 (10): 26-34.

Jain, K. and Parveen, S. 2014. Utilization of rural credit by tribal women self-help group members. *International Journal of Agricultural Extension* 6 : 127-132.

Kamuhanda, R. 2009. A study on promoting women's participation in SACCOs–A case of eight SACCOs supported by GTZ FSD programme. Kampala, under: www. mfw4a. Org/resources/documents/documents-details/a-studyon-promoting-womens- participation-in-saccos. html . Assessed on 24, August 2010.

Karlan, D. and Zinman, J. 2009. Observing unobservables: Identifying information asymmetries with a consumer credit field experiment. *Econometrical* 77 (6): 1993-2008.

Krejcie, R. V. and Morgan, D. W. 1970. Determining sample size for research activities. *Educational and psychological measurement* 30 (3): 607-610.

Kwai, M.D. and Urassa, J.K. 2015. The contribution of savings and credit cooperatives societies to income poverty reduction: A case study of Mbozi District, Tanzania. *Journal of African Studies and Development* 7 (4): 99-111.

Ladele, A.A., Oyelami, B.O. and Balogun, O.T. 2015. Extents of sharp practices in credit allocation and utilization among staff and beneficiaries of the Bank of Agriculture in Oyo State. *Agrosearch* 15 (2): 31-45.

Mugenda, O. M. and Mugenda, A. G. 1999. Research method: Quantitative and qualitative approaches. Acts Press, Nairobi, Kenya.

Muhumuza, W. 2013. Revisiting state intervention: State-sponsored micro-credit and poverty reduction in Uganda. *African Journal of Political Science and International Relations* 7 (3):121-132.

Muzigiti G. B. and Schmidt, O. 2013. Gender-balance and microfinance product development. Association of Microfinance Institutions of Uganda.

Muzinduki, P. 2008. Micro credit fund through SACCOs: Analysis of inclusion and exclusion of the poor in Kabarole district, Uganda. Erasmus University.

Nyambane, O.D, Abuga, M.I and Manyange, N. M. 2015. Assessing the effectiveness of credit management in selected savings and credit co-operatives in Rwanda. *International Journal of Information Research and Review* 2 (10): 1249-1254.

Olorunsanya, E. O., Babatunde, R. O., Fakayode, S. B. and Toluhi, M. 2013. A gender analysis of rural households' credit utilisation in Kabba/ Bunu Local Government Area of Kogi State, Nigeria. *Nigerian Journal of Farm Management* 14 (1): 71-75.

Peters, B.G. 2000. Institutional theory: Problems and prospects. Institute for Advanced Studies, Vienna, Austria.

Sebhatu, K.T. 2012. Management of savings and credit cooperatives from the perspective of outreach and sustainability: Evidence from Southern Tigrai of Ethiopia. *Research Journal of Finance and Accounting* 2 (7-8):10-23.

Tebeje, M., Gebeyehu, B. and Regasa, G. 2015. Socio-economic determinants of credit service utilization by smallholder households at Wolaita Zone, Ethiopia. *Developing Country Studies* 5 (11): 102-107

Tesfay, B.A. 2010. Credit Utilization and repayment performance of members of cooperatives in Alaje Woreda, Tigray, Ethiopia. Master Thesis. Mekelle University.

Tumwine, F. 2015. Savings and credit cooperatives (SACCOs) services terms and members economic development in Rwanda: a case study of Zigama SACCO LTD. PhD Thesis, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.

Wambugu, M.E. 2010. Credit risk management practices in savings and credit cooperative societies (SACCOs) offering front office service activity (FOSA) in Kenya. Master Thesis, University of Nairobi, Nairobi, Kenya.