American Journal of **Finance** (AJF)



EFFECT OF ASSET QUALITY ON THE FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT SOCIETIES IN KENYA

Jane J. Barus, Prof. Willy Muturi, Dr. Patrick Kibati and Dr. Joel Koima





EFFECT OF ASSET QUALITY ON THE FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT SOCIETIES IN KENYA

^{1*}Jane J. Barus

Post Graduate Student: School of Business

Jomo Kenyatta University of Agriculture and Technology

*Corresponding Author's E-mail: jane.barus@yahoo.com

²Prof. Willy Muturi, Lecturer, School of Business

³Dr. Patrick Kibati Lecturer, School of Business

⁴Dr. Joel Koima Lecturer, School of Business

Abstract

Purpose: The purpose of this study was to establish the effect of asset quality on the financial performance of savings and credit societies in Kenya.

Methodology: The study employed an explanatory research design. The target population was 83 registered deposit taking SACCO's in Kenya that have been in operation for the last five years. The sample size for the study was all 83 SACCOs that have remained in existence since 2011-2015. Census methodology was used in the study. Both primary and secondary sources of data were employed. Multiple linear regression models were used to analyze the data using statistical package for the social sciences (SPSS) and STATA. A pilot study was conducted to measure the research instruments reliability and validity. Descriptive and inferential analysis was conducted to analyze the data. The data was presented using tables and graphs.

Results: Based on the findings the study concluded that asset quality influenced the financial performance of savings and credit societies in Kenya. This can be explained by the regression results which showed that the influence was positive and also showed the magnitude by which asset quality influenced the financial performance of savings and credit societies. The univariate regression results showed that asset quality influenced the financial performance of savings and credit societies by 5.827units.

Unique contribution to theory, practice and policy: The study recommended that management need to be cautious in setting up a credit policy that will not negatively affects profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits and maximization of profit. The study also recommended for credit information sharing between SACCO's. This will play a significant role in determining performance of deposit taking SACCO's. Further, the study

American Journal of Finance ISSN 2520-0445 (Online) Vol.1, Issue 4 No.2, pp13-25, 2017



recommended that SACCO's opt for equity financing instead of debt financing to improve on its leverage. SACCO's should also avoid excessive lending, maintain high credit standards and limit lending to un-hedged borrowers.

Keywords: asset quality, financial performance, savings and credit societies

1.0 INTRODUCTION

1.1 Background of the Study

The SACCO industry in Kenya plays a very important role as the financial intermediary between savers and investors. The first ever SACCO was established in 1844 by Robert Owen (John, 2002). SACCO's belong to a group of cooperatives that are commonly called Raiffeisen cooperatives due to the German originator of this movement in the 1800s (Tache, 2006). SACCO's are guided by seven principles as stipulated by the International Cooperative Alliance (ICA); Open and voluntary membership, member economic participation, independence and autonomy, democratic member control, education, training and information, Concern for Community and Cooperation among Cooperatives. SACCO's are expected to give better and cheaper services to its members as compared to the main stream banks because SACCO's understands the needs of the members given that they are the owners (Wanyama, Develtere & Pollet, 2008). Services offered by SACCO's include normal loans, emergency loans, school fees loans and front office services for example; payment of salaries, salary advances, bank cheques, safe keeping of documents, and ATMs (Ngaira, 2011).

According to (ICA, 2009) Rochdale Pioneers was the founder of the contemporary Cooperative Movement in Lancashire, England, to deliver cheap alternative to poor-quality and adulterated food and provisions food, by the use of surplus so as to benefit the community. Subsequently, the co-operative movement has succeeded spreading throughout the world and incorporating all parts of the economy. The principles that supported cooperatives ways of doing trade is still recognized today as the basis upon which all co-operatives operate. However, the principles has been looked over and updated.

Globally, the sector has 1 billion memberships. It is estimated that co-operatives have employed 250 million people all over the world, co-operatives has an estimated global turnover of 2.2 trillion US Dollars, Co-operative generate 2.2 trillion US\$ in turnover while providing infrastructure and services that the society needs to flourish. Global statistical report for 2014, recorded a total of 57,000 Credit Unions (SACCO's), spread across 105 countries and 6 continents. The world Credit Union system has a combined savings of 1.5 trillion US\$, and an asset base of 1.8 trillion US\$ out of which 1.2 trillion US\$ constitutes the loan portfolio. The average worldwide penetration rate of the Credit Union system stood at 8.2 percent World Co-operative Monitor (2014).

Globally, efficiency of community banks was analyzed in the United States (US) using data from year-end 2006-2008. Multivariate discriminant model was used based on the CAMEL(S) model, to differentiate between low efficiency and high efficiency community banks by using the efficiency ratio as the independent variable. The results on the significance of the individual CAMEL components provide mixed results for different periods apart from the sensitivity to market risk, which is found to be statistically insignificant (Hays, Stephen& Arthur, 2009).

American Journal of Finance ISSN 2520-0445 (Online) Vol.1, Issue 4 No.2, pp13-25, 2017



In India, the soundness of Indian Banking through its effect on the asset value was analyzed. The study recognized the key players such as the risk management, Non Performing Assets (NPA) levels, effective cost management and financial inclusion. Moreover, In India performance of different Indian private and public sectors banks over the period 2000-2011 were analyzed using the CAMEL approach and established out that the private sector banks were at the top, with their performance being the best in terms of soundness (Chaudhry &Singh, 2012).

In Africa growth of SACCO's has been experienced to the extent that in 1965, Africa Federation of Cooperative Societies Savings and Credit Association (ACCOSSCA) was formed with the principle objective of offering SACCO insurance, education to members and promoting SACCO principles(Ng'ombe & Mikwamba, 2004). There are 28 countries in the continent of Africa with established SACCO's (saving plus, 2010). Africa has membership of 16 million which is 8 percent of the whole world membership, with savings of 62% and loans of 65% being 3rd after Asia and North America which has 36 million and 102 million respectively. Africa mobilize 0.4 percent of the worldwide savings of US\$ 1.1 trillion and 0.4 percent of international loans given to members standing at US\$ 912 billion (WOCCU, 2009). In Africa, performance of the South African Banking Sector was analyzed from 1994 and found out that all bank-specific variables were statistically significant at conventional level for both Return on Assets (ROA) and Return on Equity (ROE) equations. The study had shown that Asset Quality (measured by assets to capital employed ratio), Management Efficiency (measured by operating profits per employee ratio), and Liquidity Management (measured by quick ratio) has positive relationship with both measures of bank performance, which is consistent with a priori theoretical expectations. However, the Leverage Ratio, which is a measure of Capital Adequacy, shows a surprising significant negative relationship with ROA, whereas its relationship with ROE is significant and positive as expected, (Ifeacho & Ngalawa, 2014). In Ghana CAMEL Rating System was used to assess the Performance of Local and Foreign Banks results from the study indicated that not all the CAMEL variables affect Banks performance in Ghana in terms of ROA and ROE (Ansah, 2015).

In East Africa the East African Legislative Assembly (EALA) passed the East African Community (EAC) Cooperative Societies Bill, 2014. The Bill is currently awaiting assent by the East African Community Heads of States in line with Article 63 of the EAC Treaty. The objective of the EAC Cooperative Societies Bill, 2014 is to provide a legal framework for the operations of Co-operative Societies within the Community, which is in line with Article 128 of the EAC Treaty on the strengthening of the role of private sector as an effective force for developing economies, by virtue of EAC Treaty and Article 2(6) of Kenyan Constitution 2010 which recognizes that treaties ratified by Kenya are part of the laws of Kenya, the Kenyan National Legislations on Co-operatives will be required to be aligned to EAC Cooperative Societies Bill, 2014 once it becomes law. The Bill is based on the understanding that each Partner State shall undertake to encourage the efficient use of resources and to promote the development of private sector organizations which are engaged in all types of economic activities, such as the chambers of commerce and industry, confederations and associations of industry, agriculture among others. It also recognized the responsibility of state parties to enact national legislations to govern the operations of co-operative societies within the party states. In Ethiopia Zerfeshewa, 2010 investigated the determinants of SACCO performance; the study established that the educational level of members and



officials as well as the regulations posed the greatest impediment to the performance of SACCO's.

1.2 Problem Statement

The SACCO's subsector remains a significant player in the provision of financial services to the Kenya household and small business segment. Its membership as per 2013 increased to 3.3million from 2.97 million in 2012. SACCO's plays a vital role of pooling resources for investment and wealth creation (Kinyua, 2013). They spur economic growth through the mobilization of domestic savings. According to SASRA report (2010), SACCO activities contribute 43% of the gross domestic product (GDP).

The significance of SACCO's to the Kenyan economy is further evidenced by inclusion in the Vision 2030 economic blue print (Kioko, 2014). Given their significance in the financial sector and poverty alleviation, it is important to investigate the moderating effect of sensitivity to market risk on determinants of performance in order to provide accurate and consistent assessment of savings and credit financial conditions and operations in the area of performance. Zerfeshewa (2010) investigated the determinants of SACCO performance in Ethiopia; Sonja (2010) analyzed SACCO's in Uganda to determine effect of automation on the growth of SACCO's.

Based on these studies and the varying gaps in literature, there is need to conduct similar studies in Africa and more so in Kenya. Therefore, the research attempted to establish the effect of asset quality on the financial performance of savings and credit societies in Kenya.

1.3 Research Objective

To establish the effect of asset quality on the financial performance of savings and credit societies in Kenya

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Monetarist Theory

Milton Friedman was the Founding Father of Monetarism theory. Monetarism is a theoretical challenge to Keynesian economics that increased in importance and popularity in the late 1960s and 1970s Monetarists argue that since money is a direct substitute for all other assets, an increase in the supply of money, given a fairly stable velocity of circulation, there will be direct effect on the demand for other assets since there will be more money to spend on those assets. If the total output of the economy is fixed, then an increase in the money supply will lead directly to high prices (Friedman, 1987). All increases in the money supply will be reflected in higher prices unless there is a long-term growth in the economy. Monetarist school of economic thought contended that money supply is a key determinant of the level of production the short run and the rate of inflation in the long run. In order to minimize uncertainty monetarist advocated for the maintenance of a constant rate of growth of money supply (Friedman, 1987). The monetarist school holds to three major propositions: the growth of the money supply is the major systematic determinant of nominal GDP growth; prices and wages are relatively flexible; and the private economy is stable, these propositions suggest that macroeconomic fluctuations arise primarily from erratic money-supply growth. The monetarist theory is relevant to this study as it guides the SACCO, given the uncertainty



of the future. Additionally, inflationary expectation is affected by previous period thus affecting economic growth. Since SACCO contributes to the economy of the country then this theory will guide SACCO's.

2.1.2 Expense-Preference Behavior theory

Expense-Preference behavior theory is one of the most employed in the research. This theory was developed by Williamson (1963) and later refined by (Rees, 1974), this theory posits individual preferences of managers of a firm as utility maximizing, as opposed to profit maximizing. It predicts that under certain conducive circumstances such as the separation of ownership and control, costly monitoring of managerial behavior, a lack of effective competition in input and output markets, or effective regulation in those same markets, managers spend more on other prerequisites than is consistent with profit maximization behavior, Gropper & Oswald (1996). The first empirical work for the Expense Preference Theoretical Framework on financial institutions was carried out by Edwards (1977). Using aggregated bank data for 44 banks in 1962, 1964, 1986 and total wages and salaries; total employees as the dependent variables, he finds the coefficient on the three bank concentration ratios to be positive and significantly correlated with both the bank's total labor force and the bank's total wage bill Thus, he concludes that expense preference behavior is a significant force that detracts from profit maximization in many banks. Other works consistent with this view include the empirical works of (Hannan, 1979 and Arnould, 1985) who found evidence of the expense preference theory in the banking firms. The theory is relevant to this study as it guides on how the profitability of the bank is taken in measuring performance though there are other alternative theories, in which factors other than profitability are taken as a measure of performance.

2.1.3 Economic Efficiency Theory

Economic efficiency theory states that companies should achieve their output at the lowest possible cost per unit produced. According to this theory, economies of scale should be exploited to achieve optimal production. The theory focuses on two kinds of efficiency; allocative and productive efficiency. Allocative efficiency is achieved by ensuring that all firms in the industry charge optimal prices. In the banking sector, this will result in a reduction of lending rates.

The economic efficiency theory is relevant to this study as it guides in savings mobilization, which will enable SACCO's to create credit out of excess deposits (credit creation) hence SACCO will earn interest. Allocative efficiency in the determination of lending rates among SACCO's will ensure unhealthy competition does not ensue between them. High competition in banking is associated with instability (De Nicoló, Jalal & Boyd, 2006). Productive efficiency is achieved when banks employ all their resources efficiently, producing the most output from the least input (Said, 2011). Productive efficiency guides both the lending and investment decisions of financial institutions. It would involve investing in low risk assets such as government bonds.

2.2 Empirical Review

Luqman, (2014) undertook a study on the effect of credit risk on performance of banks in Nigeria. The study found that there is a significant relationship between bank performance (in terms of profitability) and credit risk management (in terms of loan performance). The study mentioned that Loans and advances and non-performing loans are major variables in



determining asset quality of a bank. Findings indicated that improper credit risk management reduces bank profitability, affects the quality of its assets and increases loan losses and non-performing loan which may eventually lead to financial distress. The study recommended that management need to be cautious in setting up a credit policy that will not negatively affects profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits and maximization of profit.

Kinyua, (2013) investigated the relationship between the SACCO size and financial performance in Kenya. The study used total assets deposits and turnover as proxies for SACCO size. The study found that SACCO size significantly influence performance. Kioko (2014) investigated the influence of credit information sharing on SACCO performance. The study established that credit information sharing plays a significant role in determining performance of deposit taking SACCO's.

Manyuanda, (2013) examined the effect of nonperforming loans on the performance of SACCO's in Nairobi, Kenya. The study concluded that a significant negative relationship existed between non-performing loans and performance of SACCO's. The study recommended that SACCO's opt for equity financing instead of debt financing to improve on its leverage. SACCO's should also avoid excessive lending, maintain high credit standards and limit lending to un-hedged borrowers.

Gitonga, (2014) studied the effect of loan provision on the profitability of SACCO's in Nairobi County. The study gathered information on loan provision from the year 2010 to 2013. The study revealed that a negative relationship existed between loan loss provision and profitability of deposit taking SACCO's. A positive relationship was also found between the size of the SACCO and performance. The study also mentioned that management quality positively impacted on performance. They study also looked at the role of loan intensity in SACCO performance. Findings indicated that a unit increase in loan intensity led to a unit increase in profit of deposit taking SACCO's.

2.3 Conceptual Framework

Independent variable

Dependent variable

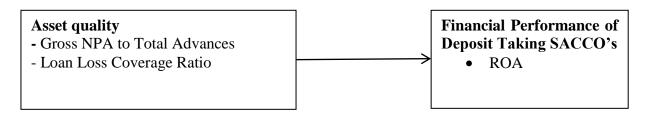


Figure 1: Conceptual Framework

3.0 RESEARCH METHODOLOGY

The study employed an explanatory research design. The target population was all the 83 registered deposits taking SACCO's licensed by SASRA as at 31st December 2011 to 2015 and has been in operation for the last five years. Therefore, the study used the inclusion criteria to select a total of 83 SACCO's registered by SASRA as at 31st December 2011. The sampling frame for the study consisted of all licensed deposit taking SACCO's in operation in Kenya as at 31st December, 2011and still in operation as at 31st December 2015 as they



appear in the SASRA database. Census methodology was used in the study in order to enable researcher gather sufficient information. The study also used purposive sampling procedure to identify the sample units. The sample size for the study was all 83 SACCO's that have remained in existence since 2011-2015. The questionnaire in this study was divided into three parts. The data collected was keyed into Statistical Package for Social Sciences (SPSS) computer software for analysis. SPSS and STATA software was used to produce frequencies, descriptive and inferential statistics which was used to derive a conclusions and generalizations regarding the population.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

The number of questionnaires that were administered was 83. A total of 71 questionnaires were properly filled and returned. This represented an overall successful response rate of 86% as shown on Table 1. This agrees with Babbie (2004) who asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on this assertion 86% response rate is adequate for the study.

1: Response Rate

Response	Frequency	Percent	
Returned	71	86	
Unreturned	12	14	
Total	83	100	

4.2 Demographic Characteristics

This section analyzes the demographic characteristics of the respondents. This section presents the descriptions of the respondents in terms of type of shareholders and period of existence.

4.2.1 Type of Shareholder

The respondents were asked to indicate their shareholders. Results in table 2 reveal that 47% of the respondents indicated business men and women, 42% of the respondents indicated the general public while 11% of the respondents indicated government employees. This implies that majority of the SACCOs members and customers are business people and the general public. This implies that most business people rely on SACCOs for finances. This is likely to have a positive influence on Sacco's financial performance.

Table 2: Type of Shareholder

Response	Frequency	Percent
Government employees	8	11.3
General public	30	42.3
Business Men and Women	33	46.5
Total	71	100

The respondents were asked to indicate the number of years their organizations have been in existence. Results in table 3 reveal that majority (68%) of the respondents indicated more than 20 years, 16% indicated 5-10 years, 10% indicated 16-20 years while 7% of the



respondents indicated 11-15 years. This implies that majority of the SACCOs have been in the market long enough to gain the prerequisite experience and relevance. This implies that the SACCO's have the potential to be competitive and thus performance well.

Table 3: Period of Existence

Response	Frequency	Frequency Percent		
5-10 years		11	15.5	
11-15 years		5	7	
16-20 years		7	9.9	
More than 20 years		48	67.6	
Total		71	100	

4.3 Descriptive Statistics

The objective of the study was to determine the influence of asset quality on the financial performance of savings and credit societies in Kenya. The respondents were asked to respond to statements on asset quality. The responses were rated on a five likert scale as presented in Table 4. Majority of 96% (69.0%+26.8%) of the respondents agreed with the statement that our Sacco has a credit policy in place, 81% agreed with the statement that our Sacco observes the general state of the economy before establishing a loan portfolio policy, 79% of the respondents agreed that our Sacco observes the trend of creditors before establishing a loan portfolio policy while 85% of the respondents agreed that our Sacco observes the overhead cost before establishing a loan portfolio policy.

On a five point scale, the average mean of the responses was 3.97 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 0.62.

These findings agree with those of Luqman, (2014) who undertook a study on the effect of credit risk on performance of banks in Nigeria. The study found that there is a significant relationship between bank performance (in terms of profitability) and credit risk management (in terms of loan performance). The study mentioned that Loans and advances and non-performing loans are major variables in determining asset quality of a bank. Findings indicated that improper credit risk management reduces bank profitability, affects the quality of its assets and increases loan losses and non-performing loan which may eventually lead to financial distress

Table 4: Asset Quality

	Strongl						
	y	Disagr	Neutra		Strongl	Mea	Std.
Statement	disagree	ee	l	Agree	y agree	n	Dev
Our Sacco has a credit							
policy in place	0.00%	2.80%	1.40%	69.00%	26.80%	4.20	0.60
Our Sacco observes the							
general state of the							
economy before							
establishing a loan							
portfolio policy	0.00%	2.80%	15.50%	71.80%	9.90%	3.89	0.60
Our Sacco observes the							
trend of creditors before							
establishing a loan							
portfolio policy	0.00%	5.60%	15.50%	64.80%	14.10%	3.87	0.72
Our Sacco observes the							
overhead cost before							
establishing a loan							
portfolio policy	0.00%	2.80%	12.70%	76.10%	8.50%	3.90	0.57
Average						3.97	0.62

4.4 Inferential Statistics

The results presented in table 5 present the regression model used in explaining the study phenomena. Asset quality explained 50% of the financial performance of SACCOs in Kenya. This is supported by coefficient of determination also known as the R square of 50%. This means that asset quality explain 50% of the financial performance SACCO's in Kenya. Further, results indicate that the overall model was statistically significant as supported by a p value of 0.000. This implies that asset quality is a good predictor of financial performance. This was supported by an F statistic of 180.74 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level.

These findings agree with those of Manyuanda, (2013) who examined the effect of nonperforming loans on the performance of SACCO's in Nairobi, Kenya. The study concluded that a significant negative relationship existed between non-performing loans and performance of SACCO's. The study recommended that SACCO's opt for equity financing instead of debt financing to improve on its leverage. SACCO's should also avoid excessive lending, maintain high credit standards and limit lending to un-hedged borrowers.

Table 5: Regression model

ROA	Coef.	Std.Err	Z	P> z	[95%	Conf.Interval
Asset quality	5.8269	0.43337	13.44	0.000	4.9769	6.6757
Cons	-1.0608	0.23176	-4.58	0.000	-1.5150	-0.6066
R^2	0.4986					
F-statistics	180.74					
P value	0.000					

American Journal of Finance ISSN 2520-0445 (Online) Vol.1, Issue 4 No.2, pp13-25, 2017



The specific model was;

Firm Financial Performance = -1.0608+5.8269Asset quality

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Discussion

The objective of the study was to determine the effect of asset quality on the financial performance of savings and credit societies in Kenya. The regression results showed that there is a positive and significant relationship between asset quality and financial performance of savings and credit societies as supported by a p value of 0.000 and a beta coefficient of 5.827. This implies that improvement in asset quality would increase the financial performance of savings and credit societies by 5.827units.

5.2 Conclusions

Based on the findings the study concluded that asset quality influenced the financial performance of savings and credit societies in Kenya. This can be explained by the regression results which showed that the influence was positive and also showed the magnitude by which asset quality influenced the financial performance of savings and credit societies. The univariate regression results showed that asset quality influenced the financial performance of savings and credit societies by 5.827units.

5.3 Recommendations

The study recommended that management need to be cautious in setting up a credit policy that will not negatively affects profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits and maximization of profit. The study also recommended for credit information sharing between SACCO's. This will play a significant role in determining performance of deposit taking SACCO's. Further, the study recommended that SACCO's opt for equity financing instead of debt financing to improve on its leverage. SACCO's should also avoid excessive lending, maintain high credit standards and limit lending to un-hedged borrowers.

5.4 Areas for Further Studies

The study recommends that a similar study should be conducted in other financial sectors such as banking sector for comparison purposes. The study also recommends that a study seeking to examine the effects of other financial factors on financial performance of savings and credit cooperatives should be conducted. This would help to give insight to the SACCO's and other organizations on what other financial factors to consider in order toenhance their performance.

REFERENCES

Arnould, R. J. (1985). Agency costs in banking firms: an analysis of expense preference behavior. Journal of Economics and Business, 37(2), 103-112.

Chaudhry, S., Singh, S. (2012); Impact of Reforms on the Asset Quality in Indian banking .International Journal of Multidisciplinary. 5(2), 17-24.



- De Nicolò, G. Boyd, J. H., & Jalal, A. M. (2006). Bank risk-taking and competition revisited [electronic resource]: new theory and new evidence. International Monetary Fund.
- Friedman, B. M. (1987). Lessons from the 1979-1982 monetary policy experiment (No. w1272). National Bureau of Economic Research.
- Gitonga, J. K. (2014). The effect of loan loss provisioning on profitability of deposit taking SACCO societies in Nairobi county. (Doctoral dissertation, University of Nairobi).
- Gropper, D. M., & Oswald, S. L. (1996). Regulation, deregulation and managerial behaviour. Applied Financial Economics, 6(1), 1-7.
- Hannan, T. H. (1979). Expense-preference behavior in banking: A reexamination. Journal of Political Economy. 87(October), 891-895.
- ICA (2009). 59th Annual Annual Conference.Chicago,IllinoisUSA Chicago Marriott
- Infeacho, C & Ngalawa, H. (2014).Performance of the south African banking sector since 1994. Journal of applied business research (jabr),30(4)1183-1196
- John, A. (2002). Rochdale Pioneer. The Oxford Companion to British History.
- Kinyua, J. W. (2013). Relationship between financial performance and size of deposit taking Savings and Credit Cooperative Societies in Kenya (Doctoral dissertation, University of Nairobi).
- Kinyua, J. W. (2013). Relationship between financial performance and size of deposit taking Savings and Credit Cooperative Societies in Kenya (Doctoral dissertation, University of Nairobi).
- Kioko, C. (2014). Credit information sharing influence on performance of licensed deposit taking SACCO businesses in Kenya. Strategic Journal of Business & Change Management, 1(2).
- Kioko, C. (2014). Credit information sharing influence on performance of licensed deposit taking SACCO businesses in Kenya. Strategic Journal of Business & Change Management, 1(2).
- Luqman, O. S. (2014). The Effect of Credit Risk on the Performance of Commercial Banks in Nigeria. Journal of Social Science Research Network, **45: 4, 117-139.**
- Manyuanda, M. O. (2014). The effect of nonperforming loans on the financial performance of savings and credit co-operative societies in Nairobi County, Kenya.
- Ngaira, L. (2011). The impact of SACCO regulatory authority guidelines on SACCO operations in Kenya-the case of Nairobi deposit taking SACCO's (Doctoral dissertation, School of Business, University of Nairobi).



- Ngo'mbe, B.W. & Mikwamba, E. (2004). Know more about SACCO. A handbook for SACCO study circle programme. Malawi Union of Savings and Credit Cooperative, Lilongwe, Malawi.
- Rees, R. (1974). A reconsideration of the expense preference theory of the Firm. Economica, 41(2), 295-307.
- Sonja, K. (2010). Effect of computerization on performance of saccos in Uganda. Unpublished MBA research project Reutlingen Germany.
- Wanyama, F. O., Develtere, P., & Pollet, I. (2008). Encountering the evidence: Co-operatives and poverty reduction in Africa. Journal of Co-operative Studies, 41(3), 16-27.
- Zerfeshewa, B. (2010). Determinants of Saving and Credit Cooperatives (SACCO's) Operational Performance in Gondar town, Ethiopia (Doctoral dissertation, Mekelle University).