



**DETERMINANTS OF FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT  
COOPERATIVE SOCIETIES IN KIAMBU COUNTY, KENYA**

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**Abstract**

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*Savings and credit cooperative societies (SACCOs) have been present in Kenya for decades but this sector has not been able to impact positively on the lives of people. Access to finance has been cited as one of the factors hampering economic growth and poverty alleviations. Savings and credit cooperative societies have lagged behind other financial institutions by performing below their members' expectations therefore causing dissatisfaction among the members. The purpose of this study was to establish the determinants of financial performance of SACCOs in Kiambu County, Kenya. The study was guided by the following objectives, to determine the effects of financial innovation on the financial performance of SACCOs in Kiambu County and to establish the influence of investment decision making on the financial performance of SACCOs in Kiambu County. The study adopted the descriptive research design to examine the determinants of financial performance of SACCOs in Kiambu County. Financial performance was measured by use of return on assets, profitability and Liquidity. Multiple regression model was used to establish the relationship between independent variables and dependent variable. Findings from the study shows that there is a positive relationship between the financial innovation and investment decision in the SACCOs and the financial performance. The results also show that financial innovation of the SACCOs in Kiambu and in Kenya in general influence their financial performance*

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**Keywords:** Financial Innovation, investment decision, Financial Performance

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## I. INTRODUCTION

Savings and Credit Cooperative Societies have been recognized as critical avenues for economic growth in most countries of the world. SASSRA (2013) approximates that one billion people are affiliated with SACCOs across the globe as reflected in the composition of International Co-operative Alliance (ICA). ICA is a worldwide apex body that represents cooperatives in the world (ICA Report 2006). Majority of countries that have achieved economic development have a cooperative sector featuring widespread vibrancy and dynamism (Olweny & Shipho, 2011). Rapid growth of SACCOs that characterized African countries such as South Africa, Kenya and Rwanda have enhanced the substantial growth of economies due to their focus on provision of financial services for benefit of startups. Mokuu, (2015) acknowledges that SACCOs are popular for providing savings and credit investment opportunities to individuals, institutions and group members. The fundamental role of SACCOs as per the above researcher in economic prosperity constitutes performing an active intermediation function between urban and rural areas in addition to linking of net savers and net borrowers.

A savings and credit co-operative society has a number of principles one of which is the belief in cooperative and mutual self-help for uplifting the standards of living of the poor people (Mwangi, 2013). Members with common bond join hands to form those quasi-banks institutions. With finances mobilized through such joint efforts the savings and credit co-operative society members build up the capital which they can use through local arrangements to finance their own social as well as economic development

Kenya is applauded for having the most vibrant and dynamic SACCO sector in Africa. SACCOs operating in Kenya range from Agricultural and livestock cooperative societies in rural areas of the financial SACCOs that are prevalent in urban areas. Metropolitan counties such as Kiambu extend between the Nairobi urban and Kiambu rural areas, thus, the county harbors several categories of SACCOs. Kenya's cooperative movement encourages SACCO autonomy and independence although the Ministry of Cooperative Development and Management plays some regulative role as one way of checking SACCO performance, and particularly financial performance. Financial performance is a subjective measure of the efficiency and effectiveness with which firms utilize their assets from their primary modes of business and generate revenues, (Sangmi & Nazir, 2010).

In Kiambu County, there are 62 registered savings and credit co-operative societies and despite the government efforts to register, promote and develop these SACCOs for the purpose of uplifting the standards of living of the residents, little seemed to have been achieved as the SACCOs have not fully met the member's needs to their satisfaction and expectations. They have a long string of pending loans not paid; some SACCOs pay little or no dividends /interests on member's savings. Some others have low multiplying factor, a number of them have not computerized their services for the purposes of efficiency and accuracy in their delivery of services (Mwaura, 2005).

Many studies have been carried on determinants of financial performance of Sacco's in Kenya, but little have been done on Sacco sector especially in Kiambu County. However, the major

determinants of SACCOs' financial performance include financial innovation, investment decision. Financial Innovation involves the action of creating and popularizing new financial instruments as well as new financial technologies, markets and institutions. This includes innovation in the level of product, process and/or the institution. Investment decision making is a function of investors and investment managers.

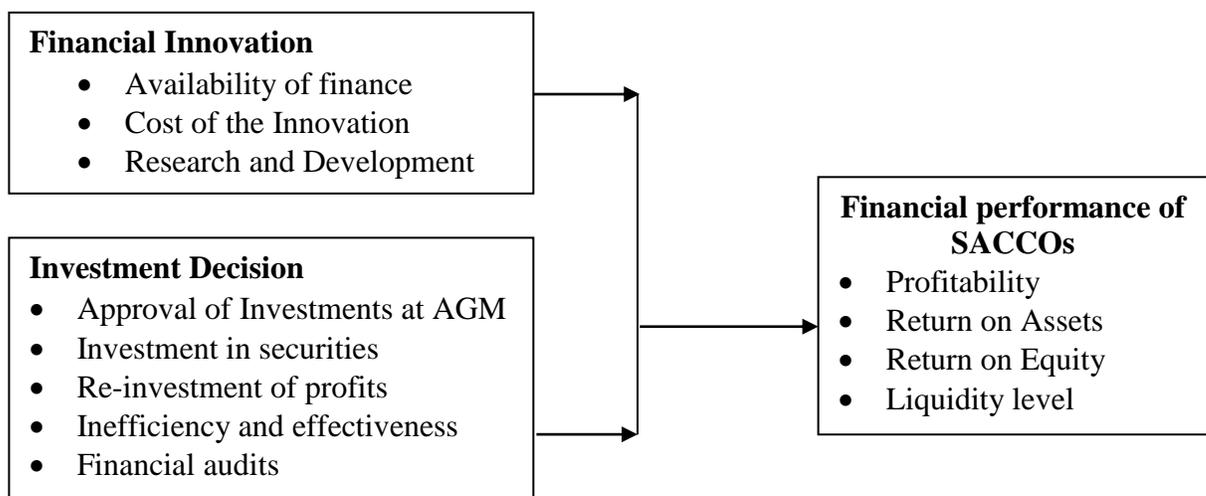
Investors commonly perform investment analysis by making use of fundamental analysis, technical analysis and gut feel. Good decision making leads to high profitability. One of the greatest roles of SACCOs constitutes loaning both individuals and businesses. Sustainability of SACCOs is contingent upon borrowers' ability and willingness to return borrowed capital with the agreed rate of interest. Management of loan defaulters extends to insuring loans against default and requiring collateral as a surety that the loan will be paid. SACCOs with effective strategies for managing loan defaulters are believed to have high chances of excellent financial performance while SACCOs with ineffective defaulter management strategies may prone to high financial risks (Miriti, 2014).

### Objectives

The general objective of this study was to analyze the determinants of financial performance of SACCOs in Kiambu County, Kenya. The specific objectives of this study were to:

- i. Determine the effects of financial innovation on the financial performance of SACCOs in Kiambu County.
- ii. Establish the influence of investment decision making on the financial performance of SACCOs in Kiambu County.

### Conceptual Framework



### Independent Variables

### Dependent Variable

Figure 1: Conceptual Framework

## II. RESEARCH METHODOLOGY

The target population of this study constituted all SACCOs in Kiambu County. Inclusions in the population were determined by the time of registration and operation of activeness. Thus all Sacco's that were in existence between the years 2012 to 2015 and formally registered with KUSSCO constituted the study of population. In this bracket there were 12 SACCOs spread across the six sub counties in Kiambu County. From each of the Sacco, employees and members were selected to participate by completing a copy of a questionnaire. This study targeted to reach out to employees and members of 12 SACCOs. Stratified sampling technique was used to determine the sample for the study. Within each study unit (SACCO), two strata's was created, one being that of employees of the SACCO and the other for SACCO members. Within the SACCO members' stratum, simple random sampling was used to identify individual respondents. However, since the SACCO employees were too few, they were all included in the study.

## III. RESEARCH FINDINGS

### Financial Innovation

The study sought to establish the contribution of financial innovation on financial performance of SACCOs in Kenya as summarized on table 1.

**Table 1: Financial innovation and Financial Performance**

*Key: SD (Strongly Disagree), D (Disagree), N (Neutral), A (Agree), SA (Strongly Agree)*

Statement	SD=1	D=2	N=3	A=4	SA=5	Mean	SD
	%	%	%	%	%		
Financial products available had improved Sacco productivity.	2.4	11.9	19.0	32.1	34.5	3.85	1.10
Financial innovation promotes financial performance of our Sacco	2.4	11.9	25.0	26.2	34.5	3.79	1.12
Greater efficiency and diversity in Sacco's financial institutions is as result of financial innovation	3.6	11.9	27.4	28.6	28.6	3.67	1.12
Greater access to Sacco's financial Information is as result of financial innovation	4.8	11.9	21.4	31.0	31.0	3.71	1.17
Process innovation is key factor in realization of high turnover to our Sacco.	6.0	14.3	2.4	28.6	48.8	4.0	1.28

The transactions cost through implementations of process innovation is a major cost in the SACCO.	3.6	10.7	19.0	36.9	29.8	3.79	1.20
Financial Innovation						3.8	0.57

Results in table 1 indicated that 66.6 % (193) of the respondents strongly attested that the financial products available in the SACCOs had an impact on financial productivity with a mean of 3.85 and a standard deviation of 1.10. The study also revealed that 60.7% (176) of the respondents agreed that various ways of financial innovation improves the financial performance of the SACCOs with a mean of 3.79 and a standard deviation of 1.12. Similarly, 57.2% (166) of the respondents strongly agree that greater efficiency and diversity in financial institutions such as SACCOs, is as a result of financial innovation with a mean of 3.67 and a standard deviation of 1.12.

The study also revealed that 62% (179) of the respondents agreed that faster access to the financial information of the SACCOs occurred due to financial innovation with a mean of 3.71 and a standard deviation of 1.17. From the study 77.4% (224) of the respondents agreed that Process innovation is key factor in realization of high turnover of the SACCOs in Kenya, with a mean of 4.0 and a standard deviation of 1.28. Finally the study also revealed that 66.7% (193) of the respondents were in agreement that the transactions cost through implementations of process innovation is a major cost in the SACCOs with a mean of 3.79 and a standard deviation of 1.20.

The mean score of the responses was 3.80 which indicated that many respondents agreed that financial innovation is key determinant of financial performance of SACCOs. The results revealed that product, process and institutional innovation influenced financial performance of SACCOs in Kenya. The findings imply that there was constant financial innovation in the SACCOs that has led to improved financial performance.

The findings concur with those in Kiaritha (2015), who examined the extent to which the depressed profitability among financial innovators. The author found out that there are firms in the years after the innovations experience a significant increase in profitability. The researcher found evidence that suggests that small firms are more innovative than their larger ones, less profitable firms innovate more, but firms that innovate enjoy enhanced profitability in subsequent year.

### **Investment Decision**

The study sought to establish whether investment decision making influences the financial performance of SACCOs in Kenya. The results were shown in Table 2.

**Table 2: Investment Decision**

Statement	SD=1 %	D=2 %	N=3 %	A=4 %	SA=5 %	Mean	SD
All capital investments involve the largest tangible investments of our SACCO must be approved by members in the AGM by way of voting	1.2	15.5	17.9	32.1	33.3	3.81	1.10
Re-investment of profits in our SACCO Plays a key role in achieving high market share	7.1	9.5	31.2	28.6	22.6	3.5	1.16
Ineffective and inefficient investments may result in Cash flow problems our SACCO.	2.4	11.9	17.9	31.0	36.9	3.88	1.11
The financial statement is approved by the auditors or financial experts which enables the investors of our Sacco in making investment decisions.	10.7	9.5	31.0	33.3	15.5	3.45	1.19
The financial statement is approved by the auditors or financial experts which enables the investors of our Sacco in making investment decisions.	6.0	15.5	29.8	25.0	23.8	3.53	1.12
Investment Decision						3.64	0.35

The study revealed that 65.4% (190) of the respondents agreed that all the capital investments must be approved by members during AGM with a mean of 3.81 and a standard deviation of 1.11. The study also revealed that 51.2% (148) of the respondents agreed that Re-investment of profits in our SACCOs Plays a key role in achieving high market share with a mean of 3.50 and a standard deviation of 1.16. From the study, also 67.9% (197) of the respondents agreed that Ineffective and inefficient investments may result in Cash flow problems in the SACCOs with a mean of 3.88 and a standard deviation of 1.11.

The study also revealed that 48.8% (142) the respondents agreed that the financial statements are approved by the auditors or financial experts which enables investors of the SACCOs in making investment decisions with a mean of 3.45 and a standard deviation of 1.19. Further research shows that 48.8% (137) of the respondents agreed that the financial statements of the SACCOs were approved by the auditors or financial experts which helped the investors of the SACCOs in making investment decisions with a mean of 3.53 and a standard deviation of 1.20.

The mean score for the responses was 3.64 which indicate that many respondents agreed that investment decision making policies were a key determinant of financial performance of

SACCOs. The results revealed that investment decision making policies influenced financial performance of SACCOS in Kenya. The findings imply that there were investment strategies in SACCOs which guide the investment decision making.

The findings agree with those in Mosongo (2013) who asserted that cooperatives are complex social organizations with many interests in one place and with a focus on inclusive decision-making. The researcher further argued that members want more than just a financial return from co-operatives and they thus require more involvement than just attending an annual general meeting as shareholders of private companies would do and clarity of purpose, on-going participation by members and competent leadership clearly focused on the agreed upon objectives appear to be key factors in ensuring that these complex organizations remain successful.

### Regression Analysis

The regression method used for this study was the multiple linear regression model. This was used to determine the line of best fit for the model through minimizing the sum of squares of the distances from the points to the line of best fit. Through this method, the analysis assumed linearity between the dependent variable and the independent variables. Regression analysis was necessary to detect simple linear relationship and because it also acts as a building block for multiple regression models (Anglim, 2007).

### Model Summary

**Table 3: Regression Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.797 <sup>a</sup>	.636	.566	.18309

Regression indicates the strength of the relationship between the independent variables (Financial innovation, and investment decision) and the dependent variable (financial Performance). The R square value in this case is 0.636 which clearly suggests that there is a strong relationship between financial innovation, investment decision and financial Performance. This indicates that financial innovation and investment decision share a variation of 63.6% of financial performance.

### ANOVA Model

ANOVA was conducted to establish the homogeneity of data as indicated in table 4 If the observations were drawn from the same population their variances would not differ much. An F statistic of 371.322 indicated that the combined model was significant. This was supported by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05). Thus, the model was fit to predict financial performance using financial

innovation and investment decision. The results indicate that financial innovation and investment decisions are influential in predicting financial performance of SACCO's in Kiambu County.

**Table 4: ANOVA Model of Determinants and Financial Performance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.079	4	12.020	371.322	.000 <sup>b</sup>
	Residual	9.226	285	.32		
	Total	57.305	289			

### Overall Regression Analysis

A multiple regression model  $Y = \alpha + B_1X_1 + B_2X_2 + \epsilon$  regression analysis was fitted to determine whether independent variable (financial innovation and investment decision) predict dependent variable (financial Performance). The study revealed the amount of variation of dependent variable explained by independent variables. The result showed that R value of 0.797 and R<sup>2</sup> value of 0.636 which means that 63.6% of the correspondent variation in financial performance can be explained or predicted by all the independent variables in this study. This means that the remaining 36.4% will be explained by other factors not included in this study. However F 371.322,  $p < 0.001$  in Table 4 showed that the model of goodness of fit in explaining the variation. This validates the fact that the independent variables in this study influence financial performance.

## IV. DISCUSSION

### Financial Innovation

The study sought to determine the effects of financial innovation on the financial performance of SACCOs in Kiambu County. Various methods were used to arrive at the findings. From the study of the twelve surveyed SACCOs, most of these SACCOs largely dependent on innovation in order to survive in the market. The study also found that existing of financial innovation was a major boost factor in this sector because it increased financial performance of the SACCOs.

The study found the coefficient of financial innovation to be 0.294. This value shows that holding other variables in the model constant, an increase in financial innovation by one unit causes the financial performance to increase by 0.294 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between the financial innovation in the SACCOs and the financial performance.

The study established that financial innovation affect the financial performance of Sacco's to a great extent. In addition the study revealed that institutional innovation strategies adopted by the

SACCOs affect the performance of SACCOs to a great extent on the various factors. Institutional innovation by SACCOs revealed that mobile banking, restructuring, insurance services and investment banking played a key role in realization of financial performance of the Sacco among others. Products innovation contributed also to great extent to financial performance of Sacco. The study revealed that new deposit accounts, credit card, debit card, personal unsecured loan, money transfer services and product tailored to favor certain group also help in realizing high market share in the sector.

The study further established that process innovation adopted by the sales affected the financial performance of the Sacco to a great extent. The study established that most Sacco's created value through office automation, use of computer, electronic money transfer, internet banks transaction, ATM transactions and clients data management software created strong products employed to enhance customer's satisfaction. Process innovation strategies revealed that new products innovation process and conformance to regulation was used as a process innovation strategies hence contributing to financial performance of Sacco. Finally the study revealed that greater efficiency and diversity of financial institutions is as result of the financial innovation.

### **Investment Decision**

The study sought to establish if investment decision influences the financial performance of SACCOs in the Kiambu County. To meet this objective, descriptive statistics, regression analysis and ANOVA was conducted. Results indicated that the SACCOs had effective investment decision making.

The coefficient of investment decision was found to be 0.229. This value shows that holding other variables in the model constant, an increase in financial innovation by one unit causes the financial performance to increase by 0.229 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between the financial decision in the SACCOs and their performance.

The coefficient is not just positive but also statistically significant with a t-statistic value of 2.29. In statistics, a t-statistic of 2 and above is normally accepted to be significant in statistical inference. The standard error was found 0.100 and the p-value was found to be 0.013. The variable was also found to be the third most influential variable on the performance of SACCOs in Kiambu County. These findings supports those of Makori, Munene and Muturi (2013), Olando, Jagongo and Mbewa (2013), Mwaura, (2005), Muchemi (2005), Pandey (2005) and Nangmi and Nazri (2010) who found that investment decision making had a linear relationship to the financial performance of SACCOs.

Specifically, the study findings indicated that Sacco's capital investment must be approved by the members in the annual general meeting by way of voting and margin was a key decision parameter in SACCO investment decisions. Sacco's reinvestment of profits plays a key role in achieving high market share. In addition, respondents agreed that ineffective and inefficiency investment decision will result to cash flow problems in the SACCOs. The respondents also

agreed that investment in securities by the SACCOs is highly preferred due to good returns and reliability. Finally the respondents agreed that the financial statements must be approved by auditors and financial experts that helped the investors in making investment decision.

The study had hypothesized that investment decision making policies adopted, influences the financial performance of SACCOs in Kiambu County, Kenya. The results reveal that investment decision is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. This implied that the null hypothesis, investment decision making does not influence the financial performance of SACCOs in Kiambu County, Kenya, failed to be accepted and the alternative hypothesis failed to be rejected.

## **V. CONCLUSION**

From the findings the study concludes that Sacco need to adopt various types of financial innovation effectively to prevent it from failing in its obligation and meeting its objective like minimizing loan defaulters, cash loss and ensure the Sacco performs better increasing the returns on assets and helps the Sacco in attaining maximum financial returns that lead to improved financial performance. From the finding the study also concludes that Sacco adopted various investment decision strategies these included; all capital investments involved the largest tangible invest

The researcher noted that there was huge credit risks encountered among different SACCOs, hence the need for managements to ensure there are improved policies on credit terms and this will reduce liquidity risk and improve financial performance of the SACCOs. With the SACCO regulator on board, there is need to introduce compliance of International Financial Reporting Standards (IFRS) to ensure that all SACCOs have a standard way of reporting and it will be easier to monitor loan obligation among different SACCOs since huge loans have an effect on the performance of the economy in relation to inflation rate and gross domestic product of the country.

## **VI. RECOMMENDATIONS OF THE STUDY**

The government should support SACCOs to offer a wider variety of products and services to their members other than just simple deposits and credit to encourage higher savings rates. Implementing new products can give new life to SACCOs and renewed interest from the public and their members and the government should make better legislation which protects member's savings and prudential supervision of the industry. The study establishes that there existed a positive relationship between financial innovation and financial performances among Sacco in Kiambu County. The study also recommends that SACCOs need to adopt various types of financial innovation effectively and efficiently to minimize loan defaulters, cash loss and ensure the Sacco performs better increasing the returns on assets and helps the Sacco in attaining maximum financial returns that lead to financial performance.

The study sought to establish whether investment policy influences the financial performance of SACCOs in Kenya. The study recommends the SACCOs to establish and enhance policies for investing so as to attract and encourage large institutional and foreign investors to participate. This would be achieved by increasing investor confidence through establishing relevant policies to enhance the efficiency of the SACCOs. Since Institutional and international investors have a greater capacity to conduct extensive security analyses they will help improve availability of relevant financial information and the overall quality of the information environment of the SACCOs to members and hence improved performance.

## VII. AREAS FOR FURTHER RESEARCH

Based on this study it is recommended that a broad based study covering all Sacco's be done to analyze the determinants of financial performance .Another study could be carried out using other determinants that may influence the financial performance of SACCOs. Future studies could also focus on a comparative study among various sectors. Future studies should apply different research instruments like focus group discussions and primary data only to involve respondents in discussions in order to generate detailed information which would help improve financial performance of SACCOs.

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