



**FINANCIAL FACTORS AFFECTING PERFORMANCE OF DEPOSIT TAKING
SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN KENYA: A CASE OF
KIAMBU COUNTY**

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Abstract

This project sought to study the financial factors affecting performance of Sacco's in Kenya. The objectives of the study that were used were dividend policy, investment decisions and loan policy of the Sacco's. The research focused on all the 14 Sacco's in Kiambu County licensed by SASRA the regulatory body by the end of 2015. The study was based on data published from the audited annual reports of the Sacco's and covered a period of 5 years from 2011-2015. Quantitative data collected was analyzed by use of descriptive statistics and inferential statistics using SPSS version 20.0 and presented through percentages, mean, standard deviation with the key independent variables being Return on Assets and Return on Equity. The study found out that dividend and investment policy affected positively the financial performance of Sacco's whereas loan policy negatively affected the financial performance. The correlation and regression analysis was conducted to establish the relationship between financial factors and performance of SACCOs in Kenya. The findings of the study recommended that t and the Sacco should work towards joining the credit reference bureau and to educate their members in prompt payment. It also recommended that the Sacco should attach guarantors for the default loans to reduce the non-performing loan. The Sacco should aim at educating the members to increase their saving in order to expand on the investment portfolio so as to establish a consistent way of paying the dividend.

Keywords: Dividend Policy, Financial Performance, Investment Decision, Loan Policy

Introduction

Sacco's have been recognized worldwide as important avenues of economic growth. Close to a billion people are affiliated with co-operatives reflected in composition that make up the International Cooperative Alliance (ICA) - the global apex body representing cooperatives in the world. Many countries that have achieved economic development have a vibrant and dynamic cooperative sector which contributes substantially to the growth of those economies. SACCOs play a significant role in the provision of financial services to the poor (target groups). They provide savings and credit and investment opportunities to individuals, institutions and group members. Sacco's perform an active financial intermediation function, particularly mediating from urban and semi-urban to rural areas, and between net savers and net borrowers while ensuring that loan resources remain in the communities from which the savings were mobilized.

According to Cobia (2008), cooperative efforts have occurred throughout history. Since the early days, man cooperated with others to help kill large animals for survival and so as to achieve the objectives that they could not reach if they acted individually. Cooperation has occurred throughout the world. Ancient records show that the Babylonians practiced cooperative farming and that the Chinese developed savings and loan associations similar to those in use today. In North America, clearing land in preparation for the planting of crops, threshing beans, and barn raisings all required cooperative efforts. In the United States, the first formal co-operative business is assumed to have been established in 1752.

Empirical evidence has shown that in most developing economies, savings and credit co-operatives have brought millions of citizens into cohesive financial institutions which are succeeding very well in providing financial services to its members for improving their standard of living (Temu, 1999; Chirwa, 1997). Nevertheless, the existing literature has also indicated that these farmers' associations in rural areas has been experiencing problems including diseconomies of scale of credit, high interest rate on loan, and very short-term loans (Chirwa, 1997). Such problems have caused high rate of default in most developed economies. Likewise previous studies have established that social-economic and demographic factors such as age, income, marital status, gender, family size, occupation, etc. have a bearing on households' credit worthiness and repayment behavior of the borrowers on credit market. The following are some observations in this regard.

Nikhade *et al.*, (1994) studied crop loan repayment behaviour in cotton growers with the aim of analyzing behaviours and characteristics of borrowers along with the causes of non-repayment in crop loans. Relational analysis revealed that the social personal characteristics such as education, annual income, land holding and irrigation influenced positively the borrowing pattern and repayment behaviour of the borrowers.

The SACCO sub-sector is part of the larger cooperative movement in Kenya. There are two broad categories of co-operatives: Financial co-operatives (Savings & Credit Co-operative Societies-SACCOs) and Non-financial cooperatives (includes farm produce and other commodities

marketing cooperatives, housing, transport and investment co-operatives). In the recent past Savings and Credit Co-operatives (SACCOs) have witnessed faster growth than other co-operatives. The establishment of SACCO Societies Act 2008 places the licensing, supervision and regulation of deposit taking under the aegis of the SACCO Societies Regulatory Authority (SASRA). Through this new legal framework, prudential regulations have been introduced to guide SACCO's growth and development (Barrales, 2012).

SACCOs in Kenya are gradually responding to the fast changes in the financial environment and adopting new approaches to the SACCO model. A good example is the FOSA concept and the development of products that are not tied to the traditional SACCO model, which relies on the tied shares deposits. However, Co-operative Societies need to keep up with changing demands. For instance, members want quick and easy access to financial services. If their SACCO cannot provide the loan when it is needed, then it is not meeting its members' needs. In this regard, SACCOs need to provide efficient services and remain liquid at all times (WOCCU and FSD, 2007). With the cut-throat competition witnessed in the last few years, SACCOs are marketing themselves more aggressively than before. A case in point is Stima SACCO which has employed marketing officers, whose responsibility is marketing and business development. The SACCO has not been experiencing serious liquidity problems over the years, but with the current competition, it has to seek ways to mobilise more deposits and re-package its loan products. The SACCO has been unable to introduce a loan whose repayment period goes beyond 48 months, and this is now becoming a challenge due to the competition that offers a repayment period of 60 months and beyond (WOCCU and FSD, 2007).

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 deposit-taking 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, 2014).

Financial performance measures how well a firm utilizes its primary mode of business to generate revenue. It entails measuring of the results of a firm's policy and operations in monetary terms based on the allocated resources to most viable projects that generate returns which maximize shareholder's wealth. Financial performance can be measured using different methods but all measures should be taken in aggregation for example financial ratio analysis has been a useful way of gaining a "snapshot" picture of SACCOs. Ratios have no financial theory behind them to tell us

what should be the case (or value) thus no way to identify a "theoretically best" value for any of the ratios.

Mudibo, (2005) discussed some of the factors affecting performance of SACCOs as weak regulation, limited product and services, low marketing and poor image. With such challenges, the dividend policy of major Sacco's may be put into question, especially with low and middle income earners in developing countries where the average citizen live on less than a dollar a day. Equally, the rate of getting dividends are generally lower than those in developed countries, therefore, better dividends policy should usually be a priority for Sacco's in developing countries (Mwangi, 2008). Also default on loan repayments poses the greatest risk to stability of the multi-billion shilling savings and credit co-operative (Sacco) movement, financial sector regulators have said. With the savings and credit co-operatives increasingly becoming an important tool in economic development, the instability and inadequacy of services provided by them may compromise the quality of life and life span of average income groups in Kenya. This in the long run will affect the country's income generation potential and the overall economic growth. This growth can only be realized when there is sufficient number of well-trained co-operative officers, technical staff, professional and management manpower. Few studies have been done to establish whether the issue of dividend policy, investment policies and loan default affect the performance of Sacco's. The main aim of the study is to investigate the influence of internal financial factors of performance of Sacco's in Kenya: case of Kiambu County.

Problem Statement

As envisioned in Kenya's development blueprint, Vision 2030, Sacco's are already playing their critical role of savings mobilization for investments. Many rural and urban Kenyans now own homes and other business enterprises courtesy of funds through their Sacco's (GOK, 2007).

The Kenyan SACCO sector has been observed to contribute greatly to the total financial industry and consequently the economy. It contributes to over forty five percent of the nation's Gross Domestic Product. Given the important role that SACCOs play in any economy, it is therefore crucial to understand financial performance and its determinants so that the management can be able to know how to improve financial performance and thus ensure sustainability of the Co-operative movement in Kenya. However, if the determinants of financial performance are not properly enhanced and protected through legislation and oversight then SACCOs will be unable to adequately advance loans to members. If this extends over long periods of time, the eventual result will be liquidation and deregistration of a Sacco (GOK, 2013).

High level of performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large. (Naser and Mokhtar, 2004). From the reviewed empirical literature, it is evident that factors contributing to success or failure of co-operatives are multifaceted and depends on the operating environment of the specific SACCO. Njihia (2015) presented a report on common issues affecting performance of SACCOs and pointed out that the issues affecting performance are membership size, poor

profitability and loan defaulting. On the other hand Mwangi (2008) in his study found out that the rate of getting dividends are generally lower than those in developed countries therefore better dividend policy should usually be a priority for Saccos in developing countries. Moreover, the financial regulators are saying that the non-performing loans are increasingly posing a risk to the multibillion sacco industry, considering that saccos are an important tool in the economic development and any inadequacy in the provision of services may compromise the livelihoods of the average income groups in Kenya with far reaching consequences of income generation and overall economic growth. Therefore, this study sought to find out whether dividend policy, investment decision, and loan policy affect performance of SACCOs.

General Objectives

The general objective of the study was to investigate the influence of internal financial factors of performance on Sacco in Kenya a case of Kiambu County.

Specific Objectives

- i. To investigate the extent to which dividend policy influences performance of Sacco’s in Kiambu County
- ii. To establish the extent to which investment policy influences performance of Sacco’s in Kiambu County
- iii. To determine whether loan default affect performance of Sacco’s in Kiambu County

Conceptual Framework

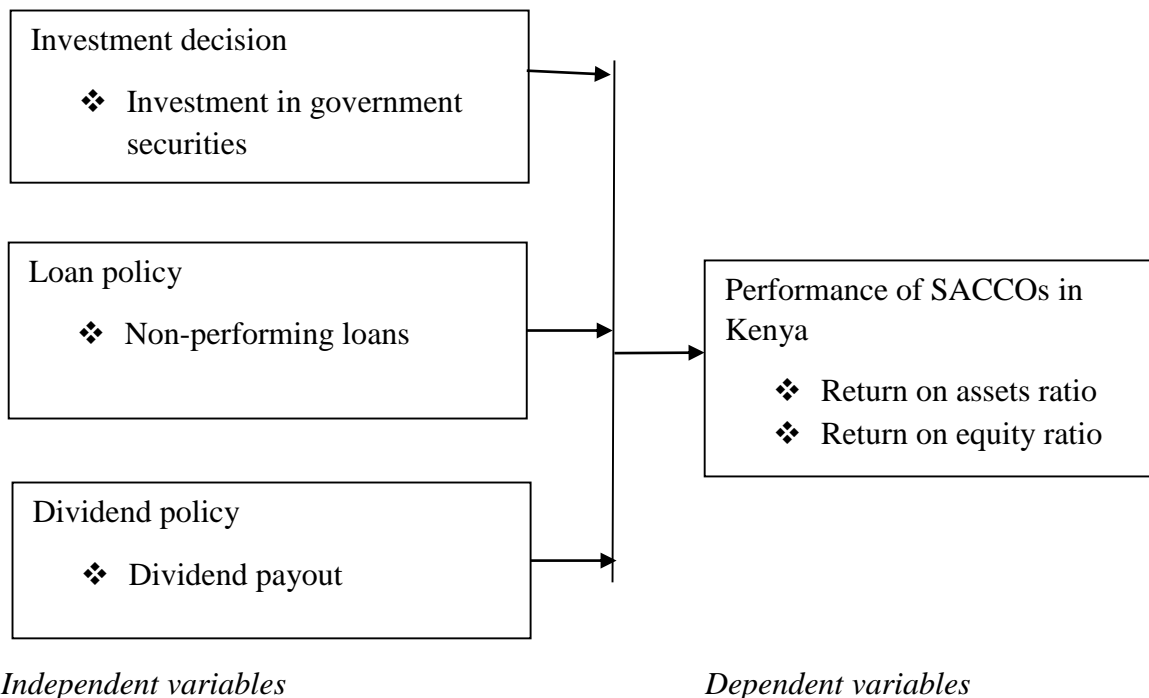


Figure 1: Conceptual Framework

Research Methodology

Descriptive research design was appropriate for this study in understanding the influence of internal factors on financial performance of SACCOs in Kenya.

The study target population consisted of the deposit taking Sacco's licensed by SASRA in Kiambu County, Kenya. There are 14 licensed deposits taking SACCOs in Kiambu County by August, 2015. (SASRA review report, 2015). Thus this research targeted all the 14 deposit taking Sacco's licensed by SASRA in Kiambu County.

Secondary data was obtained from previous works from related articles including published financial reports from the Sacco's and data related to the Sacco's available from the SASRA annual reports on their performance that assisted in the analysis of the variables stated. Journals and financial statements will be sampled for secondary data. The data was further collected and organized using a data collection schedule.

RESULTS AND DISCUSSION

1. Investment policy

The study sought to establish the distribution of money invested in government securities. The variable was measured by amount invested in government securities.

Table 1 Investment policy

year	Mean(millions Ksh)	Std.deviation	Skewness
2015	15.357	0.250	0.1478
2014	11.317	0.280	0.1946
2013	13.152	0.136	0.1695
2012	15.145	0.217	0.1367
2011	15.164	0.167	0.2354

Investment in securities was highest in 2015 with a mean of 15.357 and declined in 2014 where the mean was 11.317. Table 1 indicates that there has been an upward trend in investment in securities from 2014 with a mean of 11.317 to 2015 with a mean of 15.357.

2. Loans policy

The study sought to establish the distribution loan policy. The variable was measured by amount by non-performing loans against the loans advanced.

Table 2 Loans policy

year	Mean	Std.deviation	Skewness
2015	0.534	0.0452	0.0349
2014	0.476	0.0357	0.0391
2013	0.546	0.0246	0.0452
2012	0.456	0.05345	0.0673
2011	0.435	0.03245	0.0454

The level of nonperforming loans was highest in 2013 with a mean of 0.546. And lowest in 2011 with a mean of 0.435. There is an indication from the analysis that non-performing loans have been rising from 2013 to 2015 with a mean of 0.534.

3. Dividend Policy

The study sought to establish the distribution of dividend policy. The variable was measured by amount in Kenya shillings paid out per every share held by the members from 2011-2015.

Table 3. Dividend policy

year	Mean	Std.deviation	Skewness
2015	0.2800	0.3324	0.02
2014	0.2534	0.3894	0.04
2013	0.2345	0.2856	0.05
2012	0.1712	0.3067	0.05
2011	0.2814	0.2487	0.05

The amount paid out per share on average was highest in 2011 with a mean of 0.2814. Then the lowest amount was in 2012 where the mean was 0.1712.

4. Return on Assets (ROA)

The study sought to establish the distribution of return on assets. The variable was measured by the ratio on income dividend by assets and then converted into percentage form.

Table 4. Return on Assets

year	Mean (%)	Std deviation	Skewness
2015	2.7	0.0234	0.123
2014	2.4	0.0214	0.169
2013	2.5	0.0123	0.115

2012	2.6	0.0342	0.141
2011	2.1	0.0123	0.172

The mean value of return on assets was highest in 2015 with a mean of 2.7%. and lowest in 2011 with a mean value of 2.1%.

5. Return on Equity (ROE)

The study sought to establish the distribution of return on equity. The variable was measured by net income per shareholder's fund.

Table 5. Return on Equity

Year	Mean (%)	Std deviation	Skewness
2015	11.12	0.0451	0.054
2014	12.14	0.0436	0.045
2013	13.51	0.0546	0.012
2012	12.23	0.0234	0.035
2011	13.72	0.0342	0.023

The amount of return on equity was highest in 2011 with a mean of 13.72 and lowest amount was in 2015 where the mean was 11.12. ROE had higher percentage values than ROA on all the years under study.

Testing Multicollinearity

Prior to further analysis data was tested for multicollinearity using the pair wise correlation analysis. The essence of testing collineality is that the independent variables should be orthogonal to one another. This orthogonality condition is important since orthogonal variables can enter a model with their individual influence being very clearly identified.

Table 6. Correlation Analysis

	Performance	Investment Policy	Loans Policy	Dividend Policy
Performance	1			
Investment decision	0.712	1		
Loans Policy	0.861	0.531	1	

Dividend Policy	0.793	0.442	0.425	1
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Brook (2002) assert that Multicollinearity is the problem that occurs when the explanatory variables are very highly correlated with each other. If there is no relationship between the explanatory variables, they would be said to be orthogonal to one another. If the explanatory variables were orthogonal to none another, adding or removing a variable from a regression equation would not cause the values of the coefficients on the other variables to change.

From Table 6 the correlation analysis shows that the collinearity between independent variables was below 85 % which has been accepted in literature as the value beyond which collinearity would be termed as a serious problem in models estimation process. The correlation between the independent variables and the dependent variable (SACCOs performance) was found to be quite high which was a good indication of explanation power of the independent variables on the dependent variable. Since multicollinearity was not found to be serious problem the researcher proceeded to carry out the regression analysis in the net section

Autocorrelation test

The study set to investigate the whether there was the presence of serial correlation if the model could be estimated with the raw data assuming independence of observations. The results were estimated and presented in the table 7.

Gujarati (2008), note that autocorrelation is the correlation between members of series of observation ordered in time or space. Gujarati note further that in regression context, the classical linear regression model assumes that such autocorrelation does not exist in the disturbances (error term).

Table 7 Test of Autocorrelation

year	Autocorrelation	Q-Statistic	Probability
1	-0.135	1.3233	0.250
2	0.311	8.4750	0.014
3	-0.250	13.166	0.004
4	0.044	13.314	0.010
5	-0.004	13.315	0.021

The result showed that there was no serial correlation even at order ten as showed by the significance of the Q-statistic probability values. The test rejects the null hypotheses of auto correction.

Regression Model 1 fit

Table 8. Regression Result with ROA as dependent variable

variable	coefficient	std. error	t-statistic	prob.
Dividend policy	0.4728	0.0811	5.9100	0.0020
Loans policy	-0.1612	0.0400	-4.0322	0.0001
Investment decision	0.1745	0.0535	3.2617	0.0041
constant	3.4679	0.5957	5.8216	0.0000
F-statistic	120.57	Adjusted R-squared		0.083
prob(f-statistic)	0.000			

The regression model is as follows:

$$ROA = 3.479 + 0.4728_{\text{dividend}} - 0.1612_{\text{loan policy}} + 0.1745_{\text{investment}} + \varepsilon$$

The coefficient of determination (R square) of 0.083 indicates that ROA on its own in the model explains 8.3% of the variation or change in the dependent variable (financial performance). The remainder of 91.7% is explained by other factors and variables other than ROA.

Dividend policy

From the regression model above, the coefficient of dividend policy was found to be 0.4728. This value shows that holding other variables in the model constant, an increase in dividend policy by one unit causes the financial performance to increase by 0.4728 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between the dividend policy in the SACCOs and their performance.

The coefficient is not just positive but also statistically significant with a t-statistic value of 5.9100. In statistics, a t-statistic of 2 and above is normally accepted to be significant in statistical inference. The standard error was found 0.0811 and the p-value was found to be 0.0020. The variable was also found to be the most influential variable on the performance of SACCOs in Kiambu County. These findings supports those of Kariuki (2013), (Lintner 1956),(Ongeri,

2014),(Kapoor, 2009), (Zameer, Rasool, Igbal, Arshad, 2013) who found dividend policy to have effect on performance.

The results thus shows that dividend policy by the SACCOs enhance the financial performance. The implication is that the managers should make sure that dividend policy decisions are prioritized when formulating the financial strategies.

Investment decision

The coefficient of investment policy was found to be 0.1745 with a $p=0.0041$ which is less than 0.05. This value shows that holding other variables in the model constant, an increase in investment decision by one unit causes the financial performance to increase by 0.1745 units.i.e. 1% increase in investment decision results in 17.45% in ROA. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between the investment policy in the SACCOs and their performance.

The coefficient is not just positive but also statistically significant with a t-statistic value of 3.2617 and a standard error of 0.0535. The variable was also found to be the second most influential variable on ROA.

Loan Policy (Non-performing loans)

The coefficient of loan policy was found to be -0.1612, $p= 0.001$ which is less than 0.05. This means an increase in Nonperforming loans by one unit causes the ROA to decrease by -0.1612 units.i.e. 1% increase in loan policy results in a 16.12% decrease in ROA. The value of the coefficient is negative. The negative effect shows that there is a negative relationship between the loan policy (nonperforming loans) and ROA. The variable was also found to be the least influential variable on the performance of SACCOs in Kiambu County.

Regression Model 2 fit

Table 9. Regression Result table ROE as dependent variable.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dividend Policy	0.4072	0.1242	3.2786	0.0006
Loans policy	-0.1467	0.0314	-4.6720	0.0003
Investment decision	0.2122	0.0761	2.7884	0.0298
Constant	1.0856	0.7654	6.9367	0.0000
F-statistic	134.333			

Prob(F-statistic)	0.0000
Adjusted R-squared	0.075

The regression model is as follows:

$$\text{ROE} = 1.0856 + 0.4072_{\text{dividend}} - 0.1467_{\text{loan policy}} + 0.2122_{\text{investment}} + \varepsilon$$

Where: Y = Financial performance, β_0 = Constant Term, β_1 = Beta coefficients, X1 = dividend policy, X2 = loan policy, X3 = investment decision

ε = Error Term

The coefficient of determination (R square) of 0.75 indicates that ROE on its own in the model explains 75% of the variation or change in the dependent variable (ROE) which can be explained by dividend policy, loan policy (non performing loans) and investment decision.

Dividend policy

The regression model result represented above for the financial factors with ROE as a measure of performance. From the regression model, the coefficient of dividend policy was found to be 0.4072, $p=0.0006$ which is less than 0.05. This value shows an increase in dividend policy by one unit causes ROE to increase by 0.4072 units. i.e. 1% increase in dividend policy results in an increase of 40.72% in ROE. The value of the coefficient is also positive. The positive effect shows that there is a positive and significant relationship between the dividend policy and ROE

The standard error was found 0.1242 and the p-value was found to be 0.0006. The variable was also found to be the most influential variable on ROE.

Investment Decision

From the regression model and results, the coefficient of investment decision was found to be 0.2122, $p=0.2122$ which is less than 0.05. This value shows that an increase in investment policy by one unit causes the financial performance (ROE) to increase by 0.2122 units. i.e. 1% increase in investment decision results in 21.22% increment in ROE. The value of the coefficient is also positive. The positive effect shows that there is a positive and significant relationship between the investment policy in the SACCOs and performance (ROE). The variable was found to be the second most influential variable on the performance of SACCOs in Kiambu County.

Loan policy

The coefficient of loan policy measured by the non-performing loans was found to be -0.146 , $p=0.003$ which is less than 0.05 this means that an increase in non-performing loans by one unit causes the ROE to decrease by -0.146 units i.e. 1% increase in non-performing loans results in a decrease in ROE. The value of the coefficient is negative meaning there is a negative relationship between the non-performing loans and ROE

Summary of findings

The study intended to find out the the financial factors affecting performance of Sacco's. The information used was collected from the regulatory body SASRA. From the analysis and data collected the following discussions and recommendation are made. The analysis was based on the objectives of the study. From the data there is exist a positive correlation between dividend policy, investment policy and return on Equity and Return on Assets. However there was a negative correlation between loan policy(non-performing loans) and Return on Assets and Return on Equity.

The dividend policy was found to have a positive influence on Return on Asset and Return On Equity whereby 1% increment in dividend policy resulted in an increment of 40.72% in ROA and an increase in 47.28% in ROE. Investment decision also had a positive influence on ROA and ROE where 1% increase in investment decision resulted in 17.45% increase in Return on Assets and 21.22% increase in return on Equity. Loan policy measured by the non performing loans had a negative influence on both Return on Asset and Return On Equity with 1% increment resulting in a reduction of ROA by 16.12% and ROE by 14.6%.

Conclusion

The study concluded that dividend policy, investment policy and loans policy are the key determinants of financial performance of SACCOs in Kenya. The results from the regression model revealed that the factor's that influenced SACCOs performance were statistically significant with the linear regression analysis showing there was a relationship between the independent and dependend variables with an adjusted R of 0.75 meaning that 75% of the changes in Return on Asset and Return on Equity can be explained by dividend policy, loan policy and investment decision. Dividend policy was found to be the most influential, investment decision was found to be the second most influential variable, and finally loan policy was the least influential variable on financial performance of deposit taking SACCOs in Kiambu County.

The study concludes that since all the variables were loaded into one factor for each of the variables, this was a good indication that the constructs used in the measurement of all the variables were adequate and they measured the financial performance.

Recommendation

Since all the study variable were found to be statistically significant, therefore it is recommended that managers should be keen on the dividend policy in their SACCOs. The importance of

Dividend policy in any firm cannot be underscored especially by the managers. The management has to decide whether to pay dividend or not depending on the performance of the sacco in a given year. There is need for saccos to open up more channels for funding its activities for example regular dividend policy can be maintained by saccos with long standing and stable earnings while a residual dividend policy can be used by saccos who finance upcoming projects using internally generated funds. However the payment of dividend should not undermine a firm's investment policy

Members should be involved during the AGMs so that they can also bring in new ideas on the investments portfolios with high returns in consultation with the experts in field.

Loan policy focused on the non-performing loans. The management should take the initiative of educating their members on the prudent way of investing the loans advanced so that they can be able to repay the loans as scheduled. Though there were saccos that had partnered with Credit Reference Bureau (CRB) majority of them had not. The saccos are argued to join so that they can advance loans to those members who are creditworthy.

Saccos should also attach guarantors of members whose loans have fallen due after the first three months to avoid them being default loans and due diligence should be adhered to when evaluating members for eligibility of loans.

Suggestions for further Research

This study focused on three financial variables. Further studies should be done on other variables such as the effect of competition from commercial banks, internal political influence, operations cost, inflation rates, exchange rates and saving culture. The effect of non-financial factor on performance should also be done to ascertain whether they affect performance of saccos.

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