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# EFFECT OF REGULATIONS ON FINANCIAL PERFORMANCE IN SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN MOMBASA COUNTY, KENYA

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# ABSTRACT

This study assessed the effect of regulations on the financial performance of savings and credit cooperative societies in Mombasa County. The specific objectives of the study are to determine the effect of capital adequacy, asset quality, earnings performance and liquidity regulations on financial performance of Saccos. The study is grounded on free cash flow theory, cash management theory and operating cycle theory. The study adopted descriptive survey research design. The study target population was selected Savings and credit cooperative societies in Mombasa County with membership of 20,000 individuals and above. The population was derived from branch managers, financial managers and credit officers. Stratified random sampling technique was used to select a sample size of 73 respondents with the help of Neymars allocation formula. The primary data was collected by use of a structured questionnaire which was developed based on the research objectives. Data analysis was done with the help of Statistical Package for Social Science (SPSS) version 25 tool. Descriptive statistics and inferential statistics formed the data analysis techniques used. Data was presented in frequency tables. Findings revealed that the SACCO total capital reserves are within the stipulated level by SASRA. Further, it was established that aggregate deposits for the SACCO are sufficient and stable and that the SACCOs risk based capital is high thus preventing the SACCO from been undercapitalized. Findings showed that during hard times, our SACCO seeks capital infusion from external sources. The study concluded that for the SACCOs to improve their asset quality, they have invested in financial assets. Further, the study concluded that the SACCO has invested in real asset properties to enhance its asset quality. The SACCO loan asset is of high quality and that the SACCO's credit policies are integrated with performance objectives and in line with asset quality regulations. The study recommended that the SACCOs loans income should be enhanced as it was revealed to be the most significant income source for the SACCOs and forms the bulk of total income. The study recommended that the management of the SACCOs should seek to improve performance of these SACCOs by ensuring investments interests are maintained above the required average of 5 percent.

Key Words: Capital Adequacy, Asset Quality, Earnings Performance, Liquidity Regulations

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#### INTRODUCTION

Global financial crises a decade ago ushered in myriad of challenges concerning the way financial institutions capital regulated. is Financial institutions lacked enough high-quality capital or incentives to sufficiently curb risk-taking. Regulation was so complex that even regulators struggled enforcing it (Pille & Puradi, 2017). Since then, national and international regulatory authorities have tightened capital requirements for financial institutions with the aim of increasing the stability of national financial institutions systems. Capital adequacy, asset quality, earnings and liquidity remain the key criteria for monitoring, evaluating and measuring the financial soundness and stability of the SACCOs.

Locally, Sacco savings and deposits are estimated at over \$7 billion, equivalent to about 30 per cent of national savings while the loan portfolio is in excess of \$6.6 billion. Saccos are required to adhere to the capital regulations by maintaining minimum adequate levels of capital per their riskiness to lessen the probability of failure. However, Savings and Credit Cooperative Societies have encountered high demand for loans and are struggling to meet it due to a lack of adequate capital (Mutinda & Wahome, 2019). SACCO Societies regulatory authority describe capital and provides the minimum capital required for a SACCO Societies in the deposit-taking Sacco business (Otieno, Okengo, Ojera, & Mamati, 2016).

SASRA has the mandate to ensure that each SACCO Society maintains a level of capital which is adequate to protect or cushion member from business risks that the SACCO, as a financial institution faces. These risks include credit, investment, legislative, liquidity, interest rate, and competitive risks. Thus as a measure of a financial institution's safety and soundness, adequate capital promotes public confidence in the Savings and Credit Cooperative Societies in Kenya. Under the capital regulations of SASRA, SACCOs are required to maintain a core capital of not less than ten percent of their total assets, not less than eight percent of total deposit liabilities, and institutional capital of not less than eight percent of its total assets (Kioko, & Wario, 2016). According to the SASRA Supervision report (2018) there is a problem of undercapitalization in SACCOs. The report indicated that loans outgrew the total deposits. The loan loss allowance registered an increment of 42.45% in 2018 to reach a sum of Kshs 15.26 Billion from Kshs 10.71 Billion recorded in 2017 indicating undesirable financial performance (King'ori, Kioko, & Shikumo, 2017).

#### **Statement of the Problem**

Capital regulations have a potential to affect financial performance of Savings and credit cooperative societies. Ngugi (2018) argues that in 2019 only 69 of the 175 deposit-taking Saccos achieved and sustained the prescribed minimum institutional capital adequacy (ICA) ratio of 8 per cent. The poor level of compliance with the ICA ratio demonstrates that many deposit-taking Saccos are not retaining sufficient earnings to build capital, proportionately to the growth of their asset base. In 2020, SASRA suspended 3 financial cooperatives for failing to meet required financial ratios (Okoth, 2020). In 2019, the total loans outgrew the total deposits. The loan loss allowance registered an increment of 42.45% in 2018 to reach a sum of Kshs 15.26 Billion from Kshs 10.71 Billion recorded in 2017 indicating poor financial performance. The financial performance of Saccos has been dwindling due to increase in credit risks and emergence of Novel COVID 19 (Cytonn report, 2021). This has witnessed excessive withdrawals from the Sacco members who have lost jobs and businesses thus affecting liquidity of Saccos.

Various local studies have been done on Savings and credit cooperative societies' regulation. Kamau and Guyo (2018) investigated Sacco regulations effect on performance and established a positive relationship between liquidity and Sacco performance. Mbuti (2017) did a study on the effect of internal audit reporting quality on the financial performance of Saccos in Murang'a County and results revealed that financial reporting objectivity influences Saccos performance. Mutinda and Wahome (2019) carried a study on effect of prudential regulatory standards on financial performance of deposit taking Saccos in Kenya and showed that liquidity ratio had the highest on financial performance of Saccos. However, the reviewed empirical literature has mostly focused on broader SASRA regulations and there is empirical paucity on capital regulations on performance of Saccos. In view of the identified empirical gaps there is a need to carry out a study on capital regulations and financial performance of SACCOs in Mombasa thus the current study sought to holistically investigate the capital regulations and financial performance of Savings and Credit Cooperative Societies in Mombasa, Kenya.

# **Objectives of the Study**

The general objective of the study is to establish regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya. The specific objectives were;

- To establish the effect of capital adequacy regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya.
- To investigate the effect of asset quality regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya.
- To determine the effect of earnings performance regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya.
- To establish the effect of liquidity regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya

The study was guided by the following research hypotheses;

 H<sub>0</sub>1: There is no significant effect of capital adequacy regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya

- H<sub>0</sub>2: There is no significant effect of asset quality regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya
- H<sub>0</sub>3: There is no significant effect of earnings performance regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya
- H<sub>0</sub>4: There is no significant effect of liquidity regulations on financial performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya

# LITERATURE REVIEW

#### **Theoretical Review**

# **Buffer Theory of Capital Adequacy**

Buffer theory of capital adequacy was developed by Calem and Rob in 1996. The capital buffer theory suggests that the excessive increase in capital than required decreases the risk of the financial institution (Jokipii & Milne, 2016). The theory suggests that capital buffer may increase the performance of financial institutions due to reducing the rate of lending, which increases the demand for loans. The theory further states that a financial institution that needs a minimum capital ratio has the incentive to increase its capital and reduce risks to avoid costs associated with lack of regulatory compliance (Benes & Kumhof, 2016). Financial institutions prefer to maintain buffer capital to reduce the chance of finding themselves with levels of capital that are below the required amounts. Based on buffer theory of capital adequacy, it is a requirement for financial institutions to hold capital buffer in addition to minimum capital requirements (Benes & Kumhof, 2016).

# Liquidity Preference Theory

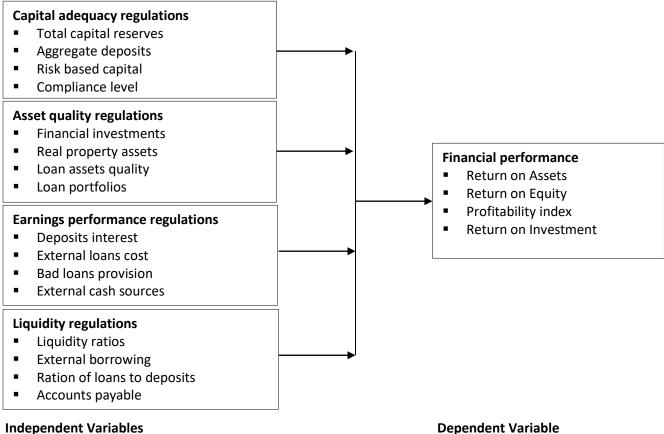
Liquidity preference theory was first introduced by Boulding in 1944. Liquidity preference theory states that short-term financial securities are preferable to long-term financial securities. According to Pigou (2016), short-term financial assets can easily be converted into cash and avoid uncertainties in the long run. Financial institutions create liquidity to reduce bankruptcy and financial distress costs. The establishment of liquidity is done through the financing of illiquidity assets by relatively liquid liabilities.

Liquidity management involves managing the relationship between a firm's short-term assets and its short-term liabilities (Pigou, 2016). The goal of working capital management is to ensure that the firm can continue its operations and that it has sufficient cash flow to satisfy both maturing shortterm debt and upcoming operational expenses (Appelt, 2016). For sufficient funds to satisfy both short-term debt maturing and upcoming operational expenses positive working capital is desirable. Capital regulations require financial institutions to comply with solvency requirements as part of liquidity management. Solvency indicates the SACCO's ability and capacity to meet its liabilities from its assets (Appelt, 2016). Therefore,

solvency shows the balance between debt and the value of assets. It is the basis upon which liquidity preference theory works. Liquidity preference theory relates to the liquidity regulations in the current study

#### **Earnings Theory of Capitalization**

The earnings theory of capitalization was developed from the work of John Lintner in 1962. The theory points out that the determinants of the value of a firm's cost of equity financing are the dividends the firm is expected to pay to perpetuity, the expected annual growth of dividends and the firm's current stock price. According to the theory, earnings are forecasted and capitalized at a return rate, which actually is the representative of the industry. Earning basis for capitalization has the merit of valuing a firm at the amount directly related to its earning capacity. It is often considered superior to cost theory because of its lesser chances of being either under or over capitalized.



# Figure 1: Conceptual framework

**Conceptual Framework** 

#### **Dependent Variable**

#### **Empirical Review**

Salaton, Gudda, Rukaria (2020) did a study on the effect of loan default rate on financial performance of Savings and Credit Cooperative Societies Innarok, County Kenya. Cross-sectional research design was applied in this study. The target population comprised of 20 registered and active SACCOs in Narok County. Purpose sampling was used to select only 17 of the SACCOs which had been active for the six years period of the study. Secondary data from audited financial report between 2013 and 2018 was collected and used for the analysis. Both descriptive and inferential statistics were used to analyse the relationship between the variables. Statistical Package for Social Sciences version 23 and Microsoft Excel package were used as appropriate tool to analyse and present the results. The findings it was established that loan default rate had a positive statistical significant effect to financial performance of the SACCOs.

Odhiambo (2019) investigated determinants of the financial performance of savings and credit cooperative societies. Descriptive survey research design was employed and helped in detailed capture of important information for the study. Census technique was used to include all Managers of 32 SACCOs in Nakuru town who provided data through structured questionnaires. Inferential and descriptive statistical methods incorporated means, standard errors, correlation coefficients and regression coefficients to analyze the data. The study findings showed that membership size affected financial performance of SACCOs.

Maina, Kinyariro, & Muturi, (2016) investigated the influence of credit risk management practices on loan delinquency in savings and credit cooperative societies. Multiple linear regressions were used in data analysis. The study findings showed a strong relationship between credit risk controls, collection policy, and loan delinquency in SACCOs. Therefore, according to the findings, credit risk management practices contributed to loan delinquency.

Kahuthu (2016) in his study on the impact of prudential regulation on the financial performance

of deposit-taking savings and credit co-operative societies in Kenya revealed that core capital positively influenced the financial performance of deposit-taking SACCOs. Results of the inferential statistics particularly the analysis of variance (ANOVA) showed that core capital has a major positive significance on the SACCOs' financial performance.

Njenga and Jagongo, (2019) did a study on the effect of financial management decisions on the financial performance of selected non-deposittaking SACCOs. Findings revealed that financial management decisions on capital structure, working capital, and investments significantly determining financial performance. Gross Domestic Product (GDP) had a moderating effect on financial management decisions that influenced the financial performance of savings and credit cooperative societies.

Onchwari (2018) did a study on the effect of statutory regulations on the financial performance of deposit-taking savings and credit cooperative organizations. The study employed a descriptive research design using quantitative approaches. The target population was FOSA managers, finance managers, credit managers and internal auditors all totaling 64 targeted respondents from SACCOs in Nakuru County, Kenya. The study used a census approach to collect data and it used closed ended questionnaires in collecting primary data. Secondary data was collected from SASRA annual publications. The collected data was summarized and analyzed using both descriptive and inferential statistics and then presented in tables. The findings revealed that capital adequacy and asset quality had a positive and weak correlation with return on equity.

Mbuti (2017) investigated the effect of internal audit reporting quality on the financial performance of savings and credit cooperative societies in Murang'a County. The study used descriptive survey design. The target population of the study was all the SACCOs in Murang'a County. Stratified sampling was utilized to select a sample of 120 SACCOs. A questionnaire was used to collect data. Descriptive statistics and inferential statistics were applied as data analysis technique. The study findings revealed that objectivity of financial reporting in SACCOs, internal audit report completeness, and timeliness of internal audit reporting had a significant effect on the financial performance of SACCOs.

# METHODOLOGY

The study used descriptive survey design. Descriptive survey design enables the researcher to depict the respondents most accurately. The study target population was ten Savings and credit cooperative societies in Mombasa County with membership of 20,000 individuals and above. Sampling frame for this study comprised of 10 Savings and credit cooperative societies in Mombasa County with membership of 20,000 individuals and above. The researcher collected data from all Branch managers, accountants, and credit officers using structured questionnaires. The data collection tool used by the researcher was Statistical Package for Social Sciences (SPSS) version 25. Descriptive analysis incorporated measures of central tendency such as means and measures of variation such as standard deviations. The study furthermore used inferential analysis applying Pearson moment correlation and regression analysis. Findings of the study were presented

**Table 1: Capital Adequacy Regulations** 

through descriptive and frequency tables. The following linear regression model was adopted to test the statistical significance of the study predictor variables on dependent variable;

 $\begin{array}{l} Y=\beta_{\theta}+\beta_{1}X_{1}+\beta_{2}X_{2}+\beta_{3}X_{3}+\beta_{4}X_{4}+\epsilon\\ Where:\\ Y=Financial Performance\\ \beta_{0}=Constant\\ \beta_{1}-\beta_{4}\ =\ are\ the\ coefficient\ function\ of\ the\\ independent\ variables,\\ X_{1}=Capital\ adequacy\ regulations\\ X_{2}=Asset\ quality\ regulations\\ X_{3}=Earnings\ performance\ regulations\\ X_{4}\ =\ Liquidity\ regulations\\ \epsilon\ =\ Error\ Term\end{array}$ 

#### **FINDINGS AND DISCUSSION**

#### Descriptive Analysis

Descriptive analysis was conducted on the study variables to check the mean and standard deviation. The results were presented in the following tables.

#### **Capital Adequacy Regulations**

The study respondents were asked to rate their agreement or disagreement on the various aspects of capital adequacy regulations. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 1.

	Ν	Mean	Std. Dev.
Our SACCO total capital reserves are within the stipulated level by SASRA	68	4.57	.600
Aggregate deposits for our SACCO are sufficient and stable	68	4.23	.529
Our SACCOs risk based capital is high thus preventing the SACCO from been undercapitalized	68	4.94	.340
During hard times, our SACCO seeks capital infusion from external sources	68	4.30	.498

From Table 1 it can be observed that respondents agreed to the statement that the SACCO total capital reserves are within the stipulated level by SASRA as indicated by a mean of 4.57 and standard deviation of 0.600. The respondents agreed to the statement that aggregate deposits for our SACCO are sufficient and stable as shown by a mean of 4.23 and a standard deviation of 0.529. The

respondents agreed to the statement that the SACCOs risk based capital is high thus preventing the SACCO from been undercapitalized and that during hard times, our SACCO seeks capital infusion from external sources as indicated by a mean of 4.94 and a mean of 4.30 respectively.

#### **Asset Quality Regulations**

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The respondents were asked to rate their agreement or disagreement on the various aspects of asset quality regulations. They were required to

do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 2.

#### **Table 2: Asset Quality Regulations**

	Ν	Mean	Std. Dev.
Our SACCO has invested in financial assets to improve its asset quality	68	4.91	.472
Our SACCO has invested in real asset properties to enhance its asset quality	68	4.44	.257
Our SACCO loan asset is of high quality	68	4.90	.507
Our SACCO's credit policies are integrated with performance objectives and in line with asset quality regulations	68	4.75	.489

From the findings, respondents agreed to the statement that the SACCO has invested in financial assets to improve its asset quality as indicated by a mean of 4.91 and standard deviation of 0.472. The respondents agreed to the statement that the SACCO has invested in real asset properties to enhance its asset quality as shown by a mean of 4.44 and a standard deviation of 0.257. Further, the respondents agreed to the statement that the SACCO loan asset is of high quality (mean=4.90) and that the SACCO's credit policies are integrated with

**Table 3: Earnings Performance Regulations** 

performance objectives and in line with asset quality regulations as indicated by a mean of 4.75 with a standard deviation of 0.489.

## **Earnings Performance Regulations**

The study respondents were asked to rate their agreement or disagreement on the various aspects of earnings performance regulations. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 3.

	Ν	Mean	Std. Dev.
Income from loans remains the most crucial source of income and forms the bulk of total income	68	4.70	.451
Interests from investments have remained at above the required average of 5%	68	4.04	.510
Our SACCO has maintained a respectable cost of external borrowing expenses to total income as required by statutory regulations	68	4.23	.449
Provisions for loan losses have markedly increased in the past five years as a result of strict application of SASRA Regulations	68	4.70	.667

Table 3 showed that respondents agreed to the statement that the income from loans remains the most crucial source of income and forms the bulk of total income as indicated by a mean of 4.70 with a standard deviation of .451. Further respondents agreed to the statement that interest from our investments has remained above the required average of 5% as indicated by a mean of 4.04 with a standard deviation of 0.510. Respondents agreed to the statement that the SACCO has maintained a respectable cost of external borrowing expenses to total income as required by statutory regulations as indicated by a mean of 4.23 and standard deviation

of 0.449. Finally, respondents agreed to the statement that provisions for loan losses have markedly increased in the past five years as a result of strict application of SASRA Regulations as indicated by a mean of 4.70 and standard deviation of 0.667.

#### **Liquidity Regulations**

The study respondents were asked to rate their agreement or disagreement on the various aspects of liquidity regulations. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 4.

# **Table 4: Liquidity Regulations**

	Ν	Mean	Std. Dev.
Our SACCO often meets its short term obligations due to increased liquidity	68	4.80	.684
The SACCO raises liquidity holdings hence reducing liquidity risks due to adherence of liquidity regulations	68	4.62	.670
The SACCO's increased liquidity arising from adherence to liquidity regulations has enhanced our loan disbursement to customers	68	4.02	.895
Our SACCO's credit policies are integrated with our performance objectives and are always in line with liquidity regulations	68	4.34	.929

Results in Table 4 showed that respondents agreed to the statement that the SACCO often meets its short term obligations due to increased liquidity as indicated by a mean of 4.80 and standard deviation of 0.684. Findings further showed that respondents agreed to the statement that the SACCO raises liquidity holdings hence reducing liquidity risks due to adherence of liquidity regulations as indicated by a mean of 4.62 and standard deviation of 0.670. The findings also showed that respondents agreed to the statement that the SACCO's increased liquidity arising from adherence to liquidity regulations has enhanced our loan disbursement to customers (mean = 4.02). The respondents agreed to the statement that the SACCO's credit policies are integrated with our performance objectives and are always in line with liquidity regulations (mean = 4.34).

# **Correlation Analysis**

Correlation analysis was done to determine the extent and size of the association between regulations and financial performance. The association was confirmed or denied using the Pearson's product moment correlation analysis. The results are shown in Table 5.

		Capital	Asset	Earnings	Liquidity	Financial
		adequacy	quality	performance	regulations	Performance
Capital	Pearson	1				
adequacy	Correlation	T				
	Sig. (2-tailed)					
	Ν	68				
Asset quality	Pearson	.399**	1			
	Correlation	.599	T			
	Sig. (2-tailed)	.000				
	Ν	68	68	68	5	
Earnings	Pearson	.435**	.550**	.284**		
performance	Correlation	.435	.550	.284		
	Sig. (2-tailed)	.000	.000			
	Ν	68	68	68	5	68
Liquidity	Pearson	.507**	.442**	.339**	1	
regulations	Correlation	.507	.442	.555	T	
	Sig. (2-tailed)	.000	.000		.003	.000
	Ν	68	68	68	8	68
Financial	Pearson	.521**	.549**	.326**	.402*	< <b>*</b>
performance	Correlation	.521	.545	.520	.402	
	Sig. (2-tailed)	.000	.000	.000	.000	
	**. Correlation is	significant at th	ne 0.01 level	(2-tailed).		

#### **Table 5: Correlation Coefficient**

Source: Researcher (2022)

The bivariate correlation results Table 5 revealed that capital adequacy regulation had a positive and significant correlation with financial performance of Saccos as indicated by a correlation coefficient of 0.521 and p-value of 0.000. The bivariate correlation between asset quality regulations and financial performance was found to be positive and significant as shown by a correlation coefficient of 0.549 and p<0.05. Further, bivariate correlation between earnings performance and financial performance was revealed to be positive and significant (r=0.326, P<0.05). The bivariate

correlation between liquidity regulations and financial performance was positive and significant (r=0.402, P<0.05).

#### **Multiple Regression Analysis**

The data was used to regress financial performance on regulations constructs which include capital adequacy regulations, asset quality regulations, earnings performance regulations and liquidity regulations. The results of regression analysis are presented as follows.

#### **Table 6: Model Summary**

_1 .721 <sup>a</sup> .519	.485	0.6054

a. Predictors: (Constant), Asset quality regulations, Capital adequacy regulations, Earnings performance regulations, Liquidity regulations

b. Dependent Variable: Financial performance

From Table 6, the correlation coefficient (R) for regulations and financial performance of SACCOs is 0.721 indicating that there is a positive strong correlation. The coefficient of determination ( $R^2$ ) is

0.519 indicates that 51.9% of the variation in financial performance is explained by Sacco regulation.

# Table 7: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	44.376	4	11.094	17.015	.000 <sup>b</sup>
1	Residual	41.049	63	.652		
	Total	85.425	67			
	10101		07			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Asset quality regulations, Capital adequacy regulations, Earnings performance regulations, Liquidity regulations

According to analysis of variance results in Table 7, the predicted relationship under the model is statistically significant at p-value of 0.000 is less than the significance level of 0.05. This shows that

the model between regulations and financial performance is statistically significant. The model coefficient is shown in Table 8.

#### **Table 8: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	.677	.265		2.553	.000
Capital adequacy regulations	.487	.232	.301	2.099	.020
1 Asset quality regulations	.649	.177	.984	3.667	.000
Earnings performance regulations	.332	.084	.366	3.952	.000
Liquidity regulations	.464	.082	.173	5.658	.004

a. Dependent Variable: Financial Performance

From Table 8, the model would appear as follows:

#### $Y = 0.677 + 0.487X_1 + 0.649X_2 + 0.332X_3 + 0.464X_4$

The regression model indicates that financial performance would increase by 0.677, given that all the other factors are held constant at zero. Further in the regression model it shows that a unit increase in capital adequacy regulations would lead to an increase in financial performance by 0.487. A unit increase in asset quality regulations would lead to a positive increase in financial performance by 0.649. A unit increase in earnings performance regulations would lead to a positive increase in financial performance regulations would lead to a positive increase in financial performance in financial performance by 0.332 and a unit increase in liquidity regulations would lead to an increase in financial performance by 0.464. The predictors had significance level of 0.05 and below hence significant.

#### **Discussion of Key Findings**

Regression analysis formed a basis for achieving research objectives adopted in this study. This was done by considering the p values corresponding to each variable of interest in the results. The first objective of the study sought to investigate the effect of capital adequacy regulations on financial performance of Saccos. Regression analysis conducted proved that there was a positively significant effect of capital adequacy regulations on financial performance as indicated by the values  $\beta_1$ = 0.487, p<0.05. The study concludes that a unit increase in capital adequacy regulations would lead to 0.487 unit change in financial performance. Therefore, the null hypothesis that there is no significant effect of capital adequacy regulations on financial performance is rejected.

The second objective was to establish the effect of asset quality regulations on financial performance of Saccos. Regression analysis result showed a positively significant effect of asset quality regulations on financial performance as indicated by the values  $\beta_2 = 0.649$ , p<0.05. The study concludes that a unit increase in asset quality regulations would lead to a positive increase in financial performance by 0.649. Therefore, the null

hypothesis that there is no significant effect of asset quality on financial performance of Saccos is rejected.

Thirdly, the study sought to establish the effect of earnings performance on financial performance of Saccos. Regression analysis conducted showed that there was positive significant effect of earnings performance on financial performance as indicated by the values  $\beta_3 = 0.332$ , p<0.05. The study concludes that a unit increase in earnings performance would lead to a positive increase in financial performance by 0.332. Therefore, the null hypothesis that there is no significant effect of earnings performance on financial performance is rejected.

The study sought to investigate the effect of liquidity regulations on financial performance of Saccos. Regression analysis conducted showed that there was positive significant effect of liquidity regulations on financial performance as indicated by the values  $\beta_4 = 0.464$ , p<0.05. The study concludes that a unit increase in liquidity regulations would lead to an increase in financial performance by 0.464. Therefore, the null hypothesis that liquidity regulations has no significant effect on financial performance of Saccos is rejected.

# CONCLUSSIONS AND RECOMMENDATIONS

The study concludes that that the capital reserves of the SACCO are always maintained within the level required by the regulator of Saccos. It is concluded that the aggregate deposits for the SACCO are sufficient and stable. Further, the study concludes that the risk based capital of the target Saccos is high and this prevents these Saccos from been undercapitalized. The study concludes that SACCOs seek capital infusion from external sources during hard economic times.

The study concludes that for the SACCOs to improve their asset quality, they have invested in financial assets. Further, the study concludes that the SACCO has invested in real asset properties to enhance its asset quality. The SACCO loan asset is of high quality and that the SACCO's credit policies are integrated with performance objectives and in line with asset quality regulations.

The study concludes that the income from loans remains the most crucial source of income and forms the bulk of total income and that interest from our investments has remained above the required average of 5%. The study concludes that the SACCOs have maintained a respectable cost of external borrowing expenses to total income as required by statutory regulations and that the provisions for loan losses have markedly increased in the past five years as a result of strict application of SASRA Regulations.

The study also concludes that the short term obligations of Saccos is often met as a results of Sacco liquidity increase. Also it is concluded that the SACCOs raise liquidity holdings hence reducing liquidity risks due to adherence of liquidity regulations. The study concludes that the SACCO's increased liquidity arising from adherence to liquidity regulations has enhanced their loan disbursement to customers and that the SACCO's credit policies are integrated with our performance objectives and are always in line with liquidity regulations.

The study recommends that management of SACCOs should strive to maintain the SACCO capital reserves so as to conform to the SASRA acceptable levels. Further, the management of the Saccos should ensure there is stability and sufficiency of aggregate deposits in the Saccos and also ensure that the risk based capital of the target Saccos is high so as to prevent SACCOs from been undercapitalized. Also in the case of difficult economic times, the management of the SACCOs should seek capital infusion from external sources.

The study recommends that the management of the SACCOs should prioritize investment in financial assets so as to improve SACCO asset quality. The study recommends that, in addition to financial assets investments, the SACCOs should also invest in real assets properties with a view to enhance asset quality of SACCOs and the management should maintain the asset quality of the Saccos at highest level since it was found to affect financial performance. The credit policies of the SACCOs should be integrated with performance objectives and in line with asset quality regulations.

The study recommends that the SACCOs loans income should be enhanced as it was revealed to be the most significant income source for the SACCOs and forms the bulk of total income. The study recommends that the management of the Saccos should seek to improve performance of these Saccos by ensuring investments interests are maintained above the required average of 5 percent. Also the SACCOs should maintain a respectable cost of external borrowing expenses to total income as required by statutory regulations.

The study recommends that the management of the SACCOs should strike a balance on SACCO liquidity so as to meet short term obligations of Saccos. Also the study recommends that the SACCOs should raise liquidity holdings so as to reduce liquidity risks and adhere to liquidity regulations since it was revealed that increased liquidity adherence as per the regulations has enhanced SACCOs loan disbursement to customers. The management of the SACCOs should integrate credit policies with performance objectives of the SACCOs and liquidity regulations.

# **Suggestions for Further Research**

This study focused on investigating the effect of regulations on financial performance of SACCOs in Mombasa County. However, the high commitment work systems used in the study explained 51.9 per cent change in financial performance. It is on this basis that the researcher recommended a study be carried out to study the other regulation aspects with a view to establishing their effect on growth of, not only SACCOs but other financial institutions in Kenya.

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