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Efficiency of Deposit Taking Saccos's in Kenya**



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## Investment Management and Financial Intermediation Efficiency of Deposit Taking Saccos's in Kenya

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### Abstract

**Purpose:** The purpose of the study will be to examine the influence of investment management on financial intermediation efficiency of deposit taking Savings and Credit Cooperative Societies in Kenya.

**Methodology:** This study adopted a descriptive survey research design. Target population of the study was 174 DT SACCOs which were in operations as December 2020. Census approach was used to select 174 DT SACCOs. The study relied on secondary data that was collected from annual financial statement of DT SACCOs. Data was analyzed using descriptive statistics (mean, standard deviation) and inferential statistics; regression analysis to examine the nature of the influence of investment management on financial intermediation efficiency.

**Results:** Results indicate that 57.38% of changes in financial intermediation efficiency of DT SACCOs was contributed by investment requirements. Further, there was a positive and significant influence of investment requirement on financial intermediation of DT SACCOs in Kenya ( $\beta = 0.071$ ,  $p$  value  $< 0.05$ ). The findings further revealed that financial performance as measured by profit before tax over total assets is positively related to Liquidity.

**Unique Contribution to Theory, Policy and Practices:** There is need for management of DT SACCOs to enhance compliance with Investment managements policy guidelines and procedures. This would be achieved through management of working capital items such as management of cash balances. Dependent on investment policies in place DT SACCOs management may adopt investment models that would enable ease conversion of investment in non-tangible assets into cash.

**Key words:** *Investment management, Financial Intermediation Efficiency, Deposit Taking Savings and Credit Cooperative Societies*

## **1.0 INTRODUCTION**

Investment policy requirement means ensuring that the institution maintains sufficient cash and liquid assets to satisfy the organizations demand for cash. For a financial institution, and thus for DTS's cash demand will be to meet the customers demand for cash in form of loans; savings withdrawal and to pay institutions expenses. It involves a daily analysis and detailed estimation of the size and timing of cash inflows and outflows over a given period of time to minimize the risk that savers will be unable to access their deposits in the moment they demand them. It describes the effort of managers to reduce liquidity risk exposure (Brunnermeier and Pedersen, 2009).

The board of directors are responsible for the formulation of the investment policy which shall be frequently updated the main challenges in implementing Investment Policy requirement is that SACCOs have focused on investing in the properties and buildings and these investments have surpassed the minimum regulatory requirements. The regulation requires Sacco's to divest from investment in buildings and focus on the core business of serving the members (Kevin, 2014).

SACCO investment policy mandates them not to exceed 10% total assets in land and buildings in their investments for purpose of earning rental or capital appreciation while should not exceed 5% of the land and buildings to total assets. The board of directors are responsible for the formulation of the investment policy which shall be frequently updated. Financial investment should not exceed 40% of core capital or 5% of total deposits Investments. Liquid assets to all institutions for profit making or not for profit are scarce and has liquidity risk. Companies have adopted complex and very rigorous liquidity management programs to manage their affairs since profitability is significantly influenced by liquidity (Raji et al., 2017).

### **1.2 Objectives of the Study**

The main objective of the study will be to examine the influence of investment management on financial intermediation efficiency of deposit taking Savings and Credit Cooperative Societies in Kenya.

## **2.0 LITERATURE REVIEW**

### **2.1 Buffer Capital Theory**

Buffer capital theory was proposed by Calem and Rob (1996) and it argues that bank that is close to regulatory minimum capital ratio have higher odds of altering its capital requirements ratios to alleviate odds of incurring compliance costs. However, there are higher chances of poorly capitalized banks to take more risks in anticipation that they may generate superior returns as compared to raising required returns. Despite of this approach to capital requirements formulated through these approaches are exposed to complexity associated with formulation of respective weights. Hence, some banks perceived it as block on achievement of its mandate.

In Germany, savings and credit cooperative groups and banks assert that there is need for an internal rating system for examining stability of respective financial institutions (Everling, 2003). This approach may instill a sense of discipline in management. Moreover, the approach may lead to seeking of internally generated solution to issues facing specific financial institution. According to Oloo (2011) regulations of financial institutions in Kenya is undertaken by Central Bank of Kenya (CBK) and several prudential guidelines are stipulated. Capital requirements is clearly stipulated and optimal capital requirements; increases risk absorbed by banks, increases buffer against shocks and changes on organization credit creation capacity (Chang, 2007).

According to Gudmundsson, Ngoka-kisingu and Odongo (2013) those commercial banks whose capital is higher and liquidity buffers are available are better placed in supporting businesses and households in periods when business is in recession. Further, Dar-Odeh et al. (2013) assert that compliance with capital requirements provides security on member's deposits though, compliance with capital requirements may not cushion against external losses.

SASRA prudential guidelines prescribes minimum amount of capital that must be held by DT SACCOs. The theory is appropriate for the study in support for the need to have capital in excess of minimum requirements. This will aid in examination of the effect capital adequacy in financial intermediation efficiency of DT SACCOs. Moreover, if all DT SACCOs holds the minimum capital requirements, then it may not have been fit to examine its contribution on financial intermediation efficiency.

## **2.1 Empirical Literature Review**

An investment is the outlay of a sum of money in the expectation of a future return which more than compensates for the original outlay plus a premium to cover inflation, interest foregone and risk. The process of investment appraisal is designed to ensure that the right amount of money is invested in the right projects at the right time (Muchemi, 2005). Pandey (1998) asserts that too little investment, in the long run is more dangerous than too much. Too little investment leads to inefficiency and certain slow stagnation. Too much involves unacceptable levels of risk, but at least has the possibility of success. In the short term the converse is true- too little is the safer option. These conflicting needs have to be balanced in order to obtain sustainable financial performance, hence, calling for proper regulatory and supervisory mechanisms. It's one very significant aspect is the task of measuring the prospective profitability of new investments. Any investment decision as source of raising funds for the firm must consider the interests of the shareholders

Deller et al. (2009) carried out a study on economic impact of Credit Unions in United States of America. The research report described and quantified the magnitude of economic impact in United States of America owing to Cooperative investments and accessibility of cash by depositors on need basis. Deposits and savings can also act as sources of financing for SACCO societies. In

this regard, SACCO society members and third parties may put funds into the co-operative in form of savings or short-term investments. These funds can be invested by the SACCO Society to generate returns which can be used in repaying the deposits and interest with any surplus re-invested in the SACCOs (Olando et al., 2012).

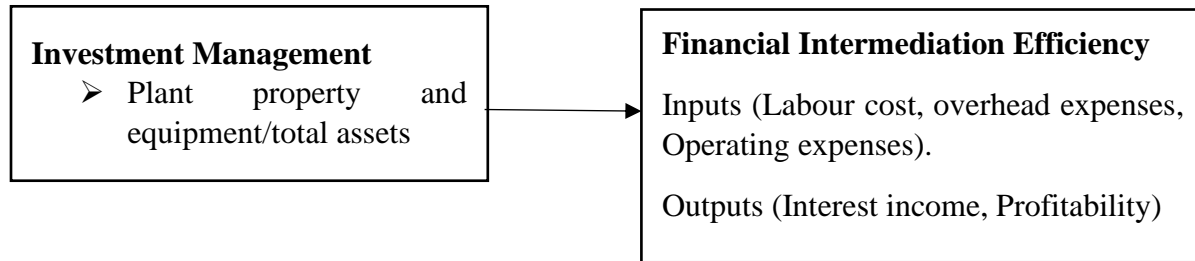
Saunders and Cornett (2011) advocate for the prudential planning of cash flows by matching maturities of assets against maturities of liabilities. For an organization to operate in a positive cash flow, the maturity of asset must be earlier than the maturity of liabilities. SACCO Society Act (2008) advocates for 15% liquidity to short term deposits and short-term liabilities ratio as a means of sustaining deposit taking business. The ratio encourages SACCO's to be liquid always to enable them meet daily cash requirements for the members. Thus, matching different maturities of assets (loans to members), and maturities of liabilities is critical to both performance and liquidity (Kahuthu, Muturi and Kiweu, 2015).

Ngugi et al., (2013) studied the effects of SACCO operating a FOSA on financial performance. They used three SACCOs in Tharaka Nithi County, Kenya for the period 2005 – 2013. Financial performance, using ROE, was compared for three years before and three years after commencement of FOSA operations. The performance improved after introduction of FOSA. Further, the sample at only three SACCOs was too small for the results to be generalized and the study focused on financial performance only. This study sought to find the effect of regulatory requirements on financial intermediation efficiency of DT SACCO's.

Nyambere (2013) studied the effect of credit risk management on financial performance of deposit taking savings and credit co-operative societies in Kenya. Nyambere used a sample size of 30 SACCOs in Kenya for the three-year period 2010 – 2012. ROE was regressed against capital adequacy, asset quality, management efficiency, earnings and liquidity. The results were that ROE was positively correlated to all the variables. The study used measure of ROE as performance; this study will measure effect of regulatory framework on financial intermediation efficiency of DT SACCO's.

Mwangi (2014) studied the influence of members' income and conduct of SACCOS in the relationship between characteristics and efficiency of SACCOS in Kenya. The study targeted all SACCOs that are regulated by SASRA for the period 2009 - 2013. The study used multiple regression analysis between efficiency, and characteristics. The study findings were that characteristics (specifically size and age) have a significant positive effect on efficiency of SACCOs and this relationship (for size only) is moderated by the income of members. Increase in size resulted in improved efficiency and, the older the SACCO, the higher the efficiency. The higher the income of members, the stronger the relationship between size and efficiency. Efficiency was negatively related to strength of bond of association, possibly because weakening of the bond would be associated with increased in size, which contributes to increased efficiency.

This study focused on efficiency while current study will focus on financial intermediation efficiency.



### 3.0 RESEARCH METHODOLOGY

Research design is a conceptual structure within which to conduct research. It constitutes an outline for data collection, measurement and analysis (Kothari, 2004). This study adopted a descriptive survey research design to analyse the influence of credit management on financial intermediation efficiency of DTSS in Kenya. Target population of the study was 174 DT SACCOs which were in operations as December 2020. Census approach was used to select 174 DT SACCOs. The study relied on secondary data that was collected from annual financial statement of DT SACCOs.

Data was analyzed using descriptive statistics (mean, standard deviation) and inferential statistics; regression analysis to examine the nature of the influence of investment management on financial intermediation efficiency. Regression model of the study was of the form:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \varepsilon_{it}$$

Where

$Y_{it}$  = Financial Intermediation Efficiency

$X_{1it}$  = Investment management

### 4.0 FINDINGS AND DISCUSSIONS

#### 4.1 Descriptive Statistics

Measures of central tendency and dispersion were used as descriptive statistics whose findings are in Table 1. The average financial intermediation efficiency of DT SACCOs in Kenya was 0.87, with a minimum of 0.09 and maximum of 1. The standard deviation was 0.09, which indicates minimal deviation on financial intermediation efficiency of DT SACCOs. Normality test indicates that financial intermediation efficiency was not normally distributed since its P value was less than 0.05. Hence, there was enough evidence to warrant rejection of the null hypotheses that the data was normally distributed against an alternative of non-normality of data. Non-normality of financial data was in conformity with Githira, Muturi and Nasieku (2020) who reported that data from listed companies in East Africa was not normally distributed. Moreover, they agreed with

Wairimu, Muturi and Olouch (2019) who found that data from listed non-financial companies in Nairobi securities exchanges was not normally distributed. Further, the data confirmed Mwai, Memba and Njeru (2019) who reported that financial deepening of commercial banks in Kenya is not normally distributed. The average financial intermediation efficiency mimicked Kariuki (2018) who reported an average 0.87, with an oscillating average from 2011 to 2014 among DT SACCOs in Kenya.

The mean investment management were 7.95 with a minimum of 1.17 and maximum of 30.19. The standard deviation for investment requirement was 7.65 a clear indication of wider variation on level of compliance with investment requirement among DT SACCOs. Huge allocation of financial resources among immovable assets may injure financial intermediation role of DT SACCOs since they may be exposed to credit crunch. Credit crunch can be associated with delayed credit creation and conversion of cash from immovable assets (Karray & Chichti, 2013). The findings concurred with Gachenga, (2022) who found that conversion of immovable assets to cash enhance the capacity of DT SACCOs to lend to release financial resources for lending to members. Furthermore, increased access to cash enhanced financial institutions in optimization of their operations.

**Table 1 Descriptive Statistics**

	<b>Investment</b>			
	<b>Requirement</b>	<b>CRSTE</b>	<b>VRSTE</b>	<b>FIE</b>
Mean	7.95	0.53	0.61	0.87
Median	13.36	0.50	0.58	0.92
Maximum	30.19	1.00	1.08	1.00
Minimum	1.17	0.00	0.01	0.09
Std. Dev.	7.65	0.26	0.27	0.14
Skewness	2.10	0.33	0.07	-1.53
Kurtosis	17.42	2.21	1.81	5.43
Jarque-Bera	8461.59	40.11	53.77	571.3
Probability	0.00	0.00	0.00	0.00

Sum	13457.68	476.1	549.7	781.9
Sum Sq. Dev.	52629.04	61.59	66.63	18.77
Observations	900	900	900	900

#### 4.2 Regression Analysis on the Influence of Credit Management on Financial Intermediation Efficiency

The objective studied the influence of investment requirement on financial intermediation efficiency of DT SACCOs in Kenya. Results in Table 2 indicates an R squared of 0.5738, indicating that 57.38% of changes in financial intermediation efficiency of DT SACCOs was contributed by investment requirements. Further, there was a positive and significant influence of investment requirement on financial intermediation of DT SACCOs in Kenya ( $\beta = 0.071$ , p value  $< 0.05$ ).

The results confirmed Deller et al. (2009) carried out a study on economic impact of cooperatives in United States of America. The research report described and quantified the magnitude of economic impact in United States of America owing to Cooperative investments and accessibility of cash by depositors on need basis. Further, there were in agreement with Okwee (2011) whose study focused on effect of cash management, Loan Repayment, investment in non-core business, liquidity decisions, management competency and quick ratio log of total assets as the independent variables. The study found that SACCOS undertook strict cash flow forecast, affect cash management which poses a greater risk in the operations of the SACCO. The findings further revealed that financial performance as measured by profit before tax over total assets is positively related to Liquidity. SACCO's through their policy of building savings for members have enabled their member's access to credit at fairly competitive rates. This is after giving them an opportunity to mobilize their limited resources (Cheruiyot et al., 2012). In Kenya Sacco's have played a key role in individual financial development. As a result, Sacco's have extended their services to include banking services and to a wider clientele which includes non-members. Sacco's have provided the chance for pooling of resources for reinvestment in homes, healthcare, benevolence and education (Gweyi & Karanja, 2014).

The resultant equation is of the form:

$$\text{Financial Intermediation Efficiency} = 0.858 + 0.071 * \text{Investment requirement.}$$

**Table 2 Investment Management and Financial Intermediation Efficiency**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
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Investment management	0.071	0.0227	3.1233	0.002
C	0.858	0.0116	73.6878	0.0000
R-squared	0.5738	Mean dependent var		0.8687
Adjusted R-squared	0.5474	S.D. dependent var		0.1445
S.E. of regression	0.1254	Akaike info criterion		-1.1625
Sum squared residuals	11.7547	Schwarz criterion		-0.3514
Log likelihood	675.1179	Hannan-Quinn criterion.		-0.8527
F-statistic	2.9569	Durbin-Watson stat		2.0154
Prob(F-statistic)	0.0000			

## 5.0 CONCLUSION AND RECOMMENDATIONS

Investment management have positive and significant influence on financial intermediation efficiency of DT SACCOs in Kenya. Consequently, it can be concluded that compliance with prudential guidelines on Investment Requirements enables DT SACCOs to create their credit capacity and minimize odds of facing bank panic and runs. Hence, financial institutions ought to ensure that they limit the amount of cash they have invested in less liquid assets so to mitigate situations of running out of cash when clients are in need of it.

There is need for management of DT SACCOs to enhance compliance with Investment managements policy guidelines and procedures. This would be achieved through management of working capital items such as management of cash balances. Dependent on investment policies in place DT SACCOs management may adopt investment models that would enable ease conversion of investment in non-tangible assets into cash.

## REFERENCES

- Brunnermeier, M. K., & Pedersen, L. H. (2009). Market liquidity and funding liquidity. *The review of financial studies*, 22(6), 2201-2238.
- Kevin, B. (2014). THE EFFECT OF REGULATION BY SASRA ON PERFORMANCE OF SMALL SACCOS IN KENYA.

- Raji, S., Adebayo, I., & Folarin, O. (2017). Impact of working capital on firms' performance in Nigeria. *Osogbo J. Manag*, 2, 47-64.
- Calem, P. S., & Rob, R. (1996). The impact of capital-based regulation on bank risk-taking: a dynamic model (pp. 96-107). *Federal Reserve Board*.
- Everling, C. (2003). *Social economy: the logic of capitalist development*. Routledge.
- Chang, C. I. (Ed.). (2007). *Hyperspectral data exploitation: theory and applications*. John Wiley & Sons.
- Gudmundsson, R., Ngoka-Kisinguh, K., & Odongo, M. (2013). *The role of capital requirements on bank competition and stability: The case of the Kenyan banking industry* (No. 5). KBA Centre for Research on Financial Markets and Policy Working Paper Series.
- Dar-Odeh, N. S., Al-Abdalla, M., Al-Shayyab, M. H., Obeidat, H., Obeidat, L., Kar, M. A., & Abu-Hammad, O. A. (2013). Prescribing Antibiotics for pediatric dental patients in Jordan; knowledge and attitudes of dentists. *The International Arabic Journal of Antimicrobial Agents*, 3(3).
- Muchemi, N. W. (2005). Customer detention in SACCOs. *A case of selected SACCOs in Nairobi (Kenya)*.
- Pandey, I. M. (1998). The process of developing venture capital in India. *Technovation*, 18(4), 253-261.
- Deller, S., Hoyt, A., Hueth, B., & Sundaram-Stukel, R. (2009). Research on the Economic Impact of Cooperatives. University of Wisconsin Center for Cooperatives: Madison, WI.
- Olando, C. O. MO (2012). Financial Practice as a Determinant of Growth of Savings and Credit Co-Operative societies wealth. *International Journal of Business and Social Science*, 3, 204-217.
- Saunders, A., & Cornett, M. M. (2011). Management of financial institutions, Teaching notes.
- Act, S. D. W. (2008). 1. Regulations.
- GWEYI, M. O., & Karanja, J. (2014). Effect of financial leverage on financial performance of deposit taking savings and credit co-operative in Kenya.
- Cheruiyot, T. K., Kimeli, C. M., & Ogendo, S. M. (2012). Effect of savings and credit co-operative societies strategies on member's savings mobilization in Nairobi, Kenya. *International Journal of Business and Commerce*, 1(11), 40-63.
- Okwee, A. (2011). Corporate Governance and Financial Performance of SACCOs in Lango Subregion. *Unpublished MBA Research Project, Makerere: Makerere University*.

- Kahuthu, D. G., Muturi, W., & Kiweu, J. M. (2015). The Impact of Credit Management and Liquidity on financial performance of Deposit Taking Savings and Credit Cooperatives in Kenya.
- Ngugi, N., Matumo, G., & Kimani, M. E. (2013). The impact of front office Sacco activity on Sacco performance in Kenya; A case study of Meru South and Maara district in Tharaka Nithi County in Kenya.
- Nyambere, K. F. (2013). Effect of credit risk management on financial performance of deposit taking saccos in Kenya. *Research project, University of Nairobi*.
- Mwangi, M. (2014). *The influence of members' income and conduct of Saccos in the relationship between characteristics and efficiency of Saccos in Kenya* (Doctoral dissertation, University of Nairobi).
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Githira, C., Muturi, W., & Nasieku, T. (2020). Does shareholders concentration affect the effect the influence of firm financial characteristics on stock return of manufacturing companies listed in Nairobi securities exchange. *International Journal of Economics, Commerce and Management*, 8(9), 17-33.
- Oluoch, K., Wairimu, H., & Muturi, W. (2019). Influence of Firm financial characteristics on Leverage of Non-Financial Listed Companies in Nairobi Securities Exchanges.
- Mwai, A., Njeru, A., & Memba, F. (2019). Moderating effect of bank size on relationship between financial innovations adoption and financial deepening of listed commercial bank in Kenya. *American Based Research Journal*, 8(11).
- Karray, S. C., & eddine Chichti, J. (2013). Bank size and efficiency in developing countries: intermediation approach versus value added approach and impact of non-traditional activities. *Asian Economic and Financial Review*, 3(5), 593-613.
- Gachenga, N. U. J. (2022). *Relationship Between Investment Decisions and Liquidity of Farmers Based Deposit Taking Savings and Credit Co-Operatives in Kenya* (Doctoral dissertation, The Co-operative University of Kenya).