Financial Stability and Financial Performance of Small and Medium Tiered Deposit Taking Savings and Credit Cooperatives in Kenya.

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ABSTRACT

The study sought to analyze the impact of financial stability on the financial performance of small and medium deposit taking savings and credit cooperatives in Kenya. Financial stability was measured by capital adequacy and earnings ability while financial performance was measured by the return on assets. The study purposively sampled one hundred and thirty deposits taking savings and credit cooperatives using the inclusion and exclusion criteria. Secondary data was collected from the published financial statements of the cooperatives and analyzed using descriptive and inferential statistics. Descriptive statistics analysis found that the average capital adequacy is higher than the minimum recommended by the regulator. On average the earnings ability ratio indicated that the cooperatives spend seventy percent of income to cover operational expenses. The study found that capital adequacy and earnings ability have a statistically significant negative impact on financial performance. The study recommends that the cooperatives should consider investing the extra capital in income generating investment opportunities to maximize and to improve cost management by avoiding inefficient operations that cost more but in the long run yield less profits.

Keywords: Financial stability, Capital adequacy, earnings ability, financial performance

BACKGROUND OF THE STUDY

The financial industry is essential in driving the growth of global economies. According to Korir (2018), the financial sector has undergone massive growth due to factors such as the integration of finance worldwide, the implementation of advanced technology and the broad development of financial innovations. The financial performance indicators featured in the World Council of Credit Unions annual report (2021) demonstrate that the cooperative movement is garnering attention and exerting a positive impact on the economies of nations worldwide.

According to Mwita (2019), European cooperatives have a substantial historical legacy that dates to the 19th century. The first cooperative was founded in Rochdale Village, Manchester, England 1844. Afterwards, it spread worldwide, eventually developing into the current cooperative movement. The 2021 WOCCU reported that there are currently 87,914 cooperative unions functional in 118 republics in six continents. The accumulative membership of these cooperative unions is more than 374 million.

The deposit taking savings and credit cooperatives have an essential role in the growth of economy. However, its financial performance is facing several challenges. WOCCU (2018) claims that the deposit taking cooperatives are now having major financial problems that prevent their capacity to satisfy members' needs for loans and withdrawals of savings. Research by Masika (2018) shows that whilst making significant contributions to the financial sector, savings and credit cooperatives in Kenya accepting deposits show uneven financial success. Based on the Sacco society regulatory authority of Kenya annual report for 2021, over the past five years, nine small and medium-sized deposit-taking SACCOs had their licenses revoked due to failure to comply with legislation designed to safeguard investors and depositors in cooperative societies. The increasing incidence of abrupt failures of SACCOs in Kenya has raised concerns among members and the regulatory authority regarding the factors influencing the financial performance of these deposit-taking institutions.

Assets are the primary source of income for deposit-taking SACCOs, smaller SACCOs generally produce moderate levels of income and revenue. According to Kariuki (2016), smaller deposits taking Sacco may face competition from larger DTS, as the latter can offer more competitive services to their subscribers. Based on statistical data from SASRA (2022), the subsector has a larger number of small and medium-sized DTS, which also have a relatively small share of the overall assets. The data shows that a small group of individuals hold most of the assets, while a significant number of people own assets worth less than five billion. Ultimately, the statistics depict the unequal allocation of resources inside the subsector.

The main objective was to examine how financial stability influences the financial performance of small and medium tiered DTSs in Kenya. The following hypothesis were formulated and tested: $H0_1$ capital adequacy does not statistically affect financial performance of small and medium tiered DTSs in Kenya: and $H0_2$ earnings ability does statistically affect financial performance of small and medium tiered DTSs in Kenya.

The study provides significant knowledge for legislators, officials in charge of establishing DTSs in Kenya and decision-makers. Different agencies like SASRA, the Ministry of Cooperatives, the Central Bank and the National Treasury will use the results to draft sensible policies for Kenya's financial industry. DTS's management and board of directors will enable them to make wise decisions, influence policy development, support product and service innovation, and increase the firm's financial health. Both DTS members and the public can also assess the financial situation of the business utilizing the study. Acquiring this knowledge is crucial for making informed decisions regarding investments and savings. The study will enhance the current understanding in the field of finance and serve as a valuable resource for researchers, students, and academics to investigate research topics, address inquiries related to the issue and conduct future investigations in the field.

LITERATURE REVIEW

The theories reviewed in this context are relevant to the examination of the variables of financial stability and financial performance namely the capital buffer theory and the management efficiency theory. The theory of capital buffer formulated by Terhi Jokipii and Alister Milne (2011) stipulates that financial institutions should maintain a certain level of capital reserves to absorb any losses and ensure stability and solvency. As per the theory, financial institutions are supposed to keep their capital level above the minimum required. Both direct and indirect expenses could create a situation when the minimal capital need is not fulfilled. The direct expenses are the financial penalties imposed by authorities resulting from either institutional closure or non-compliance with rules. On the other hand, indirect expenses could result from government intervention meant to lower too high insurance demand such as risk-taking.

The theory of profitability, also known as management efficiency theory was promulgated by Frank Knight in 1974 which introduced the concept of profitability and states that companies that have a moderate level of efficiency achieve typical returns. On the other hand, companies that have exceptional managerial abilities and production efficiency are expected to receive higher-than-normal earnings or profits. The concept is grounded in the recognition that if a company regularly achieves average returns on its investments over an extended period, more efficient enterprises will surpass the average and produce economic profits. A high ROA signifies the good functioning of the SACCOs and the efficient utilization of institutional resources by the DTS management to foster the expansion of the cooperatives.

Capital Adequacy and Financial Performance

Ocholla and Jagongo (2021) studied the influence of capital adequacy, minimum assets, asset quality, and liquidity requirements on the financial performance of Kenyan DTS. The study ascertained that SACCO performance is greatly influenced by prudential guidelines and there is need to improve their performance, efficiency, lending cycle, portfolio, and membership through strategies to raise capital levels to boost liquidity. Kingoo (2015) studied the Commercial banks that traded on the NSE to investigate the impact of capital adequacy, liquidity, operational cost efficiency and bank size on financial performance. According to the findings, capital adequacy, liquidity, operational cost efficiency, and bank size all have a substantial impact on the financial health of listed banks.

Nyanyuki et.al (2022) evaluated the Kenyan commercial banks on the correlation between adequacy of capital and the financial performance and concluded that the capital adequacy materially impacts the financial health of the commercial banks. Nanzala (2021) assessed the influence of capital adequacy on the operational effectiveness of Saccos in Kakamega County. The results revealed that SACCO profitability in Kakamega County benefited considerably from the application of capital sufficiency criteria. Ngeno (2019) investigated the relationship between the capital adequacy framework, financial allocation strategy, and financial health of Kenyan DTSs. The study found that DTS's financial health in Kenya is improved by elements like internal finance, credit management, portfolio selection, risk management, and managerial skills. Ngui and Jagongo (2017) researched the influence of capital adequacy on the financial success of Kenyan DTIs and concluded that capital adequacy was an important driver for financial health of Kenyan DTIs.

Earning Ability and Financial Performance

Kimutai et.al (2019) sought to determine how financial stability, as measured by asset quality, liquidity, and earnings ability, affects the efficiency of DTS in Kenya. According to the study, efficiency is much influenced by asset quality, capital adequacy, and liquidity; earnings ability has less effect. Barus *et al* (2017) studied how the earnings ability affects the financial health of Kenyan SACCOs. The research findings revealed that the financial performance of Kenyan SACCOs is much influenced by their earning ability as demonstrated by the regression analysis. The Oigo (2015) study investigated how earnings ability, capital, and asset quality influenced financial performance of DTSs in Kisii County. The research revealed that SACCO financial health in Kisii County is much influenced by elements including adequacy of capital, asset quality, management skills and earnings ability.

METHODOLOGY

The positivism research philosophy was used in this research. This philosophy was suitable because the study used statistical analysis to look at secondary quantitative data to test ideas. This study used explanatory research design. When data is scarce, an explanatory research strategy is utilized with the goal of explaining the reasons behind a phenomenon and spotting new patterns and trends in the available data. The explanatory design is effective for achieving an improved awareness of connections among variables.

The study population was the total number of DTS operating in Kenya for the period between 2017 to 2021, while the target population was the specific deposit taking Saccos that operated continuously during the five-year period. Purposive sampling was used to select this target population from the broader population. Secondary data was collected from the published financial statements of the DTS using a secondary data collection sheet.

Data analysis was performed by both descriptive and inferential analysis. Descriptive statistics of the mean, variance, range and standard deviation were obtained to establish the trends of the variables. Inferential statistics sought to establish the relationship between the variables, this was carried out using panel regression. Regression models with panel data are used to examine variables in both discrete dimensions and overtime. The model considers both the time series as well as the cross-sectional components of the data.

RESULTS AND DISCUSSIONS

The research aimed to establish the effect of financial stability on the financial success of small and medium tiered Kenyan DTS. Based on the research problem, research objectives were formulated and tested using hypothesis. Secondary data was obtained and analyzed utilizing panel regression model, and an analysis and discussion of the descriptive and inferential statistics was documented.

Descriptive statistics

Descriptive statistics help understand the data's central tendencies and variability, setting the stage for further inferential analysis. The mean, standard deviation, minimum and maximum statistics for the data were obtained to ascertain the nature of data collected and the outcomes are exhibited on the table below.

Table: Descriptive Statistics Summary of research variables

summarize ROA Assetquality Earningsability Liquidity Capitaladequacy					
Variable	**Obs**	**Mean**	**Std. Dev**	**Min**	**Max**
ROA	650	2.113853	4.45876	-65.58601	36.43762
Earningability	650	70.96086	36.41196	-111	398.2
Capitaladequacy	650	18.91677	13.2212	-98	57

Source: Study Data, 2025

The table above portrays the summary statistics for the research's key variables revealing significant variability in the financial performance of small and medium-sized deposit-taking SACCOs in Kenya. The mean ROA is 2.11%, with a standard deviation of 4.46, indicating a modest level of profitability but substantial variability, as some SACCOs experience significant losses

Earnings ability, represented by the proportion of operating expenses relative to operating income, averages 70.96% with a standard deviation of 36.41. The obtained means infers challenges in generating sufficient earnings, with some SACCOs even facing operating losses. Capital adequacy, the ratio of core capital to total assets, averages 18.92% with a standard deviation of 13.22. Although this illustrates a typically sufficient capital foundation, the negative minimum value indicates possible shortcomings in some SACCOs.

Trends Analysis of Study Variables

Trend analysis was performed to yield perspectives into the patterns and distribution of the variables across the five-year study period. Understanding these trends yields perspectives into the overall financial health and profitability, highlighting areas of improvement and potential challenges. The following table depicts the trend of the variables under study.

Table 4.2 Results of Trend Analysis of variables

List Year ROA Earningsability Capitaladequacy, clean				
	Year	**ROA**	**Earningsability**	**Capitaladequacy**
1	2017	2.0464531	71.568	18.780846
2	2018	1.8161601	69.181912	18.745
3	2019	1.9081056	69.385873	18.945923
4	2020	2.350091	72.292976	19.095462
5	2021	2.4484537	72.375515	19.016615

Source: Study Data, 2025

The trend analysis of the ROA of small and medium-sized DT-SACCOs in Kenya reveals several critical aspects. Over the five years from 2017 to 2021, the ROA gradually increased from 2.05% to 2.45%. This upward trend suggests an improvement in profitability, although the levels remain below the industry average for financial institutions, indicating potential areas for enhancement.

Earnings ability remained relatively stable, with slight fluctuations around 71-72% during the study, indicating consistent management of operating expenses related to income. This implies that DTS on average use 71-72% of the income generated mainly from loans to cover the expenses, raising concerns about operational efficiency. However, there is room for enhancing efficiency and DTS should strive to minimize costs to boost profitability further.

Capital adequacy improved slightly from 18.78% in 2017 to 19.02% in 2021, indicating a strengthening capital base essential for regulatory compliance and financial resilience. SASRA requires that DTS should sustain a capital adequacy ratio not lower than 10%, the DTS sampled adhered to the regulatory requirement during the study period.

Correlation Analysis results

Correlation analysis was done on the data to establish the connection between the explanatory factors of capital sufficiency, earnings ability and the dependent variable of return on assets. The table below outlines the results obtained.

Table 4.9 Correlation Analysis results

.corr ROA Earningsability Capitaladequacy (obs=650)			
	ROA	**Earningsability**	**Capitaladequacy**
ROA	1.0000		
Earningsability	-0.2207	1.0000	
Capitaladequacy	0.3045	-0.1157	1.0000

Source: Study Data, 2025

The correlation coefficient for ROA and earnings ability is -0.2207, showing a weak adverse connection. This suggests that higher earnings ability (lower operating expenses relative to income) is associated with lower ROA, highlighting the importance of efficient earnings management.

The correlation coefficient for ROA and Capital Adequacy is 0.3045, indicating a moderate positive relationship. This suggests that higher capital adequacy is associated with higher ROA, reflecting the importance of a strong capital base for financial performance.

Inferential statistics

Inferential statistics are performed on a drawn sample and hypothesis tested in order to generalize findings on a population from which the sample is obtained. This section outlines the results of tested research hypotheses. A regression analysis was done utilizing panel regression model. The evaluation of the hypothesis was set at the 0.05 significance level and the outcome displayed on the table below.

Table 4.10 Panel Regression Results

.xtreg ROA Earningsability Capitaladequacy, fe						
Fixed-effects (within) regression				Number of obs	= 650	
Group variable: ID				Number of groups	= 130	
R-squared: within = 0.5147				Obs per group: min	= 5	
between = 0.1539				avg	= 5.0	
overall = 0.3849				max	= 5	
				F (4,516)	= 136.80	
Corr (u_i, Xb) = -0.1849				Prob> F	= 0.0000	
ROA	**Coef.**	**Std.Err.**	**t**	**P> t**	**(95% Conf. Interval)**	
Earningsability	-0.0437	0.0020062	-21.78	0.000	-0.0476413	-0.397588
Capitaladequacy	-0.0028945	0.0057036	-0.51	0.612	-0.0140995	0.0083105
_cons	6.295412	0.523291	12.03	0.000	5.26737	7.323455
Sigma_u	2.3820092					
Sigma_e	2.9208053					
rho	0.39943256	(fraction of variance due to u_i)				

Source: Study Data, 2025

The table above depicts the estimates obtained from Stata from the fixed panel analysis. The value of R-squared within 0.5147 indicates that approximately 51.47% of the variability in ROA is explained by the variations in the study variables within the same DTS over time. The value of 0.1539 for the R-squared between implies that these independent variables explain 15.39% of the variability between different DTSs. The overall R-squared of

0.3849 infers that the model accounts for about 38.49% of the total ROA variability. The remaining 61.51% is attributed to issues not addressed in this study.

The F-statistics (F (4,516) = 136.80 and the associated P value < 0.000 results suggest that the model is statistically significant. This infers that the combined effect of the variables significantly explains the variations in ROA. Similarly given that the within R squared is solid at 0.5147 it implies that the fixed effect model correctly captures the variation over time.

The negative correlation between unit effects and the predictors variables given by Corr (u i, xb) = -0.1849 justifies the utilization of the fixed effect model as the random effect model would assume no correlation. The sigma u = 2.38 indicates the standard deviation of the unobserved firm specific effect. From the regression output table above, the following coefficients are fitted on the model as below:

$$\mathbf{Y_{it} = 6.295 – 0.0437X_{2it} – 0.0577X_{4it} + 0.52329}$$

The value of 6.295 is the mean financial performance, assuming all other variables remain unchanged. The negative coefficients of earnings ability (-0.0437) and capital adequacy (-0.577) indicate the value by which financial performance decreases following a unit change in the respective predictor variables.

Hypothesis testing and findings

To ascertain the effect of capital adequacy on financial performance, the null hypothesis $\mathbf{H_{01}}$ that capital sufficiency statistically affects financial performance was tested. An analysis of the trends in capital adequacy shows an increase on average of the rate from 2017 to 2021 a trend that could be attributed to continuous emphasize on the prudential guidelines by SASRA. The capital adequacy findings imply that DTS on average complied with the requirement on the minimum rate recommended by the regulator. From the regression analysis findings coefficient for capital adequacy obtained was -0.577, this means that capital adequacy has an adverse but statistically material effect on the financial performance of DTSs.

To test the effect of earnings ability the null hypothesis H_{03} regarding earnings ability's effect on financial performance was tested. Descriptive statistic findings indicated a relatively stable trend in the earnings ability for the period 2017 to 2021 which implies consistency in the management in the operating expenses relative to the income. The findings from the inferential analysis indicated that earnings ability has a negative but statistically significant effect on financial success. The value of the coefficient -0.0437 for earnings ability infers that earnings ability has a negative but statistically significant effect on financial success. The results show that an increase in earnings ability reduces the return on assets.

CONCLUSION AND RECOMMENDATIONS

The research yielded several insightful findings on the general success of small and medium-sized DT-Kenyan SACCOs. The study finds that capital adequacy has an adverse statistically significant effect on the financial health of DTSs aligns with traditional view that capital adequacy is a critical factor for financial stability. This perspective suggests that overcapitalization may result in reduction in the profitability of DTS.

The study findings report on earnings ability indicates that the DTS on average spend seventy percent of operating income to cover expenses resulting in lower profitability. This implies low levels of operational efficiency. The research revealed that earnings ability has an adverse impact that is statistically significant on the financial performance of small and medium-sized Deposit-Taking SACCOs in Kenya.

The research recommendations herein are based on the findings obtained both for practice by the management of the DTSs, the regulator, SASRA and for policy to government institutions involved in policy making such as the National Treasury, Ministry of Cooperatives among others.

The research finds that the stability metrics herein insignificantly affect the financial performance of these cooperatives suggest the need for a shift in strategic focus by SASRA and the management of DTSs. Instead of concentrating solely on traditional financial stability metrics, DTSs might benefit from exploring other avenues

to enhance performance, such as improving customer service, leveraging technology, product diversification not necessarily relying on in loan products to members and identifying new market opportunities.

The SACCOs may need to focus on strategies meant to optimize the capital structure. Given that higher capital does not guarantee higher profitability, the DTS should strive to comply with the regulatory requirements for optimum capital but seek to invest the extra capital in other income generating investment opportunities to maximize returns for the organizations.

The study recommends that the need to improve cost management given that earnings ability significantly impacts the profitability of the DTS. There is need to optimize the operating expenses for the SACCOs by minimizing costs this will ensure that higher revenues are generated. The management needs to focus on quality investments that over time will generate more income and avoid inefficient operations that cost more but in the long run give less profits.

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