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Operation Efficiency and Financial Performance of Deposit Taking Saccos in Kenya

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Abstract: *Sacco Societies are facing competitive environment in Kenya leading to financial distress. Therefore, there is need to examined the role of operation efficiency in determining financial distress among Saccos in Kenya. The study sought to establish the relationship between operational efficiency and financial performance of deposit taking Saccos in Kenya. This study was based on Agency theory. It employed a correlation research design where a census study was conducted on all deposit taking Sacco Societies registered with the Sacco Societies Regulatory Authority (SASRA). A data extraction sheet was used to collect panel data for all deposit taking Sacco Societies in Kenya for the period between 2018 and 2022. The study collect data from Audited Financial Report achieve validity and reliability of the data. Descriptive analysis and inferential analysis such as regression analysis and model specification tests was used to analyze data with the help of STATA software version 15. Five hypotheses were tested using the correlation and multivariate panel regression techniques. The study employed confirmatory factor analysis to identify the best latent variable. Using panel regression models, financial distress factors were regressed against financial performance. The study results indicated that operation efficiency had a statistically positive significant relationship with financial performance of SACCOs (β_1=0.492, P=0.000<0.05). The study concluded that operation efficiency had significant relationship with financial performance however, liquidity alone was not significantly related with financial performance. SACCOs should consider the level of operation efficiency as its affect financial performance.*

Key Words: *Operation Efficiency, Financial Performance, SACCOs, Kenya.*

I. Introduction

Globally, sources and records show the Ancient Babylonian and Chinese practiced cooperative farming and lending. Historical records depict that Planting, harvesting and storing were all done in North America in 1752, some 25 years before Independence, as the first organized co-operative firm created in the United States (Iwasaki, Kočenda, & Shida, 2021). Li, Musah, & Kong, 2020). According to the International Monetary Fund, cooperative financial institutions had a 14 percent market share of total banking sector assets in developing nations in 2004, which is a considerable part in today's society (Adeyemi, & Delhougne, 2019). Almeida (2023) found that SACCOs did better during the financial crisis because of their more cautious investing methods which were less speculative.

Regionally Father John Mcnulty established the first SACCO Society in Africa in Ghana in 1959. The SACCO was established to help communities better their economic circumstances (Wanyonyi, Kamau, & Sasaka, 2019; Li, Musah, & Kong, 2020). SACCOs were originally used in English-speaking countries. Ghana, Uganda, Nigeria, Tanzania, and Kenya were among the first to join the SACCO community. Most non-English-speaking African countries began to value SACCOs as from the 1960s through to the 1970s. SACCOs are still in their early stages in Africa, as they are among the institutions that offer saving facilities as well as credit.

When compared to other companies in financial service offering, their modest size and market share are low (Gomber, *et al*., 2018). Each country's legislation governs the financial distress procedure in South Africa. The "Judicial Management" in sections 327 to 440 of the enterprises Act of 1973, did not help financially challenged enterprises (Joubert, 2013). As a result, the Companies Act was revised, aligning South Africa's turnaround procedure with those of foreign countries such as the United States of America (USA), United Kingdom (UK), and Australia among other developed nations (Joubert, 2013). In Uganda, Musiita, *et al*., (2023) analyzed the relationship between Bushenyi District SACCOs' financial performance and various aspects of liquidity management. The results show that there is a positive statistically significant association between financial success and cash and liquidity ratios.

Munene, Ndegwa and Senaji (2020) sought to determine how board qualities affected the financial distress that Nairobi County's Deposit Taking SACCOs experienced. The study found a correlation between the financial distress of Deposit Taking SACCOs and the characteristics of the board, with board tenure, composition, and education having a statistically significant negative impact on financial hardship. In conclusion, SACCOs should have lean boards, improve the composition of their boards by adding more women, include members with relevant and high levels of education, and impose term limits on their members. Additionally, an analysis based on Altman's Z score models should be implemented for SACCOs.

Atsango (2018), aimed to investigate how company factors affected the deposit taking savings and credit cooperative societies' profitability in Kenya. The results showed that asset quality had a statistically significant impact on the profitability performance of DT-Sacco in Kenya, operational efficiency had a statistically significant impact on DT-Sacco profitability, and leverage had a statistically insignificant effect on DT-Sacco profitability in Kenya. Ultimately, the research determined that the profitability of DT-Saccos in Kenya was statistically not affected by capital sufficiency. According to the study's findings, the profitability of DT Sacco's was significantly impacted by firm size, asset quality, and operational efficiency, but not by leverage or capital sufficiency. The management of DT-Saccos must keep focusing on operational efficiency because higher efficiency leads to higher profitability, according to the conclusions. Furthermore, in order to reduce the amount of nonperforming loans in the DT-Saccos subsector, the management of DT-Saccos should prioritize lending to customers who can repay their loans as promised.

Due to the large number of small and medium-sized Sacco societies scattered around the nation, it is likely that some of these organizations continued to operate despite not having their records reviewed and registered in line with the law. The number of active SACCOs in Nairobi and the Rift Valley provinces accounted for 42% (1371) and 19% (609) of the total, respectively. As of the end of 2021, the North Eastern area has the fewest FOSAs, none of which were operating (SASRA, 2022).

Financial distress, according to Sporta (2018) are scorecards on an organization's financial performance which show the potential for volatility. Thorley, Perry and Andes (2012), posit that factors for financial distress are indicators, causes, and variables of financial distress that might impact an organization's performance. Scholars throughout the world have proposed a variety of endogenous and exogenous factors that serve as proxies for financial hardship and influence corporate performance. These include technological innovation and operational efficiency (Atsango, 2018) capital adequacy, asset quality, leverage, and liquidity.

Poor performance of financially distress enterprises causes them to become inefficient producers, which leads to excessive debt and cash flow issues, (Mburu, 2018). According to Farooq, Noor and Fatima (2020) there is a negative correlation between financial distress and corporate financial performance. Though several SACCOS were dissolved or placed under statutory administration as a result of poor financial performance, others have yet to encounter the same problems. Using data mining approaches while constructing financial distress models, Geng, Bose, and Chen (2015) found that metrics such as net profit margin, profits per share, return on assets and cash flow per share, play a significant role in forecasting the profitability of all enterprises, regardless of their financial distress condition.

Multiple discriminant analysis was employed in distress prediction in this study as postulated by Altman (1968) who was the first to apply this method to the prediction of financial distress. Altman's Z-Score model has grown in popularity and acceptance as a measure of financial distress. The model utilized a sample of 33 solvents and 33 finically distressed businesses and developed a Z-score bankruptcy prediction model and calculated a Z-score cut point of 2.99 to differentiate between healthy and finically distressed enterprises. The firms with a Z-score at the range of 1.81 to 2.99 were considered as at the grey region which meant they need to be on the lookout whereas the firms having a Z-score below 1.81 were considered as financially distressed firms. MDA tries to find a linear or quadratic combination of attributes that best distinguishes between various groups of financially distressed firms.

Five financial ratios were weighted in Altman's (1968) model, according to Altman two ratios were to be sourced from the two major parts of statement of comprehensive income and three other ratios from the statement of financial position to increase the model's capacity for prediction of financial distress. Similarly, the current study used the following five financial ratios in the prediction of financial distress in the DTSACCOs; Financial leverage, operational effectiveness, asset quality, capital sufficiency, and liquidity ratios.

Financial distress can be attributed to various factors such as profitability, leverage, company age, asset tangibility and loss rate (Isayas, 2021) asset quality, inadequate capital structure, poor financial management, management efficiency (Ndinda, 2021) and operational efficiency, equity and economic competence (Mayr, Mitter, Kücher, & Duller, 2021); liquidity, asset quality, capital sufficiency Sporta (2018), capital sufficiency,

leverage, liquidity, and inflation, Naoaj (2023); Imran, *et al*., (2021), asset quality, income structure, macro-economic variables.

Sporta, (2018) identified operational efficiency a predictor of financial distress. The study asserts that the most fundamental strategic goals of businesses are based on operational efficiency. Improving customer satisfaction and boosting shareholder value both need operational efficiency. As a result, one of the top priorities for businesses is to improve operational efficiency. This study focused on operational efficiency as one of the factors of financial distress.

Financial distress and its effects on deposit taking Sacco financial performance are not well-understood in the Saccos business. According to Kariuki (2013)'s study, the majority of previous studies adopt a simple perspective to financial distress-performance relationships, which is true for both the banking industry and the SACCOs. There are just a few empirical research on Kenyan SACCOS' financial problems and the bulk of empirical studies have focused on financial performance of commercial banks.

In Kenya, between 1984 and 1996, nine local banks and twenty Non-Banking Financial Institutions were closed or taken over. Despite close supervision by SASRA report of 2022 which indicates that 51% of Saccos in Kenya have not been operational as they suffer from financial distress. This is evidenced by cash flow problems, failure to meet their obligations as they fall due such as payment of interest on borrowed loans, remitting statutory deductions of employees such as Pay as you earn and contributions to Saccos, declining profits, payment of low dividends, if any, to their members, failure to meet the demands of their clients for loans and withdrawal of savings, decline in membership and withdrawal of members, among others. Therefore, the study established the relationship between operational efficiency and financial performance of deposit taking SACCOs in Kenya.

II. Literature Review

Theoretical Review

Jensen and Meckling (1976) put out the idea of agency theory and discussed how to reduce the costs of agency by addressing the problems encountered by owners (the principal) and managers (the agent). The establishment of conflict-resolution methods and the framework for assessing competing interests among important parties are both facilitated by agency theory (Tipuric, 2008). The association is attempted to be explained by agency theory in terms of behavioral traits. The link between ownership and control roles inside major organizations is the impetus for the creation of agency theory. Economic trade relationships between a principal and an agent are described by agency theory. The theory is helpful in that it describes how biased actions of managers and the administration affects the welfare of the shareholders.

Agency theory analyzes the interaction between the principles, such as members and agents, in accordance with Muthuva (2020) and Valentine (2009). In accordance with the agency principle, the members of the SACCO who are its owners or principals appoint the management board as their agents. The management board, which is made up of the principals (members), employs and deputizes managers to administer the company. According to Daily *et al*. (2003), there are two things that might affect how popular agency theory is. First off, according to the notion, there are only two players in a corporation: managers and owners. Second, according to agency theory, SACCO managers or staff may act in their own best interests. Investors expect the agents to make decisions and behave in the best interests of the principal. Conversely, judgments made by the agent might not always be in the best interests of the principals. This theory is relevant to the study because it looks at how the financial performance of deposit-taking savings and credit cooperative organizations in Kenya is correlated with operational efficiency and leverage.

The two fundamental tenets of agency theory are that individuals are egoists and behave in their own best interests. Because agents frequently possess the ability to make decisions and have access to additional information, both the principal and the agent prioritize their own interests. The benefits of agency theory include: resolving conflicts between agents and principals; motivating agents through incentives that lower losses to the company or organization; compensating agents based on performance as a means of reducing agency loss; and lowering the likelihood of conflict between principals and agents through transparency. One of the limitations of agency theory is its narrow theoretical emphasis and set of behavioral presumptions.

Agency theory largely stresses self-interested and opportunistic human action, ignoring a wider range of human motives. Processes protecting the interests of shareholders may impede the execution of strategic decisions and restrict group activity. As a result, agency theory-recommended control measures are both costly and financially unfeasible (Shleifer and Vishny 1997).

Daily *et al*., (2003) state that the theory has drawn criticism for oversimplifying organizational conflict and for the difficulty of the arithmetic required to solve the agency problem. Complete contracts are assumed under agency theory. Complete and effective contracts are not possible under bounded rationality. Fraud, transaction costs, and information asymmetries are insurmountable barriers to effective contracting. According to agency theory, agency expenses can be eliminated by contracting. This premise is false, as evidenced by the numerous flaws in the market. Those who are not parties to the contract but who are impacted by it are considered third parties.

Many boards take on social as well as financial obligations, taking into account the consequences on third parties. Therefore, while maximum economic efficiency under agency theory may (theoretically) be reached, maximum social welfare was not reached. It is believed that the sole thing that interests shareholders is financial success (Zogning, 2017).

Since the law mandates that directors and management have a duty to firms, it is considered that they have a duty to shareholders. Agency theory could work well for boards' oversight of managers, but it is insufficient to explain boards' other functions. The resources, services, and strategy functions of directors are not well-understood by agency theory. According to agency theory, managers are only self-interested opportunists.

Many contend that this idea fails to account for people who are devoted to their companies. Competence is not taken into consideration by agency theory. Therefore, even honest inadequate managers would still have limitations in achieving shareholder goals. People must be able to do the work; incentives alone would not suffice to motivate them to do so (Hillman and Dalziel, 2003). This theory is important to the study since the study seek to examine the relationship between operational efficiency and financial performance of deposit taking savings and credit cooperative organizations in Kenya.

Operational Efficiency and Financial Performance of SACCOs

Olalere, Temitope, and Oluwatobi, (2018) asserted that of operational efficiency is when a business is deemed to be running efficiently and is able to offer products or services at competitive rates while maintaining high levels of product, service, and support quality. In terms of airport operating efficiency, there is likely to be increased competition as well as an increase in the number of resources required. In small and medium-sized firms, measuring managerial efficiency often entails examining how well operations are conducted. An airport manager's capacity to oversee operations may be influenced by both the surroundings and the traits of individuals around them (Sarkis, 2018). It is proposed that firm executives increase the efficiency with which physical assets generate revenue in order to maximize earnings (Saleh, 2017).

A sample of commercial banks from the European Union (EU) was utilized between 2007 and 2017 in a study by Chortareas, Girardone, and Ventouri (2019) on the dynamics of bank regulatory and supervisory policies connected to Basel II's three pillars as well as other aspects of cost efficiency and performance. They reported their findings in the journal Financial Stability Review. Using frontier analysis and traditional accounting ratios allowed for an accurate assessment of the research's effectiveness. The study came to the conclusion that interventionist regulatory and supervisory measures, such as capital restrictions, bolstering government oversight institutions, private sector oversight, and limiting bank activities, might have a negative impact on bank efficiency. The findings show that countries with more liberal, competitive, and democratic political systems also have greater levels of operating efficiency, which is great news for banks located in those countries. The study established that organization's financial success or failure is its degree of operational efficiency. The conclusions cannot be generalized to Kenya's deposit taking SACCOs financial system, as the previous study kept its focus on the dynamics of bank regulatory and supervisory policies connected to Basel II's three pillars as well as other aspects of cost efficiency and performance.

An investigation of operational efficiency as a possible distress factor on financial performance was carried out using the operating expense ratio and the net worth turnover ratio (Kosikoh, 2018). This research was carried out to assess financial performance. Gross income minus overhead expenditures determinants such as the net worth/net assets ratio was calculated by dividing the gross interest income by the net worth/net assets (total assets-total liabilities). The ratio of a company's net value to total assets measures the potential return on investment for its owners. When this ratio rises, it indicates that a firm is relying on an exceptionally large amount of debt and trade payables to stay alive and avoid bankruptcy.

The link between operational innovation and financial success was examined by Klingenberg *et al*. (2018). The study also examined how well profitability indicators like return on asset, return on equity, and basic earning power could be used to assess how a certain operations plan would affect a company's performance.

Investigating the connection between these ratios and inventory management ratios with a focus on just-in-time and lean manufacturing was one of the goals of this study. According to the analysis's findings, there is no consistent correlation between the inventory management ratios of ROA, ROE, and BEP. The study established that at least two of the aspects that determine a company's profitability are the outcomes of its operations and the method in which they are supported. According to the study's findings, it is difficult to separate the impacts of an individual operations strategy from those of other organizational activities such as finance management. The study's findings, which focused on manufacturing companies in developed countries and discovered no link between operational efficiency and financial performance, cannot be applied to Kenya's deposit-taking SACCOs; however, the study discovered that operational efficiency is both a performance component and a distress indicator.

Upon analysis of literature on the relationship between operational efficiency and performance of SACCOs, the researcher noted that majority of the data available was carried out outside Kenya (Klingenberg, *et al*., 2018; Jeong & Phillips, 2019; Pranowo & Manurung, 2018; with a few being done among organizations in Kenya, (Kosikoh, 2018), (Ongore & Kusa, 2018). Despite studies by Chortareas, Girardone, and Ventouri (2019) establishing that financial success or failure is its degree of operational efficiency, the results of the study may not be generalized to the Kenyan context as the SACCO financial system is still at its infancy.

III. Methodology

This study was based on the concept of the positivist paradigm which incorporated correlation research design and longitudinal as secondary data was collected for over five years between 2018 to 2022. All 176 licensed DT SACCOs in Kenya that are authorized to accept deposits and are registered with SASRA as of July 31, 2022. A census was used in order to collect data from all 176 SACCOs in Kenya that are authorized to accept deposits. Secondary data on the dependent and independent variables was collected from the financial records of the Kenyan deposit-taking SACCOs. The SACCOs that were not in operation during the period 2018 to 2022 were excluded from the study. The study used STATA software to facilitate data analysis and panel regression to analyze the data. Quantitative data was presented using tables, charts and graphs. The simple regression analysis model was used to examined the relationship between operation efficiency and financial performance of DT-SACCOs in Kenya.

IV. Results and Discussions

The chapter entails data collected from 2018 to 2022 which were analyzed based on the years to product mean and standard deviations. Operation efficiency was measures using total operation expenses to total income and total income to core capital ratio. The summary of operation efficiency was presented in terms of mean and standard deviation over the five years.

Table 1: Total Operation Expenses to Total Income Ratio

	Over	Mean	Std. Err.	[95% Conf.	Interval]
OE1					
	2018	.3914239	.032398	.3278327	.4550152
	2019	.3528042	.0133238	.3266521	.3789563
	2020	.347492	.0137992	.3204068	.3745772
	2021	.3588677	.0130951	.3331646	.3845709
	2022	.3691914	.0140093	.3416938	.3966889

Operation efficiency as expresed by total operation expenses to total income ratio reveals that in 2018 there ratio was 39.1% which was the highest and the lowest during 2020 with 35.9%. Operation expenses to total income had flactuated over the five years with a drop frm 39.1% to 34.7% between 2018 to 2020 and an increase to 36.9% in 2022. The variation across the SACCOs was costant between 13% to 14% between 2019 to 2022, however, in 2018 it was at its highest level of 32%.

Table 2: Total Income to Core Capital Ratio

Over	Mean	Std. Err.	[95% Conf.	Interval]
OE2				
2018	.9847861	.02514	.9354411	1.034131
2019	1.064154	.0253433	1.01441	1.113898
2020	.9300596	.0218318	.8872079	.9729112
2021	.9244942	.0209297	.8834131	.9655753
2022	.7221007	.0355755	.6522728	.7919287

Operation efficiency was also examined by total income to core capital represented in Table 2. In 2019, the total income to core capital ratio was at its highest of 1.06, however, in 2022 it recorded the lowest og 0.72. The overal trend in total income to core capital has been reducing over the five year period from 0.98 in 2018 to the lowest of 0.72 in 2022. Therefore, total income has reduced during the period five based on the core capital.

Table 3: Operation Efficiency Ratio

Year	min	max	mean	sd
2018	.5582079	2.541514	.688105	.1817805
2019	.5778086	1.464856	.7084792	.1152533
2020	.2796	1.137935	.6387758	.0989451
2021	.5431463	1.194724	.641681	.0826197
2022	-.7534415	2.100031	.5456461	.2273683
Total	-.7534415	2.541514	.6445374	.1611934

The composite operation efficiency in Table 3 revealed that in 2019, the operation efficiency was at its highest. However, there was a reducing trend of operation efficiency from 2018 to 2022 from 68.8% to 54.6% respectively. The overall mean was 64.5% with a standard deviation of 16.1%.

Financial performance of SACCOs was analyzed using the return on asset (ROA) and return on equity (ROE). Hence, financial performance of SACCOs was measure using composite mean of return on asset and return on equity. This were presented in terms of mean and standard deviation for the period of 2018 to 2022.

Table 4: Return on Asset

Over	Mean	Std. Err.	[95% Conf.	Interval]
ROA				
2018	.1011149	.003776	.0937032	.1085265
2019	.1039291	.0036063	.0968505	.1110077
2020	.0998103	.0033992	.0931383	.1064823
2021	.0995625	.003309	.0930676	.1060575
2022	.097599	.0032641	.0911922	.1040057

Table 4 reflect the return of asset among SACCOs in Kenya over the five years. The results show reducing trend of net income to total asset from 10.1% in 2019 to 9.8% in 2022. The reducing trend was homogenous across the SACCOs over the five-year period as indicate by a constant standard error that range between 0.3% to 0.4%

Table 5: Return on Equity

Over	Mean	Std. Err.	[95% Conf.	Interval]
ROE				
2018	.6732016	.02514	.6238565	.7225466
2019	.7303523	.0253433	.6806082	.7800964
2020	.6410422	.0218318	.5981906	.6838939
2021	.629744	.0209297	.5886629	.6708251
2022	.4722203	.0215573	.4299073	.5145333

Financial performance was also measure using return on equity ratio within the five years as demostrated in Table 5. The results indicated a decline in net income in relation to equity over the past five years from 67.3% in 2018 to 47.2% in 2022, however, the return on equity in 2019 was the highest at 73.0%. The variation was remained constant during the five year period that ranged from 2.1% to 2.5% across the SACCOs.

Table 6: Financial Performance

Year	min	max	mean	sd
2018	-.1435035	1.352366	.3871582	.1868385
2019	-.0903083	1.41483	.4171407	.1870558
2020	-.1670087	1.070093	.3704263	.1630279
2021	-.0477705	1.13738	.3646533	.1566165
2022	-.5573072	.8275919	.2849096	.1526765
Total	-.5573072	1.41483	.3648576	.1750934

The aggregate financial performance in Table 6 results indicated a declining trend in financial performance from 38.7% in 2018 to 28.5% in 2022. In 2019, the SACCOs registered the highest financial performance of 41.7%, despite being the year with COVID-19 pandemic which affect most of the business. The variation in profitability remained had also declining from 18.7% in 2018 to 15.3% in 2022 across the SACCOs. The overall mean of 36.5% and standard deviation of 17.5% revealed that most the SACCOs achieved a positive financial performance.

> *H_o: Operational efficiency has no statistically significant relationship with financial performance of Deposit taking SACCOs.*

The objective of the study was to established whether or not operation efficiency was related to financial performance of SACCOs in Kenya. The study adopted simple regression model to test the significant based on 5% significant level as presented in Table 7.

Table 7: Operation Efficiency and Financial Performance

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Random-effects GLS regression                   Number of obs     =       835
Group variable: Firm                            Number of groups  =       167

R-sq:                                           Obs per group:
     within  = 0.3588                                         min =         5
     between = 0.4104                                         avg =       5.0
     overall = 0.3374                                         max =         5

                                                Wald chi2(1)      =    439.57
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =    0.0000
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FP	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
OE	.4922361	.0234778	20.97	0.000	.4462204	.5382518
_cons	.0475931	.0174228	2.73	0.006	.013445	.0817411
sigma_u	.10157366					
sigma_e	.09183319					
rho	.55023517	(fraction of variance due to u_i)				

The panel data set from 835 observation revealed that operation efficiency statistically predicted financial performance of SACCOs in Kenya (Prob>chi^2=0.000<0.05). A variation of 55.0% in financial performance across SACCOs in Kenya was associated with operation efficiency (Rho = 0.550). The model summary was given as follows;

$$Y = 0.048 + 0.492X_1 + \varepsilon \quad \text{..... (i)}$$

This reveals that unit increase in operation efficiency (X_1) led to 49.2% increase in financial performance of deposit taking SACCOs (Y). However, the model indicated that there was statistically significant relationship between operation efficiency and financial performance of deposit taking SACCOs in Kenya (β_1=0.492, P=0.000<0.05).

The study established whether operational efficiency had relationship with financial performance. As per the results the significant value of 0.000 which was less than 5% significant level led to rejection of null hypothesis and acceptance of alternative hypothesis (β_1=0.492, P=0.000<0.05). Therefore, operation efficiency has positive significant influence on financial performance of Deposit taking SACCOs in Kenya.

The findings align with the assertion by Olalere, Temitope, and Oluwatobi (2018), who described operational efficiency as a business's ability to offer products or services at competitive rates while maintaining high quality. This study supports the idea that efficient operations can enhance financial performance by optimizing resource use and improving service delivery, which is crucial for deposit-taking SACCOs.

Similarly, Saleh (2017) proposed that firm executives should enhance the efficiency with which physical assets generate revenue to maximize profits. This proposition concurs with the current study's results, emphasizing that operational efficiency is vital for improving financial performance, as seen in the significant positive impact on SACCOs in Kenya.

Chortareas, Girardone, and Ventouri (2019) conducted a study on EU commercial banks and concluded that operational efficiency is closely linked to financial success. Their findings indicate that higher levels of operational efficiency contribute positively to financial performance. Although the context differs, with their focus on banks and regulatory policies under Basel II, the underlying principle that operational efficiency drives financial performance is consistent with the current study's findings for Kenyan SACCOs.

Kosikoh (2018) investigated operational efficiency as a potential distress factor affecting financial performance using metrics such as the operating expense ratio and net worth turnover ratio. The study's findings suggested that improved operational efficiency leads to better financial performance, supporting the current study's conclusion that operational efficiency positively impacts SACCOs' financial outcomes. This consistency highlights the importance of managing operational costs and maximizing asset utilization.

In contrast, Klingenberg et al. (2018) explored the relationship between operational innovation and financial success in manufacturing companies. They found no consistent correlation between operational efficiency (measured through inventory management ratios) and financial performance indicators like ROA, ROE, and BEP. Although their study was conducted in a different context, focusing on manufacturing companies in developed countries, it highlights the complexity of isolating the impact of operational efficiency from other organizational activities. This difference suggests that the relationship between operational efficiency and financial performance may vary significantly across sectors and regions.

The majority of the available literature on the relationship between operational efficiency and financial performance has been conducted outside Kenya, as noted by studies such as Klingenberg et al. (2018), Jeong & Phillips (2019), and Pranowo & Manurung (2018). However, studies like Kosikoh (2018) and Ongore & Kusa (2018) provide insights within the Kenyan context. Despite this, the study by Chortareas, Girardone, and Ventouri (2019) underscores the general principle that operational efficiency is crucial for financial success, though their findings may not be directly applicable to Kenya's SACCOs due to differing regulatory and economic environments.

The current study showed that operational efficiency significantly enhances the financial performance of deposit-taking SACCOs in Kenya is supported by various literature. Although there are some contradictions, especially in different contexts like manufacturing, the overall consensus points towards the importance of operational efficiency in driving financial success. This underscores the need for SACCOs to focus on improving their operational processes to achieve better financial outcomes.

Agency Theory, which addresses conflicts between owners and managers, is corroborated as efficient operations likely align interests and reduce agency costs, leading to better financial outcomes. Together, these theories highlight how operational efficiency can mitigate distress, align interests, manage liquidity, and exploit economies of scale to enhance financial performance in SACCOs.

V. Conclusions and Recommendations

Summary

Operation efficiency in SACCOs was evaluated using the ratios of total operation expenses to total income and total income to core capital. The analysis showed fluctuating operation expenses relative to total income, with the highest ratio observed in 2018 and the lowest in 2020, followed by an increase in 2022. The variation in this ratio was stable from 2019 to 2022 but peaked in 2018. When examining total income relative to core capital, the highest ratio was recorded in 2019, with a general decline over the five years, indicating reduced income against core capital. The overall trend in operation efficiency, combining these metrics, showed a decline from

2018 to 2022. The study's third objective was to determine the relationship between operation efficiency and financial performance, revealing a statistically significant predictive relationship. Increased operation efficiency was associated with significant improvements in financial performance, indicating that better operation efficiency led to enhanced financial performance for deposit-taking SACCOs in Kenya.

Conclusions

Operational efficiency was evaluated using total operation expenses to total income and total income to core capital ratios. The analysis revealed fluctuations in operation expenses relative to total income, with significant variations in 2018 and a general decline in efficiency from 2018 to 2022. Despite these fluctuations, the study concluded that operational efficiency had a statistically significant predictive relationship with financial performance. Improved operational efficiency was associated with significant enhancements in financial performance, highlighting the critical role of managing operational expenses and income effectively in achieving better financial results for SACCOs.

Recommendations

With operational efficiency significantly predicting financial performance, SACCOs should prioritize enhancing their operational processes. It is recommended that SACCOs implement cost-cutting measures, streamline operations, and adopt technology to reduce operational expenses. Furthermore, investing in staff training and development can improve productivity and operational effectiveness. By focusing on increasing income relative to expenses and optimizing resource allocation, SACCOs can achieve better financial performance and sustainable growth.

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