

Assessing the Impact of Asset Quality on Financial Performance: A Study of Kenyan Deposit Taking SACCOs

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ABSTRACT

Saving and Credit Cooperative Societies (SACCOs) have consistently employed various financial models to evaluate their financial performance. Nonetheless, recent research indicates a rise in the number of Sacco Societies facing financial challenges. These challenges have hindered their performance. Despite this, Saving and Credit Cooperative Societies have not adequately identified the factors contributing to financial distress or the extent of their impact on financial performance. The main objective of this study therefore, was to assess the impact of asset quality on financial performance. This study was anchored on Wrecker's financial distress theory. It employed a correlation research design where a census study was conducted on all deposit taking Saving and Credit Cooperative 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 collected data from Audited Financial Reports which enhanced the 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. Using panel regression models, asset quality was regressed against financial performance. The results indicated that between 2018 to 2022 the asset quality ratio was in an increasing trend. The results also indicated that asset quality had a statistically negative significant impact on financial performance of deposit taking Sacco Societies ($\beta_1 = -1.118, 0.000 < 0.05$). The study concluded that an increase in asset quality led to a significant reduction of financial performance and vice versa. The study recommended that saving and Credit Cooperative Societies should consider low level of asset quality to achieve higher financial performance.

Key Terms: Asset Quality, Financial Performance, Correlation Research Design, Sacco Societies (SACCOs), Kenya.

INTRODUCTION

Savings and Credit Cooperative Societies (SACCOs) are cooperative societies that are formed by pooling money contribution in terms of shares for purpose of savings and offering credit facilities available to its members (Mutunga and Owino, 2017). The cooperatives are formed around a common interest, such as a geographical area, an economic effort, or employment. Members of the Sacco Societies are inextricably linked by a common economic activity. This establishes the framework for organization membership or ownership (Sacco Societies Regulatory Authority [SASRA], 2022). SACCOs play an important role in a country's economic development because they manage the majority of the money supply in circulation thus fostering liquidity (Pasara, Makochekanwa & Dunga, 2021). They provide not only saving and credit to

their members but support their member financial investment, financial advice, source of employment and contribution to overall gross domestic product of a country.

Asset quality is a critical determinant of financial performance in financial institutions, particularly in the context of customer loans and advances, which constitute a significant portion of their overall assets (Barus et al., 2018). Effective management of these loans, which primarily generate interest income, is essential for the institution's success (Love, Matthews, Simpson, Hill, & Olatunji, 2018). Evaluating asset quality helps firms assess credit risk, which in turn impacts profitability and financial performance (Adeolu, 2017). Barus et al. (2018) suggest that asset quality can be measured through indicators like loan advances and the proportion of non-performing loans (NPLs). Poor credit risk management can reduce profitability and asset quality, leading to an increase in NPLs, making ratios such as loan loss provision to operating income and total NPLs to loans essential metrics for evaluation. Hence, asset quality ratio can be measured using either non-performing loans to gross loans or loan liability provision to total income ratio.

The relationship between asset quality and financial performance varies across different contexts. For instance, Klein (2018) found that NPLs in Central, Eastern, and South-Eastern Europe were influenced by both economic indicators and financial institution characteristics, although the latter had limited explanatory power. Economic factors like GDP growth, unemployment, and inflation were significantly affected by NPL levels, impacting the broader economy. Vigneswara (2018) explored Indian banks and found that NPLs did not significantly impact profitability, contrary to expectations. This study highlighted the complex nature of asset quality's impact on financial performance, as asset size also showed no effect on profitability.

Adeolu (2017) examined Nigerian commercial banks and found a significant positive relationship between asset quality and bank performance. This suggests that better asset quality correlates with improved profitability, despite the lack of a direct relationship between bank loans and profitability. In contrast, Imran et al. (2021) studied Pakistan's Islamic banking sector and found that while asset quality did not substantially impact bankruptcy risk, the interaction between capital asset ratio and asset quality was significant. This underscores the multifaceted nature of asset quality's influence on financial stability and financial performance.

Research on Kenyan Sacco Societies by Barus, Muturi, and Kibati (2018) showed that the quality of assets significantly influences financial performance. Their study indicated that higher asset quality leads to better financial outcomes, as evidenced by regression analysis. Conversely, Olweny and Mamba (2018) found a negative relationship between asset quality and profitability in Kenyan commercial banks. Banks with higher NPLs tended to have lower profit margins, supporting the idea that increased credit risk exposure reduces profitability.

The literature review reveals conflicting findings on the relationship between asset quality and financial performance. While Adeolu (2017) and Sporta (2018) found a positive relationship, studies by Vigneswara (2018) and Akhtar and Hayati (2018) indicated no significant impact. This lack of consensus highlights the complexity of the relationship, suggesting that the influence of asset quality on financial performance may be context-specific, influenced by regional economic conditions, regulatory environments, and the characteristics of individual financial institutions. Atsango (2018) investigated how company factors affected the deposit taking savings and credit cooperative societies' profitability in Kenya and found that the profitability of DT Sacco's was significantly impacted by asset quality.

In Kenya's, Sacco societies play an important role. The Ministry of Co-Operatives and Micro, Small and Medium Enterprises (MSMES) Development's sole responsibility is to foster growth of Kenya's cooperative sector by establishing a legal and policy framework that allowed the country to meet its national social and economic objectives. The Cooperative Societies Act of 2012, established a legislative framework in Kenya for the development, registration, and expansion of co-operatives. Sacco Society Regulatory

Authority (SASRA) are responsible in ensuring that SACCOs follow regulations and financial statement for auditing purpose regularly. Financial Cooperative Institutions (Savings & Credit Co-operative Societies-SACCOs) that are not financially viable include produce, marketing, housing, transport and investment co-operatives. The primary purpose of individual members who join financial co-operatives or SACCOs is to pool their capital and lend to one another in accordance with the organization's established bylaws (Barus, Muturi, & Kibati, 2017; SASRA, 2022).

Kenya underwent severe economic difficulties during the beginning of 1990s, which drove commercial banks to require higher minimum operating balances for individual accounts in order to stay in business. As a result, a large number of people in the middle- and lower-income brackets were unable to open bank accounts. SACCOs grew in popularity among employed people who were unable to maintain or operate bank accounts. As a result, SACCOs developed a Front Office Service Activity (FOSA) that offered quasi-banking services at low cost. This marked the beginning of a new era in the SACCOs business which are deposit-taking or non-deposit-taking. A Deposit Taking SACCOs conducts a front-office savings operation (FOSA) in compliance with the appropriate statutory framework. Under the FOSA umbrella, SACCOs that have been given a license can conduct operations akin to banking (SASRA, 2022).

SACCOs play a significant role in Kenya's financial landscape as financial institutions. Their major focus is on personal development as well as the economy's small and micro enterprise sectors. More than half of the cooperatives in Kenya are SACCOs. This subsector has large SACCOs, some of which have a total asset base of more than 15 billion Kenyan shillings, as well as small SACCOs with assets of less than 10 million Kenyan shillings. This subsector may be found across Kenya, from metropolitan cities to rural locations (SASRA, 2022). In contrast to other forms of commercial organizations, the cooperative philosophy, which is based on the International Co-operative Alliance's seven Co-operative Principles, provides the foundation for the establishment of co-operatives (Ribas, *et al.*, 2022).

The cooperative sector in general is rapidly expanding, with the SACCO subsector leading the way. SACCOs currently account for more than half of all registered cooperatives. As at December 31, 2010, there were 6,737 registered Sacco societies, out of which only 3,280 were operational. Active SACCOs are defined in this context as groups that have had their annual financial accounts audited and are registered with the Commissioner for Cooperative Development (CCD). Only 215 of the 3280 functioning SACCOs were deposit-taking FOSA of which 175 out of the 215 were in operation in 2022 and three namely, M/S Miliki SACCO Society Ltd, M/S Nandi Hekima SACCO Society Ltd, and M/S Sukari SACCO Society Ltd. had failed to renew their licenses as at 31st December 2021 and have stopped to do deposit-taking operations in Kenya in compliance with the stipulations of the Sacco Societies Act and the Regulations issued there under in 2010.

Recently others like Nyamira Tea SACCO Society Ltd, Uchongaji SACCO Society Ltd, Nanyuki Equator SACCO Society Ltd and Comoco SACCO Society Ltd Failed to renew their licenses in 2022 which is a mandatory requirement for their operation under SASRA. This is an indication that SACCOS have high failure rate. Notably 37 of the registered deposit taking SACCOs were dormant, with the remaining 3,065 of the totals focusing only on Back Office Savings Activity (BOSA). This means that the remaining 3,457 SACCOs were not operational over the entire period (SASRA, 2022).

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).

Financially sound SACCOs are characterized by high liquidity, high profitability, revenue streams that are

growing, ability to meet obligations as they fall due to ease of raising capital, compliance with statutory requirements, high employee stability both at management and support level and payment of attractive dividends to its members. Over the world, financial stress is a major issue that cannot be disregarded. It results in bank failures ultimately due to bankruptcy. Financial crisis has led to the failure of numerous banks, including those in Kenya. 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. In Nairobi County's Deposit Taking SACCOs experienced, it was found that there is 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 distress. Return on equity and return on asset were employed in a study as dependent variables, and it was found that the quantity of distressed non-bank financial institutions is rising quickly.

Extent literature on asset quality were done in commercial banks which showed mixed relationship with financial performance where some found no association (Vigneswara, 2018; Imran *et al.*, 2021) and negative association (Olweny & Mamba, 2018). On the contrary, Adeolu's (2017) and Sporta's (2018) indicated positive impact of asset quality on financial performance. Consequently, a study done on SACCOs by Barus, Muturi, and Kibati (2018) did not indicate a clear association between asset quality and financial performance. This study aims to fill the gap in understanding how asset quality impacts the financial performance of deposit-taking SACCOs in Kenya.

LITERATURE REVIEW

Theoretic Review

The wrecker's theory, initially suggested by Campbell, Hilscher, and Szilagyi (2005), argued that securities of distressed enterprises perform much worse than securities of financially strong enterprises. The wreckers' theory of financial distress aims to clarify to stakeholders why financial turmoil may be beneficial. Because it integrates private benefits research with asset pricing research, this theory can help us better understand how crucial financial structure and default likelihood are in assessing the scope of private benefits control (Kalckreuth, 2005).

In the event of a default, Kalckreuth (2005) argues, there is a higher motivation for shareholders to take private and non-dividend advantages from the company. There were no opportunity costs for shareholders in states where default is avoided. Taking resources out of circulation is a no-brainer if a default is imminent hence the term "wrecking". As depicted by Wrecker, in Livdan, Saprizza and Zhang (2015) and Garlappi *et al.*, (2005) financial distress occurs when a company is subjected to several negative shocks, which lead to losses and eventually to financial distress. Due to this negative shock the asset quality is likely to be negatively affected by low deposits and more non-performing loans and advances as a result of excessive withdrawals from the firm's balance sheet (Nyamboga *et al.*, 2014).

A financially challenged company's many advantages to shareholders are attempted to be justified by the wrecker's theory of financial hardship. Due to low deposits and high non-performing loans, the shareholders' expectations for the company's production in the form of dividend payments, credits,

advances, and bank runs have an impact on the asset quality. Therefore, according to Wrecker's argument, asset quality is a significant contributor to financial crisis. Hence, Wrecker's theory supports the relationship between asset quality and financial performance.

Empirical Review

Customer loans and advances account for a sizable amount of a financial institution's overall assets (Barus *et al.*, 2018). To ensure the business's success, a range of investments are planned, the bulk of which are interest on loans issued to consumers (Love, Matthews, Simpson, Hill, & Olatunji, 2018). According to Adeolu (2017), evaluating a company's assets is an important part of firm management. This is because it allows for a more specific assessment of the amount of credit risk that the firm is taking on, as well as how this impacts the company's profitability and financial performance. According to Barus *et al.*, (2018) the asset quality of a bank may be measured in part by looking at loan advances and non-performing loans. Inadequate credit risk management, reduction on bank profitability, reduces the quality of their assets, and increases the proportion of loans that are considered nonperforming. In light of this, the loan loss provision to operating income ratio and total non-performing assets to loans ratio was used in this study. Because lower values were preferred in this investigation, these ratios were used.

Klein (2018) studied nonperforming loans in Central, Eastern, and South-Eastern Europe between 2013 and 2016. It was demonstrated that the amount of non-performing loans was related to both economic indicators and financial institution characteristics; however, the latter had very little power to explain the former. If nonperforming loans have an influence on macroeconomic parameters such as GDP growth, unemployment, inflation, and corporate performance, then this element must be considered. The financial sector has a considerable influence on the actual economy, according to the study's conclusions. This shows that the rising share of non-performing loans in certain CESEE nations is slowing the rate of recovery. Differences in NPL management processes can be explained by characteristics such as the capital-to-asset ratio, the amount of NPL provisions, and the return on assets in developing and developed countries.

Vigneswara (2018) explored the factors that influence the quality and profitability of bank assets in India. Panel data techniques were used throughout the research, which took place between 2010 and 2016, and the study's findings showed a conclusion that contradicted the known and expected result. It was revealed that non-performing assets had no influence on commercial bank profitability, and it was also demonstrated that asset size has no effect on commercial bank profitability. The study was conducted at numerous commercial banks in India between 2010 and 2016. The current study aims to fill the gap by studying the influence of asset quality, as a financial distress factor, on the financial performance of deposit-taking SACCOs in Kenya between 2012 and 2022.

Adeolu (2017) examined the link between asset quality and financial performance in Nigerian commercial banks. Using the SPSS Pearson correlation and regression tool to examine the obtained data, he concluded that asset quality had a statistically significant positive relationship and impact on financial performance. The data offered indicates that there is no relationship between bank loans and profitability. A bank's performance is monitored using a variety of financial metrics, and one of the key objectives of banks is to minimize the amount of nonperforming loans. Non-performing assets to total net loans and loan loss cover are the best asset quality ratios.

From 2009 to 2016, Imran *et al.*, (2021) performed an empirical study of Pakistan's Islamic banking sector. The study's purpose was to detect bankruptcy risk in Pakistan's Islamic banking sector by examining the relationship between asset quality, income structure, and macroeconomic variables. The study included the years 2009 to 2016. A number of bank-specific and macroeconomic parameters were examined to determine the impact of bankruptcy risk on Pakistan's Islamic financial institutions. An OLS estimate was used to get the results. According to the research, asset quality does not have a substantial impact in the occurrence of

bankruptcy within the Islamic banking system; nevertheless, the interplay between capital asset ratio and asset quality does.

Olweny and Mamba (2018) performed research on the association between banking sector characteristics and bank performance. Asset quality was one of the bank-specific characteristics that they investigated. The inquiry was conducted utilizing panel data research methodology and an explanatory approach. The study examined the yearly financial statements of 38 commercial banks in Kenya from 2010 to 2016, using the multiple linear regression approach to analyse the obtained data. According to the study's findings, there is a negative and significant relationship between asset quality and financial performance. The data also revealed that banks that are unable to successfully manage their credit loans have lower profit margins than banks that pay close attention to the quality of their assets. The findings noted that small and medium-sized banks with a high percentage of non-performing loans to total loans have a low profitability rate. The results lend support to the notion that increasing a bank's exposure to credit risk reduced its profitability.

Barus, Muturi, and Kibati (2018) investigated the impact of asset quality on the financial performance of Kenyan savings and credit institutions. An explanatory research technique was applied in this study, including 183 Kenyan SACCOs that were registered to take deposits and active between 2011 and 2015. The major approach for gathering both primary and secondary data for the study was a census. Statistical package for Social Sciences and STATA were used to analyze the data using multiple linear regression models. The results of the study imply that the financial success of Kenyan savings and credit institutions is influenced by the caliber of assets owned by such institutions. This phenomenon was explained by the findings of the regression analysis, which showed a beneficial effect and the degree to which asset quality affected the financial performance of savings and credit organizations. The findings of the univariate regression demonstrate that Kenyan savings and credit institutions' overall financial performance is influenced by the quality of the assets they hold.

The impact of asset quality on the financial performance of financial institutions has been studied in different contexts. Barus, Muturi, and Kibati (2018) conducted an explanatory research study on 183 Kenyan SACCOs that were registered to take deposits between 2011 and 2015. They found that the financial performance of these institutions is significantly influenced by the quality of assets they hold, as indicated by regression analysis results. In contrast, Adeolu (2017) explored the relationship between asset quality and financial performance in Nigerian commercial banks, revealing a statistically significant positive correlation. The data also suggested that bank loans may not be directly related to profitability. Overall, asset quality plays a crucial role in determining the financial success of financial institutions, with non-performing assets to total net loans and loan loss cover being key ratios in assessing asset quality.

Results of review of literature on the relationship between asset quality and performance of different organizations could not reach a consensus. Olweny and Mamba's (2018) study showed a negative and significant relationship. Adeolu's (2017) and Sporta's (2018) studies showed a positive and significant relationship between asset quality and financial performance while others determined that asset quality has no influence on financial performance (Vigneswara, 2018; Akhtar and Hayati, 2018). Hence, due to inconsistency in the relationship between asset quality and financial performance, there is need to examine the impact of asset quality on financial performance, especially in Deposit Taking SACCOs in Kenya.

RESEARCH METHODOLOGY

This study was based on the concept of the positivist paradigm. This emphasized on objectivity and allowed the researcher to use quantitative analysis. This enable the researcher quantify the relationship between asset quality and financial performance. Additionally, the study adopted correlation research design and longitudinal as secondary data was collected for over five years. The longitudinal design provided a time

series association between asset quality and financial performance for five years. The correlation design couple with longitudinal provide a more comprehensive relationship based on time and aggregate between the two variables. The study target population was 176 licensed and running SACCOs in Kenya between 2018 and 2022. All the 176 licensed DT SACCOs in Kenya that are authorized to accept deposits and are registered with SASRA as of July 31, 2022 was researched, including 164 legally registered DT SACCOs and 12 with limited licenses (SASRA Annual Report, 2023). The current study was based on a census conducted by the SASRA secretariat of all 176 Kenyan SACCOs that accepted deposits as of July 31, 2022. Secondary data on the dependent and independent variables was collected from the financial records of the Kenyan deposit-taking SACCOs investigated between 2018 and 2022. Data extraction form was used for data collection. Descriptive statistics that is the mean and standard deviation were used to evaluate level of asset quality and financial performance for the period 2018 to 2022. The simple regression analysis model was utilized to determine the relationship between asset quality and financial performance.

RESULTS AND DISCUSSIONS

The study assessed asset quality using non-performing loans to gross loans and loan liability provision to total income ratio. The output results were presented from 2018 to 2022 considering the mean and standard deviation results.

Table 1: Non-Performing Loan to Gross Loan Ratio

Over	Mean	Std. Err.	[95% Conf. Interval]	
AA1				
2018	.063	4.95e-18	.063	.063
2019	.06147	5.78e-18	.06147	.06147
2020	.0839564	8.31e-18	.0839564	.0839564
2021	.0885974	1.79e-17	.0885974	.0885974
2022	.1188181	.010958	.0973096	.1403265

The non-performing loans to gross loan ratio in Table 1 reveals a reducing trend from 2018 to 2022 from 6.3% to 11.9% respectively. The increase in non-performing loan in relation to gross loans indicates increase in losses associated with high non-performing loans. The variation also had increased over the same period of time across the SACCOs.

Table 2: Loan Liability Provision to Total Income Ratio

Over	Mean	Std. Err.	[95% Conf. Interval]	
AA2				
2018	.4522	0	.	.
2019	.4279	0	.	.
2020	.4412605	.0000605	.4411418	.4413792
2021	.4513	1.45e-16	.4513	.4513
2022	.4557784	.0000216	.4557361	.4558208

Table 2 indicated that the loan liability provision to total income ratio has fluctuated over 2018 to 2022. The highest loan liability provision to total income was in 2022 with 45.6%. This range between 42.8% as the lowest in 2019 and the highest 45.6% in 2022. However, there are very low variation across the years and

the SACCOs within the five-year period.

Table 3: Asset Quality Ratio

Year	min	max	mean	sd
2018	.2576	.2576	.2576	0
2019	.244685	.244685	.244685	0
2020	.2625782	.2676282	.2626085	.0003908
2021	.2699487	.2699487	.2699487	0
2022	.2297	.6923	.2872983	.070812
Total	.2297	.6923	.2644281	.0345973

The overall asset quality ratio indicated that there was a maximum ratio of 28.7% and minimum ratio of 24.5% in 2019. There is an increase trend of asset quality ratio between the period of 2018 to 2022 from 25.8% to 28.7% respectively. The overall asset quality ratio was 26.4% with standard deviation of 3.5%.

Financial Performance

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 demonstrated 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.

Table 7: Asset Quality and Financial Performance

Random-effects GLS regression	Number of obs	=	835
Group variable: Firm	Number of groups	=	167
R-sq:	Obs per group:		
within = 0.1206	min =		5
between = 0.0047	avg =		5.0
overall = 0.0434	max =		5
corr(u_i, X) = 0 (assumed)	Wald chi2(1)	=	91.99
	Prob > chi2	=	0.0000

FP	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
AA	-1.118071	.1165746	-9.59	0.000	-1.346553	-.8895886
_cons	.6605069	.032733	20.18	0.000	.5963513	.7246625
sigma_u	.13397496					
sigma_e	.1075517					
rho	.60810711	(fraction of variance due to u_i)				

The objective examined whether or not asset quality was related to financial performance of SACCOs in Kenya. A total of balance panel data of 835 observation revealed that asset quality statistically predicted financial performance of SACCOs in Kenya (Prob>chi²=0.000<0.05). A variation of 60.8% in financial performance across SACCOs in Kenya was associated with asset quality (Rho = 0.608). The summary results were given as follows;

$$Y = 0.661 - 1.118X_4 + \varepsilon \dots\dots\dots (i)$$

The model summary implied that for any unit increase in asset quality results to a decrease of 1.118 unit on financial performance of SACCOs. Therefore, asset quality had a negative statistically significant relationship with financial performance of deposit taking SACCOs in Kenya ($\beta_4 = -1.118, 0.000 < 0.05$).

H₀: Asset quality has no statistically significant relationship with the financial performance of Deposit taking SACCOs.

According to simple regression results for the fourth objective, the null hypothesis was rejected and alternative accepted, since the significant value of 0.000 was less than significant level of 5% ($\beta_1 = -1.118, 0.000 < 0.05$). These implied that asset quality had statistically significant relationship with the financial performance of deposit taking SACCOs in Kenya.

Barus et al. (2018) provide relevant insights, asserting that asset quality in banks can be measured by examining loan advances and non-performing loans. Their findings suggest that poor credit risk management leads to reduced asset quality and increased non-performing loans, which in turn adversely affect profitability. This perspective aligns with the current study's results, emphasizing the detrimental effect of poor asset quality on financial performance.

Klein (2018) explored non-performing loans in Central, Eastern, and South-Eastern Europe, finding that these loans are influenced by economic indicators and financial institution characteristics. The study concluded that a higher share of non-performing loans can hinder economic recovery, suggesting that asset quality significantly impacts the broader economic and financial environment. While this study focuses on a different geographical region, it concurs with the current results by highlighting the negative implications of poor asset quality on financial performance.

Conversely, Vigneswara (2018) investigated the quality and profitability of bank assets in India and found no significant impact of non-performing assets on commercial bank profitability. This contradictory finding suggests that the relationship between asset quality and financial performance may vary by context and financial environment. The study contrasts with the current results, indicating that asset quality's impact on financial performance is not universally consistent.

Adeolu (2017) examined the relationship between asset quality and bank performance in Nigerian commercial banks, revealing a statistically significant positive relationship. Adeolu's findings differ from the current study, which found a negative impact of asset quality on financial performance. This discrepancy highlights the variability in how asset quality affects financial performance across different financial institutions and regions.

Imran et al. (2021) studied the Islamic banking sector in Pakistan, finding that asset quality does not significantly impact bankruptcy risk within the Islamic banking system. However, they noted an interaction between capital asset ratio and asset quality. While this study does not directly align with the current results, it suggests that asset quality's influence on financial performance may be moderated by other financial metrics, such as the capital asset ratio.

Olweny and Mamba (2018) investigated the relationship between banking sector characteristics and bank performance in Kenya. They found a negative and significant relationship between asset quality and profitability, consistent with the current study's findings. Their study underscores the importance of managing credit risk to enhance financial performance, reinforcing the detrimental effect of poor asset quality on financial performance.

Barus, Muturi, and Kibati (2018) examined the impact of asset quality on the financial performance of

Kenyan SACCOs, finding that the quality of assets significantly influences financial success. Their results align with the current study, highlighting the critical role of asset quality in determining financial performance in the Kenyan context.

The literature on the relationship between asset quality and financial performance reveals mixed results. While studies by Olweny and Mamba (2018) and Barus, Muturi, and Kibati (2018) support the current findings, other studies, such as Vigneswara (2018), show no significant impact, and Adeolu (2017) found a positive relationship. These differences suggest that the impact of asset quality on financial performance may depend on various factors, including the financial institution type, geographical context, and specific financial metrics considered.

The results indicating that asset quality had a negative statistically significant relationship with the financial performance of deposit-taking SACCOs support Wrecker's financial distress theory. Wrecker's theory posits that financially distressed firms experience numerous negative shocks, leading to worse performance compared to financially stable firms. This negative impact on asset quality, as reflected in low deposits and high non-performing loans, aligns with the theory's assertion that distressed firms face significant financial challenges. These challenges often result from stakeholders extracting private benefits and non-dividend advantages as the firm nears default, which can deplete resources and further degrade asset quality. Thus, the observed negative relationship between asset quality and financial performance in SACCOs supports Wrecker's theory by illustrating how financial distress and resultant poor asset quality can lead to inferior financial performance.

CONCLUSIONS AND RECOMMENDATIONS

Summary

The study evaluated asset quality using the ratios of non-performing loans to gross loans and loan liability provisions to total income from 2018 to 2022. The results indicated a rising trend in non-performing loans relative to gross loans from 6.3% in 2018 to 11.9% in 2022 which suggests there was an increase in losses due to higher non-performing loans. Variability in this ratio also increased over the period by 7.7% from 6.3% in 2018. The loan liability provision to total income ratio fluctuated, peaking of 45.6% in 2022 from the lowest in of 42.8% in 2019. Overall, the asset quality ratio showed an increasing trend from 25.8% in 2018 to 28.7% in 2022. On the contrary, financial performance decline from 41.7 in 2019 to 28.5% in 2022. The analysis concluded that asset quality significantly predicted financial performance, with a negative relationship. Specifically, an increase in asset quality was associated with a decrease in financial performance. Therefore, the increase in non-performing loans and loan liability provision between 2018 to 2022 was associated with the declining financial performance during the same period among the deposit-taking SACCOs in Kenya.

Conclusions

The study concluded that asset quality significantly predicted financial performance, but with a negative relationship. This was associated with the trends of deposit-taking SACCOs in Kenya which were declining financial performance from 2018 to 2022 consequently their asset quality had significantly increase. This implied there was an increase in non-performing loans between the same period leading to an increase in losses. The non-performing loans ends up to bad debts leading to increase in expense generated by bad debts lowering the income of the SACCOs. On the other hand, loan liability provisions increase during the same period which might have been triggered by an increase in bad debts which leads also to lower reported profit in SACCOs. This indicated that an increase in asset quality ratio was associated with the decline of financial performance during the five years.

Recommendations

The study recommended that SACCOs enhance their credit risk management practices to reduce the level of non-performing loans. Due negative impact of declining asset quality on financial performance highlights the need for SACCOs to improve their asset management strategies. Implementing stricter loan appraisal processes, continuous monitoring of loan portfolios, and adopting effective recovery strategies for non-performing loans can help in maintaining better asset quality.

The SACCO management and regulatory bodies should adopt asset quality as an indicator that the businesses are not moving in the right direct when there are higher number of non-performing loans as well as loan liability provisions. There is need for SACCOs to improve on management of asset quality by reducing non-performing loans and reduce loan liability provisions for them to reduce the decline in financial performance.

This declining trend in financial performance has a negative effect on investors leading them to retract from the company as pointed in Wrecker's Theory. This reduces stakeholders' confidence and might lead to retraction of investors from an organization. Hence, investors should examine the level of asset quality before investing on SACCOs and other financial institution to low the risk in their investment portfolio.

REFERENCES

1. Adeyemi, B. (2019). Bank failure in Nigeria: A consequence of capital inadequacy, lack of transparency and non-performing loans. *Banks and Bank Systems*, 6(1), 99–109.
2. Ahmad, S. (2020). Effect of financial distress on firm's performance of non-financial firms registered with Pakistan Stoke Exchange. *International Journal of Business and Management Sciences*, 1(1), 44–64.
3. Altman, E. I. (1968). The Journal of Finance. *The Journal of Finance*, 23(4), 589–609.
4. Altman, E. I., Hotchkiss, E., & Wang, W. (2019). *Corporate financial distress, restructuring, and bankruptcy: analyze leveraged finance, distressed debt, and bankruptcy*. John Wiley & Sons.
5. Atsango, V. L. (2018). *Relationship Between Firm Characteristics and Profitability of Deposit Taking Sacco's in Kenya* (Doctoral dissertation, University of Nairobi).
6. Bank for International Settlements (2018). Structural changes in the banking sector after crisis. *Bank for International Settlements*. ISBN 978-92-9259-131-1 (online)
7. Barus, J., Muturi, W., & Kibati, P. (2017). The Effect of Asset Quality on the Financial Performance of Savings and Credit Societies in Kenya. *American Journal of Finance*, 1(4), 13–25.
8. Cheluget, J., Gekara, M., Orwa, G., & Keraro, V. (2014). Liquidity as a determinant of financial distress in insurance companies in Kenya. *Prime Journal of Business Administration and Management*, 4(1), 1319–1328.
9. Dirman, A. (2020). Financial distress: the impacts of profitability, liquidity, leverage, firm size, and free cash flow. *International Journal of Business, Economics and Law*, 22(1), 17–25.
10. Forgione, A. F., & Migliardo, C. (2018). Forecasting distress in cooperative banks: The role of asset quality. *International Journal of Forecasting*, 34(4), 678–695.
11. Gjuzi, G. (2018). Liquidity creation and banks' capital casual effect: GIIPS countries case.
12. Gladys, G. M. (2021). *Financial Distress and Financial Performance of Manufacturing, Construction and allied Firms Listed in The Nairobi Securities Exchange, Kenya* (Doctoral dissertation, Kenyatta University).
13. Hersugondo, H., Anjani, N., & Pamungkas, I. D. (2021). The role of non-performing asset, capital, adequacy and insolvency risk on bank performance: a case study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), 319–329.
14. Idrees, S., & Qayyum, A. (2018). The impact of financial distress risk on equity returns: A case study

- of non-financial firms of Pakistan Stock Exchange. *Journal of Economics Bibliography*, 5(2), 49-59.
15. Imran, M., Lashari, A. A., Soomro, M. I., & Shah, S. M. M. (2021). Impact of Operational Risk and Efficiency on Islamic Bank Performance: A case study of four major Islamic Banks of Pakistan. *SALU-Commerce & Economics Review*, 7(1), 166-181.
 16. Isayas, Y. N. (2021). Financial distress and its determinants: Evidence from insurance companies in Ethiopia. *Cogent Business & Management*, 8(1), 1951110.
 17. Jahan, K., & Kabir, M. A. (2019). The Impact of Financial Distress on Firm's Performance: Evidence from Non-Banking Financial Institution of Bangladesh.
 18. Jati, K., Agustina, L., Amal, M., Wahyuningrum, I., & Zulaikha, Z. (2021). Exploring the internal factors influencing financial distress. *Accounting*, 7(4), 791-800
 19. Jepkorir, S. (2022). *Determinants of Financial Distress in Deposit-Taking Savings and Credit Cooperative Organizations in Kenya* (Doctoral dissertation, JKUAT-COHRED).
 20. Kangogo, C.C. (2021) *Financial distress and performance of selected firms listed at Nairobi securities exchange, Kenya*. Kenyatta university repository
 21. Kariuki, H. N. (2013). The Effect of Financial Distress on financial Performance of Commercial Banks in Kenya. *University of Nairobi*.
 22. Kumaraswamy, S. (2016). Impact of working capital on financial performance of gulf cooperation council firms. *International Journal of Economics and Financial Issues*, 6(3), 1136-1143.
 23. Livdan, D., Sapriza, H., & Zhang, L. (2015). A neoclassical model of financially constrained stock returns, unpublished manuscript.
 24. Love, P., Matthews, J., Simpson, I., Hill, A., & Olatunji, O. (2018). A benefit realization management building information modelling framework for asset owners. *Automation in Construction*, 37(1), 1-10. Retrieved from <internal-pdf://love0290629889/Love.pdf>
 25. Lucky, L. A., & Michael, A. O. (2019). Leverage and corporate financial distress in Nigeria: A panel data analysis. *Asian Finance & Banking Review*, 3(2), 26-38.
 26. Mayr, S., Mitter, C., Kücher, A., & Duller, C. (2021). Entrepreneur characteristics and differences in reasons for business failure: evidence from bankrupt Austrian SMEs. *Journal of Small Business & Entrepreneurship*, 33(5), 539-558.
 27. Muchori, H. M., & Wanjala, M. (2020). Influence of Financial Distress on Performance of Commercial Banks in Kenya. *International Journal of Advanced Research and Review*, 5(4).
 28. Mutunga, D & Owino, E. (2017). Moderating role of firm size on the relationship between micro factors and financial performance of Manufacturing firms in Kenya. *Journal of finance and accounting* . Volume 1, Issue 2. P 14-27.
 29. Naoaj, M. S. (2023). Exploring the Determinants of Capital Adequacy in Commercial Banks: A Study of Bangladesh's Banking Sector. *arXiv preprint arXiv:2304.05935*.
 30. Ndinda, B. (2021). *Effect of Firm Characteristics on Financial Distress Among Non-Financial Firms Listed at the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
 31. Onchangwa, G. A. (2019). *Effects of working capital management on financial distress of non-financial firms listed at the Nairobi securities exchange market* (Doctoral dissertation, JKUAT-COHRED)
 32. Pandey, P., & Pandey, M. M. (2021). *Research methodology tools and techniques*. Bridge Center.
 33. Pasara, M. T., Makochekeka, A., & Dunga, S. H. (2021). The Role of Savings and Credit Cooperatives (SACCOs) on Financial Inclusion in Zimbabwe. *Eurasian Journal of Business and Management*, 9(1), 47-60.
 34. Pozzoli, M., & Paolone, F. (2017). *Corporate financial distress: a study of the Italian manufacturing industry*. Springer.
 35. Ribas, W. P., Pedroso, B., Vargas, L. M., Picinin, C. T., & Freitas Júnior, M. A. D. (2022). Cooperative Organization and Its Characteristics in Economic and Social Development (1995 to 2020). *Sustainability*, 14(14), 8470.
 36. SACCO Societies Regulatory Authority. (2020). SACCO supervision report-2020: Deposit taking SACCOs. Nairobi: *Government Printers*.

37. SACCO Societies Regulatory Authority. (2021). SACCO supervision report-2021: Deposit taking SACCOs. Nairobi: *Government Printers*.
38. SACCO Societies Regulatory Authority. (2022). List of SACCO Societies licensed to undertake deposit taking SACCO business in Kenya for the financial year ending December 2022. Retrieved+ from: <https://www.SASRA.go.ke/index.php/resources/publications/category/11-SACCOsupervision-reports#.NXMbYXIU>
39. Shisia, A., Sang, W., Waitindi, S., & Okibo, W. B. (2014). An in-depth analysis of the Altman's failure Prediction model on corporate financial distress in Uchumi supermarket in Kenya.
40. Singh, M. P. (2023). Financial Distress Risk and Stock Return: A Review. *Economics and Commerce*, 14(01).
41. Sporta, F. O. (2018). *Effect of financial distress factors on performance of commercial banks in Kenya* (Doctoral dissertation, JKUAT).
42. Thinwa, B., & Matanda, J. (2023). Antecedents of Financial Distress Among Agricultural Firms Listed at the Nairobi Securities Exchange. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 7(1).
43. Ufo, A. (2015). Impact of financial distress on the leverage of selected manufacturing firms of Ethiopia. *Industrial engineering letters*, 5(10), 6-11
44. Ufo, A., No, A., & Sodo, W. (2015). Determinants of financial distress in manufacturing firms of Ethiopia. *Research Journal of Finance and Accounting*, 6(17), 9-17.
45. Vigneswara, S. (2018). Modelling bank asset quality and profitability.
46. Wanderi, R. G. (2016). *Influence of corporate governance practice on financial distress among commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).