

Financial Decisions and Stability of Deposit Taking Savings and Credit Cooperative Societies in Kenya

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Abstract: The study investigated the effect of financial decisions on financial stability of Kenyan Deposit-Taking Sacco Societies. Specifically, it analyzed how financial leverage, dividend policy, and liquidity as key indicators of financial decision-making, affect capital adequacy, which serves as a benchmark for assessing the financial stability of these institutions. The anchoring theoretical postulations included the theory of trade-off, dividend relevance theory, working capital management theory, and risk absorption theory. To achieve the research objectives explanatory research design was utilized. The study focused on DTS that have been operational from 2018 to 2022. Data of secondary nature was sourced via the audited annual statements of these DTSs finance, which were submitted to the Sacco Regulatory Authority. The findings revealed that financial leverage negatively and insignificantly affects financial stability, while dividend policy and liquidity both have a substantial positive effect on financial stability. Furthermore, the DTS's size was noted to have significantly moderated the connection concerning financial decisions and financial stability. The study recommends strengthening existing regulatory frameworks to ensure DTS has robust liquidity risk management practices in place. This can include guidelines on liquidity stress testing, contingency funding plans, and liquidity ratio requirements. Clear and comprehensive regulations will help DTSs maintain adequate liquidity levels and mitigate liquidity-related risks.

Keywords: Financial Leverage, Dividend Policy, Liquidity and Financial Stability.

1. INTRODUCTION

1.1 Background of the Study

Financial stability is the ability of a firm to operate in both excellent and poor economic times whilst digesting events of all kinds (Lobo & Pacheco, 2023). Financial markets and financial institutions are considered stable when they can give individuals, groups, along organizations the merchandise, amenities, alongside financial backing their bodies need to expand, make investments, or simply play a part in creating an economy that thrives. In the context of a financial institution, financial stability means the smooth operation of a firm while being profitable and liquid to overcome any challenges of bankruptcy while serving its members and penetrating deeper into its targeted clientele (Henock 2019).

Credit Unions as financial institutions are becoming important players in the financial sector by providing deeper financial inclusion networks and encouraging savings. They have the potential to significantly alter the landscape in addressing socioeconomic disparities within local communities and improving the overall saving and investment levels of a country (Ashraf, 2014). To effectively attain a just socioeconomic equilibrium, and boost savings in an economy, the Credit Union must be stable. Credit Unions aim to remain stable in the economy. They make crucial financial decisions on when to source funds, where the funds can be raised from, and how the funds are invested to achieve a balanced optimum capital structure. They collect deposits from individuals and corporations and funnel them to investments like loan products and government securities. This financial decision affects the firms' expenses, cash flows, and controls and exposes them to financing risk, which leads to instability of the firm (WOCCU, 2021).

The Credit union also known as the Cooperative Union movement started in Germany in 1849, and later followed in Canada in 1901. The initiative has reached nearly every country in the globe over time (Ngombe & Mikwamba, 2004). Credit Unions have significantly grown over the years with approximately 87,914 credit unions worldwide serving more than 393 billion members. Credit Unions have a penetration rate of 12.69% in the financial market and offer stiff competition to banks, which is a sign of the Credit Union's stability worldwide (WOCCU Report, 2021). French Credit Unions Agricole is one of the largest institutions of finance whose stability in the market has attracted investors from Germany, who have more than 28% shares in the company. Canada has a stable and the largest Credit Union concentration with approximately five million more members than banks (USAID Uganda report, 2018). The financial stability of Credit Unions in various emerging economies has been boosted by the introduction of a deposit insurance guarantee that offers Credit Unions more stability during crises since it holds a buffer reserve to cushion members' funds. In Africa, there are approximately 41,067 Credit Unions with a penetration rate of 15.66% in the financial market. Most African countries have recognized the essential responsibility that Credit Unions play in the finance sector hence the rise of financial regulations to stabilize the Credit Union movement (Mushonga, 2018). The growth and stability of the Credit Unions have accelerated their growth rate and penetration rate in Africa (WOCCU, 2021).

1.2 Problem Statement

SACCOs are essential to Kenya's economy, managing 30% of the country's savings and contributing 43% to the GDP (State's Department of Cooperatives Study, 2019). To address risks like liquidity issues and poor credit management in SACCOs, the government introduced the SACCO Societies Act of 2010 and Regulations in 2012, to ensure stability in the financial system (SASRA, 2013). Despite financial growth following the introduction of prudential regulations, many DTSs have struggled with financial instability, particularly in meeting capital adequacy requirements. As per SASRA (2018), the SACCOs financial stability has been declining, with a 13% drop in 2014, followed by additional declines of 6% in 2015 and 10% in 2016. Between 2019 and 2021, many DTSs in Kenya struggled to meet key regulatory capital requirements. In 2019, 45 DTSs were below the minimum capital core to assets total (CCA) ratio of 10%, 22 failed to meet the capital core to deposits total (CCD) minimum of 8%, and 91 did not meet the institutional capital to assets total (ICA) minimum of 8% (SASRA, 2019). In 2020, 37 DTSs were below the CCA ratio, 21 failed to meet the CCD ratio, and 91 were below the ICA ratio (SASRA, 2020). By 2021, eight out of 176 DTSs did not meet the core capital requirement of Kshs 10 million, 22 fell short of the CCA ratio, 13 failed the CCD ratio, and 51 did not meet the ICA ratio (SASRA, 2021). The meager degree of adherence to the adequacy of capital ratio demonstrates the struggle for the financial stability of DTSs (KUSCO, 2023).

Research on the financial stability of DTSs has explored various factors affecting the stability of DTSs such as the impact of intellectual capital disclosure (Farah, Mbebe, and Muyoka, 2019) loan defaulting, and membership (Kilemile, 2017), competitive market strategies, internal controls, and corporate governance (Mutiso 2019). However, none of these studies examined how financial decisions affect DTSs financial stability in Kenya. Additionally, other researchers have measured finances considering ROA and ROE. Mutiso, Kamau, and Gatheru (2020) and Ntoiti & Jagongo (2021) utilized assets return and equity return as measures of the performance financially. The studies have not considered the financial stability of the DTSs whereas they faced issues in compliance with the adequacy of capital ratios. This research investigated the effects of financial leverage, dividend policy, and liquidity as indicators of financial decisions on Kenyan DTS financial stability.

1.3 Objectives of the Study

1.3.1 The Main Objective

To find out how financial decisions affect Kenyan SACCOs that are deposit-taking financial stability.

1.3.2 Definite Objectives

These objectives specifically were:

- i. To assess the effect of financial leverage on stability of Deposit Taking Savings and Credit Cooperative Societies in Kenya
- ii. To determine the effect of dividend policy on stability of Deposit Taking Savings and Credit Cooperative Societies in Kenya
- iii. To analyze the effect of liquidity on stability of Deposit Taking Savings and Credit Cooperative Societies in Kenya

1.4 Research Hypotheses

H₀₁: Financial leverage has no significant influence on stability of Deposit Taking Savings and Credit Cooperative Societies in Kenya

H₀₂: Dividend policy has no significant effect on stability of Deposit Taking Savings and Credit Cooperative Societies in Kenya

H₀₃: Liquidity has no significant effect on stability of Deposit Taking Savings and Credit Cooperative Societies in Kenya

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Working Capital Management Theory

The theory of working capital management was advanced by Richards and Laughlin (1980). The theory of working capital illustrates the relationships among a company's current assets and liabilities (Sagan, 1955). A company's working capital should be managed using this model. According to this rule, businesses must make sure that their short-term financial resources and liabilities are equal (Tran, Abbott, & Yap, 2017). Working capital management's main goal is to anticipate along with handle a company's immediate obligations so that they avoid resulting in shortfalls or economic strain (Rekha, 2014). In order to be guarantee that the assets obtained are used efficiently and economically, the short-term liabilities are assessed and examined (Almazari, 2014). Working capital theory aids establishments of finance in striking an equilibrium among the various working capital elements to maintain a company's competitive edge and liquidity. Some of the working capital components include cash management, inventory, accounts receivables, account payable and cash conversion cycle (Njeri, 2017). In management of working capital as prescribed in the theory it takes the management to make decision when to invest funds, how to manage cash, account receivables, accounts payables and the cash conversion cycle at the same time ensure effective managing assets for maximum rewards. This prevents keeping quite a bit of idle resources. short-term assets, and at the same time holding too little of the short-term assets (Karvonen, 2010).

The National Council for Law Reporting. (2019) calls for a 15 percent proportion of assets current and liabilities current. The ratio encourages DTSs to possess sustainable working capital for them to operate optimally in the financial system (Kahutho, 2017). The primary activity of DTS is to provide credit to its membership as needed. The absence of funds accessible for lending participants represents a missed chance for loan advancement which lowers membership' trust in the DTS. This theory supports liquidity as a measure of financial decisions made by DTSs because SACCOs that lack liquidity will find it difficult to fulfill their responsibilities on time, which would result in late payments to their members and other loan providers.

2.1.2 The Risk Absorption Theory

This theory, outlined by Berger and Bouwman (2009), is founded on 2 ideas: that having more capital improves a company's capacity to generate liquidity (Allen and Gale, 2004), as well as that having more capital enables an organization to take on more risk (Repullo, 2004). According to the conventional theory of liquidity emergence, institutions provide liquidity by converting their capital investments towards liquid liabilities. Credit unions can generate liquidity, according to Diamond and Rajan (2001) and Gorton and Winton (2000), by merely altering the financing composition on the liability front. According to Wilson et al. (2011) and Goddard et al. (2010), "meaningful capital requirements which are essential to maintaining the interests of owners as well as the long-term viability of the institution" best describe the significance of capital baseline. Most authorities recognize shareholder inputs (core capital) as an essential element, according to Saunders and Cornet (2007), largely since they represent the funds accessible to shareholders in the case of bankruptcy alongside dissolution. Substantial proportions of capital are set by organizations to protect deposits from potential losses and unwelcome frantic money withdrawals that could lead to damaging rushes (Bhattacharya & Thakor, 1993).

In 2021, the aggregate core capital held by DTSs was Kshs 8.69 billion (SASRA, 2021). DTSs must adhere to capital adequacy ratios set by SASRA for their own financial stability (SASRA 2020). The capital ratios set by SASRA are minimum capital core to asset total of 10%, minimum capital core to deposit total of 8% and minimum capital of institutions to asset total of 8%. The risk absorption theory assists the understanding that core capital is meaningful in protecting the members' funds and thus it is important in this study for it helps in understanding that the financial stability

of DTSSs is supported by adequate capital reserves by making sure SACCOs have adequate capital to cover their operating losses and by keeping the market functioning well to stop losses from eating up members' savings and share capital, which would result in capital impairment.

2.2 Empirical Review

2.2.1 Financial Leverage and Financial Stability

Javed, Rao, Akram and Nazir (2015) analyzed how financial leverage affected the Pakistani's firms performance with 154 textile firms utilized. The outcome uncovered that debt total and debt of long-term inversely impact the ROA and ROE of the firms. The study was also undertaken in Pakistan and not Kenya hence the outcomes do not signify the situation in Kenya. The inquiry also used measured performance of firms and not the stability of firms that this study intends to establish. The study's findings on textile firms cannot represent the situation of DTSSs because the textile firms do not offer financial products as DTSSs do.

Kaara (2018) studied the effects of financial leverage on the NSE listed firms in Kenya. The study sampled 20 quoted Kenya's firms. The outcomes uncovered that debt ratio positively affect the firms ROA. Although this inquiry was performed in Kenya the listed firms have different ownership structure and offer different financial products to DTSSs, hence the conclusion of the findings cannot be applicable in this study. The study also missed out on the stability of the firms but measured the impact on financial performance. This investigation measured how financial leverage affect DTSSs financial stability.

Njenga, Raphael, and Jagongo (2019) conducted research examining how financial management decisions affected SACCOs that are non-deposit-taking financial performance in the County of Kiambu. The findings unveiled that financial decisions positively affect the performance. The research measured the SACCOs financial performance and ignored their stability which is key in the overall financial system. Non-deposit-taking SACCOs were the center of the investigation which do not have similar prudential regulations as DTSSs. Odondi, Jagongo, and Ndede (2022) performed an investigation to establish the impact of financial leverage on Kenya's DTSSs financial performance. The independent variables examined in the research included the debt-to-equity ratios, debt-to-capital, long-term debt ratio-to-total asset, and short-term debt ratio-to-asset total. Meanwhile, the explained factors were identified as equity return and assets return. The study demonstrated a positively substantial connection between variables. The research used a time scope from 2012-2018, this study used a time scope from 2018-2022.

The above studies mainly focused on the performance of the firms using variables like assets return and equity return. The investigations did not focus on the long-term effects of financial leverage or how it may affect the stability of the firms. The financial stability of firms is crucial because it gives assurance to the shareholders and investors of the firms that their funds are well protected. DTSSs experience challenges in complying with capital adequacy regulations hence risking license withdrawal by SASRA (SASRA, 2020). The non-compliance with capital adequacy requirement is also an indicator of the instability of DTSSs since they hold a low level of capital to cushion themselves in case of financial distress. Motivated by the crucial role DTSSs play in the country's social economy, this inquiry centered on the effect of external borrowing on the stability of the DTSSs. External borrowing was a measure of financial decisions.

2.2.2 Dividend Policy and Financial Stability

Gatimu and Muturi (2018) studied the major factors that affect the cash flows of DTSSs in Kiambu County, Kenya. The responding parameter was the cash flow while the independent variables were, non-remittance of DTSSs dues, increase in the operation costs, dividend payout ratio, market competition, and investment policies employed by the DTSSs. In his study, he found out that all the independent variables including dividends influence the cash flows of DTSSs. His study concentrated on short-term outcomes, the cash flows and ignored long-term effects like the stability of DTSSs.

Korir (2018) studied the effects of dividend policy on the NSE commercial banks' financial performance. The exploration was conducted on 11 listed banks using secondary records from their statement's finances from 2013- 2017. It was uncovered that dividend payout ratio and interest rates positively influence on the banks performance. The inquiry was carried out using data that is not current; that is 2013- 2017; hence the findings may not be applicable in the current financial system. The investigation employed ROA as an indicator of financial performance but did not assess financial stability. Additionally, the survey focused on Commercial Banks instead of SACCOs which have different structures in terms of ownership and motives to pay dividends to its stakeholders. Kemboi, Kinyariro, Gesage, and Maina (2019) determined how well listed Kenyan firms were performing and how much dividends were paid out. The author wanted to

determine the connection among dividend distribution and how much it impacts the firms' performance. It discovered that the enterprise performance and the dividend payment ratio were strongly positively correlated. The study ignored the stability of the firms and was performed on NSE listed firms and instead measured financial performance using return on asset. He conducted this on listed NSE firms which have different ownership structures from DTSs and may not offer financial services as DTSs.

Amankwah and Agyemang (2020) explored the connection of dividend policy with the firms' performance, focusing on both listed banks and non-banking companies on the Ghana Securities Exchange. As exposed dividend payouts did not influence the financial performance of these entities in Ghana. Consequently, the dividends distributed to shareholders have no impact on the overall firms' financial performance. He measured performance using return on equity. This study was conducted in different county where the financial markets might be different from Kenya. It was also conducted on firms that are listed on the Securities Exchange which might have different ownership structures from DTSs and offer different services unlike DTSSs, thus the conclusion are unapplicable to DTSs. The inquiry focused on the return on equity to measure performance and not the stability of the firms.

Gitagia, Mwangi and Omagwa (2020) studied the financial management decisions and selected firms' value trading at the Kenya's NSE. The survey utilized dividend policy, capital structure, corporate investment decisions, and cash holdings as financial management decisions, while Tobin's Q was utilized as a firm's value proxy, it unveiled that dividend payouts positively affected firm value. Expressly, a surge in dividend payouts resulted in firm value's increment. The inquiry was executed on listed NSE firms that may offer different products from DTSs and have different ownership structures, hence the results may not apply to DTSs. The survey adopted Tobin's Q to measure the firm's value and did not measure the stability of the firms.

Murimi and Mungai (2021) established how dividend policy affected the financial performance of insurance companies quoted in Kenya's NSE. Panelly regressed, findings arrived that dividend payout insignificantly affect financial performance of insurance companies quoted on NSE. Dividends paid are not an expense hence does not reduce the company's profits. The inquiry limitation was on the numbers of traded insurance firms at NSE; hence it was conducted on very few insurance firms. The results cannot be relied upon and applicable on DTSs. The investigation applied return on investment to determine the performance of insurance firms and ignore stability aspects like capital adequacy. The study was not conducted on DTSs but on insurance firms that offer different financial products from DTSs and have different regulators.

These studies have not established the effect of dividends paid to members and the stability of DTSs. The allocation of reserves effectively diminishes the earnings that can be distributed to members as dividends. A percentage of DTS revenues ought to be placed away as capital utilized for covering costs from unexpected or severe issues in order to boost DTS's buffers. Considering the capital is non-withdrawable then this capital should allow the DTSs to sustain lesser interest rates on financing, build up more reservations, or make investments in more items and amenities. Thus, to increase their capital, DTSs may reserve more earnings reducing the dividend ratio. This required understanding the effects of dividends paid to members on the stability of DTSs, hence dividend pay-out ratio was among the financial decision variables.

2.2.3 Liquidity and Financial Stability

A critical analysis of the impacts of liquidity on the financial performances of DT SACCOs in Kenya was conducted by Otwoko and Maina (2021). Regression techniques were utilized in the study's descriptive survey approach to model connections between DT SACCOs' financial performances and liquidity risk. At a five percent significance level, the data were examined. Liquidity risk was uncovered significantly impacts on deposit-taking SACCOs' financial performances at the significance level of 5%. In light of the results, DT SACCOs are advised to concentrate on improving deposit mobilization to maintain portfolio asset that reduces risk of liquidity. While the current investigation utilized financial stability and employed an explanatory design, the previous survey deployed descriptive approach and centered on financial performance.

Ma and Ji (2023) investigated liquidity and its effects on financial services from the standpoints of asset-liability management theory and financial stability in China. To investigate empirically whether liquidity risk management was applied in monetary and financial services in accordance with target values of liquidity risk indicators, information disclosure data from 181 monetary and financial service firms in China between 2015 and 2022 were used. Next, the study looked at how size, liquidity level and duration, firm characteristics, macroeconomic climate, and enterprise size

affected ways financial and monetary service companies managed their liquidity risk. Findings demonstrated financial service providers and banks would modify their liquidity structures in accordance with desired levels of liquidity risk indicators. The prior study was centered on financial service companies and was implemented in China as the existing survey was in Kenya and focused on DTSSs.

The liquidity effect on the financial performances of Nigerian listed deposit money banks were studied by Udenwa, Suberu, and Jacob (2023). Liquidity was considered via loans and advances to assets total ratios and total deposits. Information was gathered from each deposit money bank's yearly financial report. Panel regression was utilized on the spanned data ranging 2014 and 2021. Panel regression analysis's findings showed that the performances are significantly impacted by loans and advances to assets total as well as advances and loans to deposits. The aforesaid study took place in Nigeria and concentrated on DMBs whereas this was in Kenya and concentrated on DTSSs.

All studies conducted have not been able to measure liquidity in terms of current assets ratio to current liabilities. Likewise, they have ignored the stability of DTSSs and focused on profitability and performance, which is the short-term goal of DTSSs. Hence, this study utilized the assets current ratio to the liabilities current ratio as a computed for liquidity and insolvency risks as a measure of the stability of DTSSs.

3. RESEARCH METHODOLOGY

Explanatory research design was adopted. Panel regression analysis was employed to conduct the inferential analysis. A panel model contains data collected in different cross-sections over time. This study used panel model since the data was compiled from the annual statements of 153 DTSSs finances whose licenses have been renewed annually from 2018 to 2022. The empirical analysis was based on the following equation:

$$= \beta_0 + \beta_1 FL_{it} + \beta_2 DP_{it} + \beta_3 WC_{it} + \varepsilon$$

Where:

- FS = Financial Stability
- FL = Financial Leverage
- DP = Dividend Policy
- WC = Liquidity
- i = 1, 2, 3.....156
- t = 1, 2, 3,9
- ε = Error Term

4. RESEARCH FINDINGS AND DISCUSSIONS

The analysis was based on descriptive and panel regression analysis as presented in the succeeding sections.

4.1 Descriptive Analysis

Descriptive analysis is a key method in data analysis that emphasizes summarizing and interpreting the essential attributes of a dataset, revealing its statistical properties such as central tendencies and standard deviation. The variability and distribution of these factors were documented, providing clear evidence of the factors' divergence or convergence. The unveiling of the outcomes is evident in Table 4.1.

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Financial Stability	765	.9335314	2.423157	-.5641918	10.21976
Financial Leverage	765	.2230468	1.244744	-12.82034	18.35125
Liquidity	765	1.098364	.5081601	.0031654	2.430022
Dividend Policy	765	6.91e+07	3.27e+08	-1.57e+07	4.02e+09

Source: Study Data (2024)

The financial stability variable exhibits a wide values range, with a score of 0.9335 mean and a deviation of 2.4231 standards. The the mean and standard deviation of financial stability implies relative fluctuations over the period. The least value of -0.5619 and the upper limit value of 10.2197 designates the lowest and highest observed levels of financial stability, respectively. The fact that negative values are present implies that some of the SACCOs in Kenya exhibit financial instability or negative financial health during the study period.

Similarly, the financial leverage variable shows a diverse distribution, with mean average score of 0.2230468 mean and a deviation of 1.244744 standard. The small average value of mean designates that, the cooperative societies in Kenya have a conservative approach to debt financing. It indicates that these societies tend to have a lower fraction of debt comparative to their assets total. The relatively large standard deviation implies that financial leverage levels vary considerably among the observed cooperative societies. It highlights the heterogeneity in the debt financing strategies employed by these societies. The least value of -12.82034 and the greatest value of 18.35125 characterize the least and top observed levels of financial leverage. The presence of negative values suggests that some cooperative societies have negative financial leverage, indicating a net surplus of assets over debt. On the other hand, the presence of high positive values indicates a higher reliance on debt financing. These extreme values reveal the diversity of financial leverage practices among the cooperative societies in the study.

The dividend variable displays a significant range of values, with a score of 6.91e+07 mean and a substantial standard of 3.27e+08 deviations. The high mean value suggests that, on average, the DTSs have a significant dividend distribution to their shareholders. The relatively large standard deviation indicates that dividend payments vary considerably among the observed cooperative societies. It implies that there is a significant diversity in dividend policies, with some societies having higher or lower dividend payments compared to the average. The minimum value of -1.57e+07 (-15,700,000) and the maximum value of 4.02e+09 (4,020,000,000) represent the lowest and highest observed dividend payments. The existence of negative values suggests that some cooperative societies may have faced losses, resulting in negative dividend payments or no dividend distribution. On the other hand, the presence of high positive values indicates that some societies have distributed substantial dividends to their shareholders.

The liquidity variable indicates a moderate level of liquidity, with a score mean of 1.098364 and standard of 0.5081601 deviations. The average score value denotes that, the DTSSs have a moderate level of liquidity. This implies that these societies have an adequate ability to convert their assets into cash to meet their immediate financial needs. The standard deviation implies that liquidity levels vary moderately among the observed cooperative societies. It indicates that while the average liquidity level is moderate, some societies may have higher or lower levels of liquidity. The smallest 0.0031654 value and the value of 2.430022 maximum correspond to the least and peak observed levels of liquidity. The presence of very low values suggests that some cooperative societies may have lower liquidity, potentially indicating difficulty in meeting short-term financial obligations. Conversely, the presence of high values indicates that some societies have higher liquidity levels, indicating a stronger ability to meet their short-term financial obligations.

4.2 Model Specification Test

Taking into consideration the ongoing discourse regarding fixed and random models' effects in the analysis of group information (Baltagi, 2005), the research employed Hausman test (as presented in Table 4.2) to determine the fitting estimation model. This assessment enables the differentiation concerning fixed-effects, which emphasizes exact distinctiveness within panels, and a random-effects, which assumes arbitrary deviation across groups.

Table 4.2: Results of Hausman

	(b) Fixed	(B) Random	(b-B) Difference	Sqrt (diag(V _b -V _B)) S.E.
Financial Leverage	-.0000398	-.0001395	.0000997	.0005376
Liquidity	.055585	.0551728	.0004122	.0011545
Dividend Policy	6.58e-11	6.59e-11	-9.08e-14	2.27e-12
Chi2(2)	0.16			
Prob>chi2	0.9232			

Source: Study Data (2024)

The test outcomes are reported as Chi2(2) with a corresponding probability (Prob>chi2) value of 0.9232. 0.9232 as the value of prob signifies that the diversity concerning fixed and random effects models are not significant at the 5% significance level. Therefore, the test does not provide evidence to favor the model that is fixed over the model of randomization. Consequently, the random model was considered fitting for the survey assessment.

4.3 Regression Analyses

To assess the financial decisions effect on the stability of deposit-taking savings and credit cooperative societies in Kenya, this survey employed the random effects model within a panel regression analysis. The analysis specifically concentrated on deposit-taking savings and credit cooperative societies in Kenya, and the outcomes obtained from this analysis accurately depict the effects, as elaborated in Table 4.3.

Table 4.3: Regression Results

Financial Stability	Coef.	Robust Std. Err.	z	P>z	[95% Conf. Interval]
Financial Leverage	-.0001395	.0090227	-0.02	0.988	-.0178237 .0175448
Dividend Policy	6.59e-11	3.52e-11	1.87	0.061	-3.12e-12 1.35e-10
Liquidity	.0551728	.0211165	2.61	0.009	.0137853 .0965603
_cons	.7575497	.1838775	4.12	0.000	.3971564 1.117943
R-Sq	0.0218				
Wald chi2(3)	3.67				
Prob > chi2	0.0123				

Source: Study Data (2024)

Drawing upon the evidence presented in Table 4.3, this study shows financial decisions effect on the financial stability of DTSs where the outcome unveiled that the components of financial decisions (financial leverage, dividend policy and liquidity) significantly in a joint manner explained DTSs financial stability. This is shown by the significant Wald test value of 3.67 and its associated 0.0123 p-value. The overall model unveils an R-squared value of 0.0218, indicating that the regressors explain a small fragment of the variability in financial stability. This means that financial leverage, dividend policy and liquidity account for only 2.18% of the variability in financial stability. This implies that factors excluded in the model play a significant role in influencing financial stability. In view of this, Wooldridge (2013) highlighted that in various fields, particularly in social sciences and economics, numerous unobserved factors can considerably affect outcomes, leading to low R-squared values. Additionally, Harrell (2015) pointed out that a low R-squared should not be seen as a sign of a model's ineffectiveness or invalidity; rather, the significance of individual predictors should be prioritized over R-squared alone.

Within the specific context of DTSs in Kenya, the empirical outcomes noted revealed that financial leverage exerts an inverse influence on financial stability. The coefficient of 0.00013 connotes that for each incremental unit in financial leverage, there is a corresponding 0.00013% decrease in financial stability. However, despite this negative effect, the statistical analysis demonstrates that the observed effect is insignificant at both 0.05 and 0.1 threshold significance, as indicated by the value of p of 0.988. The result aligned with the null assertion which states that financial leverage insignificantly affects DTSs financial stability. This signifies those changes in the level of financial leverage, such as the use of debt or leverage ratios, do insignificantly impact financial stability of DTSs. This study's outcome aligned with Kaara (2018) who unveiled that that total debt and long-term debt insignificantly affects ROA and ROE of firms. The outcome conflicted with the outcome of Odondi, Jagongo, and Ndede (2022) who demonstrated positively substantial effect of financial leverage on ROE. Javed, Rao, Akram and Nazir (2015) established that total debt and long-term debt significantly affected ROA and ROE of firms. These disparate results can be attributed to the distinct contextual frameworks under which these studies were undertaken.

Similarly, the study also explored how dividend policy affects financial stability. The output unfolds a positive effect, as reflected by the coefficient of 6.59. This suggests that a 1% increase in dividend policy corresponds to a 6.59% increase in financial stability. The statistical analysis unravels that the observed positive effect of dividend policy on financial stability is statistically significant at 0.1 threshold significance, as unveiled by 0.061 p-value. This outcome refuted the assertion of null, implying that dividend policy significantly affect the financial stability of the studied SACCOs. This

demonstrates that variations in dividend policies, such as dividend payout ratios or dividend yield, have significant effect on the financial stability of DTSSs. Thus, changes in dividend policy may be a reliable indicator or determinant of the financial stability of DTSSs in the Kenyan context. This investigation's output is consistent with Maina and Muturi (2018) who unveiled that dividend policy significantly affects DTSS cash flow. Korir (2018) uncovered that dividend policy significantly affects ROA of NSE Kenyan commercial banks. Kemboi, Kinyariro, Gesage, and Maina (2019) discovered that the enterprise performance is significantly affected by dividend payment ratio. Gitagia, Mwangi and Omagwa (2020) disclosed that dividend policy significantly affects the firm's value. However, it diverges from Amankwah and Agyemang (2020) who exposed that dividend payouts did not influence the ROE of these entities in Ghana. Murimi and Mungai (2021) arrived that dividend payout insignificantly affect NSE insurance firms' financial performance. These divergent outcomes can be attributed to the varying contextual settings of the studies and the utilization of distinct performance measures.

Examining the effect of liquidity on financial stability, this survey, as depicted in Table 4.8, reveals a positive influence of liquidity on financial stability. The 0.055 as coefficient indicates that for every 1% increase in liquidity of the DTSSs, there is a corresponding 0.055% increase in financial stability. Importantly, the statistical analysis supports the significance of this effect, as displayed by the remarkably low 0.009 p-values. Thus, liquidity substantially influences the performance of DTSSs in Kenya financially. The unfolded significant proof led to the null premise rejection. This indicates that variations in liquidity, such as current ratios or cash flow adequacy, possessed noteworthy influence on the DTSSs financial stability. Therefore, changes in liquidity levels can be considered as reliable indicators of the DTSSs financial stability. This finding corroborates Otworko and Maina (2021) who uncovered that liquidity risk was found to have statistically significant affects DTSSs' financial performances. Udenwa, Suberu, and Jacob (2023) unveiled those performances of deposit money banks in Nigeria is significantly affected by loans and advances to total assets as well as loans and advances to deposits.

5. CONCLUSION, RECOMMENDATIONS

5.1 Conclusion

This investigation aimed to examine how financial decisions, including financial leverage, dividend policy, and liquidity, affect the financial stability of Kenyan DTSSs. The findings of this investigation indicated diverse directional influences of these factors, with only liquidity exhibiting a statistically significant association with financial stability. The specific objective pertaining to financial leverage confirmed its lack of significant predictive power in relation to financial stability. Conclusive is that financial leverage is not a significant factor in shaping the financial stability of DTSSs in Kenya. Therefore, lack of a significant effect suggests that variations in financial leverage, such as debt levels or leverage ratios, do not have a meaningful effect on the of DTSSs financial stability. This point to the fact that changes in financial leverage alone may not be reliable predictors or determinants of the financial stability of these institutions.

Unveiling a positive and statistically insignificant dividend policy effect was discovered on financial stability of DTSSs. The survey concludes that dividend policy is not a key factor in the determination of financial stability. This implies that variations in dividend policy, such as dividend payout ratios or consistency of dividend payments, do not significantly affect the financial stability of DTSSs. This signifies that changes in dividend policy alone may not be reliable indicators or determinants of the financial stability of these institutions.

The survey analyzed liquidity effect on financial stability in Kenyan DTSSs. Whereas the outcome provided positive effect directional effect of liquidity, the outcome concludes that this effect was significant in determining the financial stability of DTSSs. This implies that the significant effect indicates that retaining sufficient levels of liquidity is crucial for ensuring the financial stability of DTSSs. Sufficient liquidity allows these institutions to meet their financial obligations promptly, withstand unexpected shocks, and sustain their operational activities.

The inquiry evaluated the moderating influence of DT size on the association concerning financial decisions and financial stability in the context of Kenyan DTSSs. The output displayed that the effect of moderation of DTSS size is insignificant. This connotes that the effect of financial decisions on financial stability is largely unaffected by the size of the DTSS. The lack of a significant moderating effect suggests that the size of DTSSs does not significantly influence the linkage relating financial decisions (such as financial leverage, dividend policy, or liquidity) and financial stability. This designates that the influence of financial decisions on financial stability is consistent across DTSSs of different sizes in the Kenyan context.

5.2. Recommendations

The outcomes discovered a noteworthy liquidity influence on the financial stability of Kenyan DTSs. This underscores the significance of liquidity as a key driver of financial stability. The study recommends strengthening of existing regulatory frameworks to ensure DTSs have robust liquidity risk management practices in place. This can include guidelines on liquidity stress testing, contingency funding plans, and liquidity ratio requirements. Clear and comprehensive regulations will help DTSs maintain adequate liquidity levels and mitigate liquidity-related risks.

DTSs should formulate a well-defined liquidity management strategy that aligns with their financial goals and risk appetite. This strategy should encompass policies and procedures for monitoring liquidity levels, assessing liquidity risks, and establishing appropriate liquidity buffers. It should also include guidelines for managing cash flows, diversifying funding sources, and maintaining adequate liquidity ratios.

5.3 Further Research Suggestions

This study has provided valuable perspective into the interplay concerning financial decisions and financial stability in the unique context of Kenyan DTSs. To advance scholarly knowledge in this important area, future research endeavors could consider exploring several promising avenues. Firstly, conducting an investigation into the bond concerning financial decisions and financial stability in other sectors, such as commercial banks and microfinance banks, would yield valuable comparative perspectives. Secondly, there is a compelling opportunity to delve deeper into the underlying factors that contribute to the seemingly insignificant effects of dividend policy and financial leverage on financial stability. Furthermore, considering the low R-square disclosed in the study, other studies can be conducted to broaden the scope of financial decision to incorporate other factors not included in the model to determine their influence on the Kenyan DT-SACCOs financial stability.

REFERENCES

- [1] Allen, F., & Gale, D. (2004). Competition and financial stability. *Journal of money, credit and banking*, 453-480.
- [2] Almazari, A. A. (2014). The relationship between working capital management and profitability: Evidence from Saudi cement companies. *British Journal of Economics, Management & Trade*, 4(1), 146-157.
- [3] Amankwah, D. O., & Agyemang, O. O. (2020). The Relationship Between Policy Dividends And Firms'performance On Ghana Stock Exchange. *International Journal of Advance Research and Innovative Ideas in Education*, 6(4), 378-397.
- [4] Ashraf, M. A. (2014). Caritas' cooperative credit union (CCU) in Bangladesh: A new approach to poverty alleviation and rural development. *Caritas*, 4(17).
- [5] Baltagi, B.H. (2005). Solutions to Problems Posed in Volume 20(1) and 20(2): 04.1.1. A Hausman Test Based on the Difference between Fixed Effects Two-Stage Least Squares and Error Components Two-Stage Least Squares—Solution. *Econometric Theory*, 21, 483 - 484.
- [6] Berger, A. N., & Bouwman, C. H. (2009). Bank liquidity creation. *The review of financial studies*, 22(9), 3779-3837.
- [7] Bhattacharya, S., & Thakor, A. V. (1993). Contemporary banking theory. *Journal of financial Intermediation*, 3(1), 2-50.
- [8] Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
- [9] Diamond, D. W., & Rajan, R. G. (2001). Liquidity risk, liquidity creation, and financial fragility: A theory of banking. *Journal of political Economy*, 109(2), 287-327.
- [10] Farah, A.A., Mbebe, J.N., & Muyoka, D.B. (2019). Effect Of Intellectual Capital on Financial Sustainability of Savings and Credit Cooperative Societies in Kenya.
- [11] Gatheru, M. S. (2020). Effect of customer service on tax compliance in Kenya, the case of SME's in Nairobi central business district. *International Academic Journal of Economics and Finance*, 3(6), 281-301.
- [12] Gatimu, E.M., & Muturi, W.M. (2018). Effect of Non-Performing Loan Management Practices on Loan Recovery Performance of Deposit Taking Savings and Credit Cooperatives in Kenya.

- [13] Gitagia, F.K., Wamugo, L., & Omagwa, J. (2020). Dividend Decisions, Economic Growth and Firm's Value of Firms Listed at Nairobi Securities Exchange Kenya. *Research Journal of Finance and Accounting*.
- [14] Goddard, Y. L., Miller, R., Larsen, R., Goddard, R., Madsen, J., & Schroeder, P. (2010). Connecting Principal Leadership, Teacher Collaboration, and Student Achievement. Online Submission.
- [15] Gordon, W. J. J. (1961). *Synectics: The development of creative capacity*.
- [16] Gorton, G., & Winton, A. (2000). Liquidity provision and the social cost of bank capital. working paper.
- [17] Harrell, F.E. (2015). Regression modeling strategies: with applications to linear models, logistic and ordinal regression, and survival analysis.
- [18] Henock, M. S. (2019). Financial sustainability and outreach performance of saving and credit cooperatives: The case of Eastern Ethiopia. *Asia Pacific Management Review*, 24(1), 1-9.
- [19] Javed, Z. H., Rao, H. H., Akram, B., & Nazir, M. F. (2015). Effect of financial leverage on performance of the firms: Empirical evidence from Pakistan. *SPOUDAI-Journal of Economics and Business*, 65(1-2), 87-95.
- [20] Kaara, P. M. (2018). *Effect of financial leverage on financial performance of companies listed at Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
- [21] Kahuthu, D (2016). Impact of Prudential Regulation on Financial Performance of Deposit Taking Savings and Credit Cooperative Societies in Kenya, Kenya, Unpublished.
- [22] Kaloi, J.M. (2004). Factors contributing to liquidity problems on saving credit co- operatives. MA thesis, Moi University, Eldoret, Kenya.
- [23] Karvonen, L. (2010). The personalisation of politics. A study of parliamentary democracies.
- [24] Kemboi, N., Kinyariro, D. K., Gesage, M. B., & Maina, J. N. (2019). Relationship between dividend yield and financial performance of listed firms at the Nairobi securities exchange.
- [25] Kenya Union Savings and Credit Cooperatives (KUSCCO). (2023). About KUSCCO. Available at <https://www.kuscco.com/index.php/about-us/who-we-Are>. Accessed March 23, 2023.
- [26] Kilemile, R.E. (2017). Factors Affecting the Financial Sustainability of SACCOS in Shinyanga Municipality.
- [27] Korir, J. K. (2018). Effect of Dividend Policy on Financial Performance of Commercial Banks Listed at the Nairobi Securities Exchange (Doctoral dissertation, University of Nairobi).
- [28] Lobo, C. A., & Pacheco, L. M. (2023). Eurozone's macroprudential policy and financial stability.
- [29] Maina, A. (2007). A survey on corporate governance practices in insurance industry in Kenya (Doctoral dissertation, University Of Nairobi).
- [30] Ma, X., & Ji, M. (2023). Analysis of the risk transmission mechanism of monetary policy in the monetary and financial service sectors from the perspective of asset-liability management. *Plos one*, 18(10), e0292007.
- [31] Murimi, K. V., & Mungai, J. (2021). Dividend policy and financial performance of insurance companies listed in Nairobi securities exchange, Kenya. *International Academic Journal of Economics and Finance*, 3 (6), 405, 422, 2.
- [32] Mushonga, M. (2018). *The efficiency and sustainability of co-operative financial institutions in South Africa* (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- [33] Mutiso, A. (2019). Financial Sustainability of Sacco's in Kenya: Challenges and Opportunities. KyU 4th Annual International Conference.
- [34] National Council for Law Reporting. (2019). The Sacco Societies Act No. 14 of 2008 (Revised Edition 2019) [2008]. Published with the Authority of the Attorney-General. Retrieved from www.kenyalaw.org.
- [35] Ngo'mbe, B.W. & Mikwamba, E. (2004). Know more about SACCO. A handbook for SACCO study circle programme. Malawi Union of Savings and Credit Cooperative, Lilongwe, Malawi.

- [36] Njenga, R., & Jagongo, A. (2019). Effect of financial management decisions on financial performance of selected non-deposit taking SACCOs in Kiambu County, Kenya: Theoretical Review. *International Academic Journal of Economics and Finance*, 3(3), 204-217.
- [37] Njeri, K. K. (2017). Estimating risk premia for corporate governance risk in the Kenyan equity market.
- [38] Ntoiti, R., & Jagongo, A.O. (2021). Non-Performing Loans and Financial Stability of Deposit Taking Saccos Regulated By SASRA. *International Journal of Finance and Accounting*.
- [39] Odondi, Jagongo, and Ndede (2022). Financial Leverage And Financial Performance Of Deposit Taking Savings And Credit Co-Operative Societies In Nairobi City County-Kenya (Doctoral dissertation, Kenyatta University).
- [40] Omar, H. S. (2015). The relationship between firm size and financial performance of microfinance banks in Kenya (Doctoral dissertation, University of Nairobi).
- [41] Otwoko, B. E., & Maina, K. (2021). Effect of liquidity risk on the financial performance of deposit taking savings and credit cooperative organisations (SACCOs) in Kenya. *Research in Business and Social science*, 10(2).
- [42] Repullo, R. (2004). Policies for Banking Crises: A Theoretical Framework. CEPR Discussion Paper Series.
- [43] Richards, V. D., & Laughlin, E. J. (1980). A cash conversion cycle approach to liquidity analysis. *Financial management*, 32-38.
- [44] Sagan, J. (1955). Toward a theory of working capital management. *The Journal of finance*, 10(2), 121-129.
- [45] SASRA (2008). Sacco Societies Act No. 14 of 2008. Retrieved from [<https://www.sasra.go.ke/download/the-sacco-societies-act/>].
- [46] SASRA, "SACCO Supervision Annual Report (2013), (Deposit Taking SACCOs)," *SACCO Societies Regulatory Authority (SASRA)*, 2013.
- [47] SASRA. (2018). The Sacco Annual Supervision Report 2018: An annual report on the operations and performance of Deposit-Taking Sacco Societies (DT-SACCOs) in Kenya. Nairobi: SASRA.
- [48] SASRA. (2019). The Sacco Annual Supervision Report 2019: An annual report on the operations and performance of Deposit-Taking Sacco Societies (DT-SACCOs) in Kenya. Nairobi: SASRA.
- [49] SASRA. (2020). The Sacco Supervision Annual Report 2020: An annual statutory report on the operations and performance of Deposit-Taking SACCO. Nairobi: The Sacco Societies Regulatory Authority.
- [50] SASRA. (2021). The SACCO Supervision Annual Report, 2021: An Annual Report on the performance and operations of SACCOs. Nairobi: The SACCO Societies Regulatory Authority.
- [51] Saunders, A., & Cornet, M. M. (2007). Financial Market and Institutions: An Introduction to the Risk Management Approach, 3rd. *McGrawHill Education Co*, 492493493.
- [52] State's Department of Cooperatives Study, (2019). National Co-Operative Policy Promoting Co-operatives for Socio Economic Transformation SEPTEMBER, 2019
- [53] Tran, H., Abbott, M., & Jin Yap, C. (2017). How does working capital management affect the profitability of Vietnamese small-and medium-sized enterprises?. *Journal of Small Business and Enterprise Development*, 24(1), 2-11.
- [54] Udenwa, A. T., Suberu, A. A., & Jacob, Z. (2023). Effect of Liquidity Risk on the Financial Performance of Quoted Deposit Money Banks in Nigeria. *International Journal of Economics, Business and Management Research*, 7(54-69).
- [55] USAID Uganda Mission. (2018). *Uganda Performance and Impact Evaluation for Literacy Achievement and Retention Activity (LARA) Quarterly Performance Report FY2018, Fourth Quarter Report July - Sept 2018* (https://pdf.usaid.gov/pdf_docs/PA00WZST.pdf). USAID..

- [56] Whisman, M. A., & McClelland, G. H. (2005). Designing, Testing, and Interpreting Interactions and Moderator Effects in Family Research. *Journal of Family Psychology*, 19 (1), 111-120.
- [57] Wilson, C. J., Rickwood, D. J., Bushnell, J. A., Caputi, P., & Thomas, S. J. (2011). The effects of need for autonomy and preference for seeking help from informal sources on emerging adults' intentions to access mental health services for common mental disorders and suicidal thoughts. *Advances in Mental Health*, 10(1), 29-38.
- [58] WOCCU. (2021). *Statistical report 2021_Statistical_Report*. www.woccu.org.
- [59] Wooldridge, J. M. (2013). Correlated random effects panel data models. IZA Summer School in Labor Economics (http://www.iza.org/conference_files/SUMS_2013/viewProgram).
- [60] World Council of Credit Unions. (2018). Statistical Report. Retrieved from <https://www.woccu.org/about/statreport>.
- [61] Zikmund, W. G., & Babin, B. J. (2010). *Exploring Marketing Research*. Cengage Learning.