RELATIONSHIP BETWEEN NON-WITHDRAWABLE DEPOSITS AND FINANCIAL INTERMEDIATION EFFICIENCY OF DEPOSIT TAKING SACCOS IN KENYA

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ABSTRACT

Financial sector firms normally tend to exhibit a higher level of financial intermediation efficiency than firms in other sectors due to their ability to transform savings received primarily from household economic units into credit or loans for companies and others to invest in buildings, equipment and other capital goods. Therefore, by enhancing their efficiency, commercial banks are in a position to offer their financial services more effectively. SACCOs in Kenya play a very significant role in financial intermediation as savings through them translates to around 48.55% of the gross national savings. However, despite these developments, SACCOs are still facing numerous challenges especially in terms of their overall financial structure. For example, there was an increase in the amount of non-performing loan ratio on SACCOS to 6.30 percent back in 2018 down from 6.14 percent of what had been reported in 2017.Therefore, the study bridged this research gap by examining the relationship between non-withdrawable deposits and financial intermediation efficiency of deposit taking SACCOs in Kenya. The study adopted a descriptive research design. The study target population was all 174 DT-SACCOs in Kenya. The study utilized secondary data taken from the financial statements submitted by each DTS to SASRA. STATA was used for data analysis. The research was based on balanced panel data from 2017 to 2021. The results also indicated that non-withdrawable deposits held had a negative but statistically significant effect on financial intermediation efficiency of DTS. It was concluded that an increase in the amount of non-withdrawable deposits tends to inhibit the financial intermediation efficiency of DTS. It was recommended that DTS in Kenya should strive to enhance their marketing capability so as to attract more customers and make their financial intermediation services more manageable by receiving non-withdrawable deposits from depositors and issuing out loans to creditors. It was also recommended that that policy makers in Kenya that are concerned with DTS regulation should ensure that that DTS across the country implement and adopt effective and sound financial structure decisions in order to enhance their financial intermediation efficiency and thus minimize the instances of DTS plunging into financial crisis that has caused many people across the country to lose a lot of money in the past.

Key words: Non-Withdrawable Deposits, Financial Intermediation Efficiency.

INTRODUCTION

The financial structure includes both liabilities and capital, in addition to all other sources of funding for the company. The financial structure basically involves how a company funds its assets, either through a combination of different sources or from a single source (Saad, 2019). Balancing the proportion of debt and equity of a firm is very crucial as unbalanced capital structure may cause a firm to fail to effectively economize the manner in which they use their capital. As a result, proper care must always be taken when making financial structure decisions in order for a company to be able to adapt more effectively to the ever-changing nature of their market.

Financial intermediation is a profitable venture in which an organizational unit assumes its own liabilities in order to acquire financial assets through market-based monetary operations (Ibrahim & Law, 2020). Financial intermediaries serve to smooth the transfer of funds between lenders and borrowers. It also refers to the transfer of funds from an economic unit with a surplus (saver) to an economic unit with a deficit (investor). In addition, financial intermediation efficiency refers to the mobilisation of cash from surplus units and their distribution to deficit units with minimal or no waste (Ibrahim & Law, 2020). It encourages resource conservation by prioritising cost reduction and maximising output for a given set of inputs and technologies.

Financial intermediation within the financial sector is very crucial in promoting financial services access as well as ensuring the financial sector stability as a key component of the financial system (Qin & Zhou, 2019). However, even though the positive relationship between financial structure and financial intermediation has been supported by a number of studies done across the globe, very limited research has been undertaken to determine the actual effect of financial structure on firm's financial intermediation efficiency. Due to their capacity to convert savings received primarily from household economic units into credit or loans for companies and others to invest in buildings, equipment, and other capital goods, financial sector firms typically demonstrate a higher level of financial intermediation efficiency than firms in other sectors. Therefore, a well-balanced financial structure is very crucial for firms within the financial sector to ensure high financial intermediation efficiency especially with financial institutions being at the forefront of economic development (Mehmood, Hunjra & Chani, 2019).

The traditional mode of financial institutions of obtaining finances at low cost and the spread between obtaining finances and issuing out loans and advances has greatly reduced. This is because traditional financial services were deemed to be less profitable forcing the institutions to seek new avenues for enhancing their overall financial intermediation efficiency (Ma & Yao, 2022). The increase in financial institutions efficiency has been made possible due to enhanced financial structure decisions where they are able to obtain more fee-based incomes and, thus, diversifying their overall financing risks. Therefore, financial institutions are more likely to report high financial efficiency when appropriate financial structure is maintained.

In the United States, Shubita and Alsawalhah (2020) observed that financial structure decisions are important in every business life, as they are important in determining the achievement of goals for different organizations. A survey in China in 2021 found it difficult to determine the optimal

financial structure for a company due to the need to analyze multiple factors, including key factors such as risk and profitability. rice field. Decisions are even more difficult if the economic, social, technical and political environment in which the company operates shows a high degree of instability (Arora, 2020).

Pantielieieva, Khutorna, Lytvynenko and Potapenko (2020) in their study that targeted EU finance firms observed that implementation of financial intermediation within the banking sector usually plays a very crucial role in lowering their investment costs, managing risks and financing their daily operations. Consequently, the ability to provide such services within the economy enables financial intermediaries to influence saving and allocation decisions in ways that can impact long-term growth rates. Consequently, countries whose financial institutions are able to implement effective financial intermediation that is better at acquiring information, exerting corporate control, managing risk, and mobilizing savings are able to experience faster economic growth than nations with less developed financial systems.

Yakubu and Abdallah (2021) argue that maintaining a proper financial structure balance is very crucial for financial institutions since they play a very crucial role as financial intermediaries by channeling funds between borrowers and lenders in Nigeria. In this case, saver's deposits their money with financial institutions for which they are eligible to annual interest payment after which they are free to withdraw their money whenever they desire. In contrast, financial institutions provide loans to borrowers who are obligated to return the principal amount plus interest. Therefore, savers are surplus spending units because they have funds in excess of their needs, but borrowers are deficit spending units since they spend more than they have. To increase the overall efficiency, however, financial institutions must act as a conduit between the two.

Further, the ability of a financial institution to operate efficiently is a key driving force behind their successful performance in Egypt (Mohieldin, Hussein & Rostom, 2019). As a result, commercial banks in majority of developing countries are nowadays more concerned with the financial efficiency. This has been influenced by the fact that financial development of commercial banks is not peculiar to a certain economy but indeed guided by universal guidelines. For this reason, commercial bank in developing countries must re-examine their financial efficiency on a continuous basis as required under Basel Regulations so as to keep pace with their counterparts operating in developed countries.

Bayai and Ikhide (2018) in their study in South Africa observed that the selection of a company's best financial structure is challenging since it requires a consideration of various elements, including risk and profitability. When the alternatives are limited, the decision becomes more difficult economic, social, technological, and political settings within which a business works demonstrates a high level of instability. Consequently, the choice of the most optimal proportion of debt to equity can alter the overall financial performance of a company (Bayai & Ikhide, 2018).

According to the findings of a study undertaken by Kimani et al. (2019), it was concluded that the efficiency of financial intermediation and the financial structure are related. Therefore, many commercial banks have failed to efficiently mediate because they have not implemented appropriate

financial strategies. Factors contributing to the bankruptcy of commercial banks can be addressed through appropriate strategies to drive the growth and achievement of corporate goal. Great care and attention must be paid and careful when deciding on the financial structure. Failure to do so can lead to financial difficulties (Singh & Faircloth, 2020). There may be multiple options, but to make the best decision in a given scenario for the benefit of the business, for someone to critically analyze the impact of the available options on the efficiency of the business's mediation.

Further Mumo (2021) notes that Kenya's financial sector has become the largest and most developed in East Africa over the past four decades. Significant regulatory measures that aim to enhance the efficiency and competition of the financial sector have largely prompted the transformation. In order to boost profitability, capitalization, and efficiency as a result of economies of scale and the usage of specialist market sectors, policymakers support financial consolidation in the financial industry using voluntary or non-voluntary means. Nevertheless, despite this development, the banking sector in Kenya still faces numerous challenges, such as a relatively high ratio of non-performing loans (NPLs) in some banks, insufficient quantities of commercial bank loans to finance long-term infrastructural projects, declining profitability, overreliance on savings, and skewed lending towards government, public, and large entities, among others.

STATEMENT OF THE PROBLEM

SACCOs in Kenya play a very significant role in financial intermediation as savings through them translates to around 48.55% of the gross national savings. However, despite these developments, SACCOs are still facing numerous challenges especially in terms of their overall financial structure. For example, there was an increase in the amount of non-performing loan ratio on SACCOS to 6.30 percent back in 2018 down from 6.14 percent of what had been reported in 2017. This increase was reported to be caused by a significant increase provision for loans extended which rose from Shs 4.92 billion in the year 2017 to Shs 5.27 billion a year later in 2018 and further to Shs 8.99 in 2019 (Mumo, 2021). These statistics is a clear indication that the financial intermediation efficiency of SACCOs is not as effective as it is supposed to be. Based on the above statistics, then it seems its very crucial to try and establish why the operational efficiency of SACCOs is not that effective despite them being very popular and key corner stone in the provision of financial services across the country.

There are a number of studies that have been undertaken both locally and internationally relating to the concept of financial structure and financial intermediation efficiency. Rahman et al., (2018) examined the relationship between capital requirements and the cost of financial intermediation among banks in Bangladesh and observed that a strong relationship existed between the two. In addition, Kamau (2018) examined the relationship between intermediation efficiency and productivity of banks in Kenya. Based on the above empirical studies, it is clear that there were limited studies that have been done examining the concept of financial structure and financial intermediation efficiency in Kenya. Therefore, the current study bridged this research gap by investigating the relationship between capital structure and financial intermediation efficiency of deposit taking SACCOs in Kenya.

RESEARCH OBJECTIVE

To establish the relationship between non-withdrawable deposits and financial intermediation efficiency of deposit taking SACCOs in Kenya.

THEORETICAL REVIEW

Pecking Order Theory

Pecking Order Theory was first proposed by Donaldson (1961) before being modified later by Myers and Majluf (1984). According to this theory, firms usually prioritize their financing sources based on the cost associated with each financing source with internal financing being their first priority and only turning to equity financing as the last resort. As a result, firms usually depend on internal funds to financing their operations until they are depleted after which they borrow debts and if this is not sustainable then they turn to equity financing (Frank, Goyal & Shen, 2020).

Pecking order theory is implied on the concept of asymmetric information since firm managers usually have more information regarding their firm such as risks, value and operational prospects than outsiders (Simatupang, Purwanti & Mardiati, 2019). As a result, existence of asymmetric information affects the choice of the firms financing option between internal and external ones and between issue of debt or equity. For this reason, it is assumed that a pecking order usually exists when planning on how to finance new projects. Usually, asymmetric information favours financing projects through debts than equity as the firm management are more confidents as debts signals that the planned project is likely to be profitable and that the prevailing stock price is undervalued. However, debt issue usually signals that the board is not confident and they consider stock price to be over-priced (Oktavina, Manalu & Yuniarti, 2018).

The major strength of Pecking Order Theory is that it clearly shows the finance manager of a firm is keen to maintain complete control over the firm by avoiding equity issue until it is the last resort, thus, helping to minimize agency problem. However, critics of the theory argue that the theory ranking financing sources is a clear way of finance managers to try and avoid the consequences of finance managers with more information about the company than others such as shareholders. In addition, the theory limits the sources of financing that a firm may adopt to finance its operations.
The theory was very important to this study since it clearly shows that firms are always keen to maintain clear control of its financial structure, hence, helping to explain changes that are associated with firms' financing structure. This in turn allows big firms with massive revenues to maintain proper control over their company by utilizing internal funds and debt issue to financing their operations than diluting their company control over equity issue. The theory was used to support the variable on non-withdrawable deposits.

Theory of Financial Intermediation

Sealey and Lindley (1977) proposed the Theory of Financial Intermediation. According to the idea, the transformation process of a financial institution entails borrowing funds from surplus spending

units and lending them to deficit spending units, i.e., financial intermediation. Therefore, the money associated with intermediation relates to the degree to which monetary institutions reconcile deficits and surpluses in spending units (Ndebbio, 2004). The essence of commercial banks is their role as intermediaries, wherein clients with excess capital deposit cash with banks, who then lend the funds to borrowers. Commercial banks have the advantage of screening applicants along multiple lines of inquiry to determine their potential to repay loans.

The financial intermediation theory is based on the assumption of information asymmetry as well as the agency theory. The essence of existence of financial intermediaries is thus explained by the presence of attributable factors such as: inadequate information, high transaction costs, and regulation methods (Scholtens & van Wensveen, 2003). Indeed, information symmetry is at the heart of financial intermediation theory whereby aspects such as adverse selection problem, concomitant leading to moral hazard or the need for costly verification and auditing procedures. Thus, informational asymmetry in the financial markets leads to market imperfections, which are deviations from the perfect markets as described by Arrow-Debreu perspective. The process of financial intermediary that results in the expansion of financial institutions requires an extension of facilities to offer affordable financial services at the lowest costs possible in order to enhance deepening.

Financial innovations have thus been attributed to the minimization of costs of intermediation. The foundation of the financial intermediation theory is established on the notion of reductions in the costs of intermediation through transactions and elimination of informational asymmetries (Scholtens & van Wensveen, 2003). Therefore, the developments adopted by commercial banks in the form of financial innovations driven by technology are meant to enhance financial intermediation, intensify financial deepening, and also ease regulatory stringency. Financial intermediation should be viewed as a process to create economic value thus an important undertaking that commercial banks play in their everyday operations.

Theory of financial intermediation has over the years been criticized by some scholars such as Allen and Santomero (1997); Scholtens and Wensveen (2000) who argue that that it does not recognize the risk management role of lenders in the banking relationship. Scholtens and Van Wensveen (2000) also propagated that the world is not moving towards disintermediation, but instead towards reintermediation. Despite this, theory of financial intermediation will be of great significance to the current study since it recognizes the fact that by engaging in financial innovation, financial institutions stand at an advantageous position to help create efficient markets and lower the cost of doing business. Therefore, the theory was used to support the variable on financial intermediation efficiency.

RESEARCH METHODOGY

Research Design

Research design is described as the logical flow of the way a study is to be executed. It is also the blueprint set a benchmark by the researcher towards the implementation of the study on the basis

of collected data and analysis to attain the set objectives. Research design in research seeks to determine the reasons behind the prevailing status quo in the phenomenon under the study. The study adopted a descriptive research design. The descriptive study design was adopted as the study involved investigating the financial structure and its relationship with the financial intermediation efficiency of DTS in Kenya. Descriptive research was further used to collect data on the existing state of a phenomena in order to describe "what exists" in relation to the variables or conditions of a scenario (Bloomfield & Fisher, 2019). Systematically and precisely, it depicted the features or behaviour of a certain population.

Target Population

Target population normally refers to the entire group of objects or individuals from which research strives to obtain a small number of the objects in order to act as the wholesome representation of the entire population (Howe & Robinson, 2018). Additionally, population is defined as the entire group of individuals, events or objects having a common observable characteristic. A portion of the population from which the researcher intends to extrapolate his research findings following analysis is known as the target population. The target population of the study was all 174-deposit taking SACCOs licensed by SASRA to operate across Kenya.

Sampling Technique and Sample Size

Sampling method or technique is regarded as a detailed approach that involves selecting or picking a sample as a representative of the larger object for the purposes of inclusion in a study (Sharma, 2017). Based on this, this study employed a simple random sampling technique. The sampling technique was adopted in order to avoid bias during data collection and thus giving all selected DT-SACCOs an equal chance of being selected for the purpose of completion of this study.

Sample size refers to the act of choosing the number of objects to include in the study out of the entire target population so as to include a clear and measurable statistical sample. In research, sample size is very crucial as it allows a researcher to choose a manageable sample from a large target population and be able to make inferences about the entire population based on the observation of the sample (Sharma, 2017). Therefore, the sample size of the current study was determined using Yamane (1967) formulae as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where;
n =Sample Size,
N=Population Size,
e= level of Precision

$$n = \frac{174}{1+174(0.1)^2}$$

n= 63

Therefore, the sample size of this study was 63 licensed DT-SACCOs operating across Kenya.

Data Collection Procedure

The study used secondary data taken from the financial statements submitted by each DTS to SASRA. Kalu, Unachukwu and Ibiam (2019) states that secondary data is data collected by others who have undergone statistical process. The data collection sheet was used to collect data from published audited annual reports, KNBS and CBK pertaining to the 63 sampled DT-SACCOs submitted to the regulator. The data for all 63 sampled DTS covered a 5-year period between 2017 and 2021.

Data Presentation and Analysis

Using STATA, descriptive statistics, correlation analysis and regression analysis were used to analyze the data. Because there was more than one independent variable in this study, regression analysis was used because it was effective in assessing the simultaneous effects of independent factors on a dependent variable (Purba & Bimantara, 2020). Using t-statistics at a 5% significance level, regression coefficients was evaluated for significance before conclusions were made. The predictor variable was deemed significant if the value P, which is the precise probability of rejecting null when it is true, is less than 5%. Numerous national and international researchers have employed the analytical techniques that were used in the past. The study's findings were displayed in tables.

Research Model

The research was based on balanced Panel data from 2017 to 2021. Panels are appealing as compared to merely cross-sectional data because they often include significantly more information than single cross-sections and thus allow for greater estimation precision (Purba & Bimantara, 2020). Panel data provided more useful data, more variability, less collinearity across variables, more degrees of freedom, and greater efficiency by merging time series of cross-section observations. Panel data, however, present similar estimate and inference issues that afflict cross-sectional and time series data, despite their significant advantages. There are various estimating strategies that can be used to solve these issues. The first, pooled OLS, simply merges or pools all-time series and cross-sectional data and uses ordinary least squares to estimate the underlying model (OLS). Equation 1 represents the input-output model.

$$Y_{it} = \alpha + \beta X'_{it} + \epsilon_{it} \quad \text{..... (1)}$$

Where; ϵ_{it}= error term

Y_{it} = Weighted sum of loans and Investments/Weighted sum deposits and total assets for each firm i at time t

for i^{th} firm in t^{th} year.

X'_{it}= vector for independent variables for firm *i* in year *t*,

β = is the independent variables Vector of coefficients,

α is the intercept,

i= 1, 2, …, 174 (individual DTS),

t = 1, 2, 3, 4 (time factor).

Regression Analysis

According to Green (2010) equation model 2 was used for the analysis.

$W_{it}=\beta_0 + \beta_1 X1_{it} + \varepsilon_j$…… (2)

Where: W_{it} – Weighted sum of loans and Investments/Weighted sum deposits for each firm i at time t

$X1_{it}$ = Non-Withdrawable Deposits

$\beta_{i\ (i=0,1,2,\ldots.)}$ associated regression coefficients

ε_j = associated error term.

FINDINGS AND DISCUSSION

Descriptive statics for the various for the data obtained on various study variables was provided under this section in terms of their mean, standard deviation, minimum and maximum values for all 63 DTS that were sampled under this study. A five years period data was obtained in terms of the study objectives pertaining to leverage (LEV), non-withdrawable deposits (NWD) share capital (SC) and the financial intermediation efficiency (FIE).

The results in Table 1 indicate that there was a total of 315 observations that were made from the 63 DTS that were sampled in this study for the five years period between 2017 and 2021. Results also indicated that the average financial intermediation efficiency (FIE) among the 63 DTS was 1.061 with a corresponding standard deviation of 0.261. The minimum financial intermediation efficiency was 0.178 and a maximum of 2.185. The study findings are in agreement with the findings of a study done in Indonesia by Sirait and Rokhim (2019) who observed that effective implementation of financial intermediation within the financial sector is based on the ability of financial institutions to transform savings received into credit/loans for companies and others to finance their operations.

On non-withdrawable deposits, the study established that the average of the same was 20.330 with a standard deviation of 1.777. Further, the studied DTS had a minimum non-withdrawable deposit of 15.137 and a maximum of 23.160. The study findings however contradict the findings of a study by Amraoui et al., (2018) in Morocco which for its part observed that the key determinants of firm's capital structure and the most effective financing choices, it was observed that financial markets in developing countries are not likely to meet the full financial requirements of their business entities. As a result of this, business entities are forced to rely mostly on long-term loans from commercial banks so as to operate more efficiently.

Table 1: Descriptive Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
FIE	Overall	1.061	0.261	0.178	2.185	N = 315
	Between		0.223	0.578	1.588	n = 63
	Within		0.137	0.339	1.659	T = 5
NWD	Overall	20.330	1.7765	15.137	23.160	N = 315
	Between		1.755	15.435	23.022	n = 63
	Within		0.3404	16.483	21.587	T = 5
	Within		0.4461	16.549	22.689	T = 5

Correlation Analysis

Pearson correlation coefficient was applied by the researcher in order to determine the strength with which leverage, non-withdrawable deposits and share capital affected the financial intermediation efficiency of DTS in Kenya as indicated Table 2. The findings also indicated that non-withdrawable deposits had an inverse and non-significant effect on the financial intermediation efficiency of DTS in Kenya (-0.1838, P-Value<0.05).

Table2: Pearson Correlation Coefficient

	FIE	NWD
FIE	1	
NWD	-0.1838	1
	0.001	

Fixed Effect Regression Model

Figure 1 presents the fixed effects regression model results indicating the fitness, explanatory power and significance of the adopted model in explaining the extent to which various independent variables under the study predicts the dependent variable. The value of R-Squared as per the regression analysis was 0.2212 which is an indication that the it is only 22.12% of financial intermediation efficiency of DTS operating in Kenya between 2017 and 2021 had been affected by their leverage, non-withdrawable deposits and share capital respectively. The R-Squared of 22.1% is an indication that 77.9% of financial intermediation efficiency of deposit-taking SACCOs in Kenya is influenced by other factors other than their leverage, non-withdrawable deposits and share capital respectively. F-Statistics (F=10.5) is an indication that the model was statistically significant (P<0.05), hence, it can be concluded that the model was significantly fit and also that at least one of the three key independent variables was significant in explaining the financial intermediation efficiency of DTS in Kenya. Pertaining to the effect of non-withdrawable deposits on financial intermediation efficiency of DTS in Kenya, it was established that non-withdrawable deposits had a negative but statistically significant effect on financial intermediation efficiency of DTS (β = -0.084, P-Value < 0.05).

Therefore, based on the obtained results, then the resulting study model was as follows:

FIE= -2.202-0.084$\mathbf{X_2}_{it}$

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. xtreg FINANCIALINTERMEDIATIONEFFICIE LEVERAGE NONWITHDRAWABLEDEPOSITS SHARECAPITAL, fe

Fixed-effects (within) regression               Number of obs      =       315
Group variable: firm                            Number of groups   =        63

R-sq:                                           Obs per group:
     within  = 0.2212                                         min =         5
     between = 0.0022                                         avg =       5.0
     overall = 0.0071                                         max =         5

                                                F(3,249)           =     23.57
corr(u_i, Xb)  = -0.8199                        Prob > F           =    0.0000
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FINANCIALINTERMEDIATI~E	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
LEVERAGE	.2504017	.031276	8.01	0.000	.1888023	.312001
NONWITHDRAWABLEDEPOSITS	-.0842109	.0298821	-2.82	0.005	-.1430649	-.025357
SHARECAPITAL	.018585	.0232009	0.80	0.424	-.0271101	.0642801
_cons	-2.201879	.626619	-3.51	0.001	-3.436028	-.9677294
sigma_u	.40404529					
sigma_e	.13615602					
rho	.89802324	(fraction of variance due to u_i)				

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F test that all u_i=0: F(62, 249) = 10.15                     Prob > F = 0.0000
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Discussion of Study Findings

On the objective of the effect of non-withdrawable deposit on financial intermediation efficiency of deposit-taking SACCOs in Kenya, it was observed that non-withdrawable deposits had a negative but statistically significant effect on financial intermediation efficiency of DTS operating in Kenya as indicated by (β =-0.084, P-Value < 0.05). This suggests that DTS that held less non-withdrawable deposits tended to a high-level financial intermediation efficiency when compared to their counterparts that held large amounts of non-withdrawable deposits. The findings therefore indicate that whenever DTS decreased the amount of their non-withdrawable deposits by one unit and having all other variables held constant, their intermediation efficiency decreased by -8.4%.

The study findings that non-withdrawable deposits had a negative effect on financial intermediation efficiency of DTS in Kenya contradicts the results of a study done in EU countries by Leonello et al., (2022) who observed that more non-withdrawable deposits usually make commercial banks much more stable especially when the runs are driven by market panics. However, Leonello et al.,

(2022) study also observed some similar issue as with the current study when the authors noted that such non-withdrawable deposits still make banks more fragile in the events where runs are driven by critical fundamentals. As a result, external savings causes under-saving among banks especially when such is driven by critical fundamentals. The contradiction in the study findings was caused by the fact that Leonello et al., (2022) study was carried out in EU countries where financial institutions enjoy strong financial structure unlike in Kenya where majority of small financial institutions such as DTS continuously face issue with their overall financial structures.

The findings also contradict those obtained by Dewi et al. (2020) who while conducting a study in Indonesia noted that high investment financial needs in Indonesia have forced commercial banks to devise more optimal strategies to pool and mobilize savings from their customers so as to enhance both sustainable and their country's economic growth. However, banks in the country are still facing issues to effectively implement this plan due to issue to do with how to increase financial inclusion as well as to how to enhance their financial intermediation. As a result, banks have urged the government to establish strong financial system with enhanced financial intermediation efficiency so as to provide answer to various economic challenges.

The study findings that non-withdrawable deposits although had a negative but statistically significant effect on financial intermediation efficiency of DTS in Kenya to some extent concurs with the findings observed in Ghana by Baidoo et al., (2019) that non-withdrawable customer deposits are considered as a crucial source of operational funds among financial institution in Ghana. This is because financial institutions normally utilize mobilized customers deposits to issue loans and advances to their clients which earns them interest and, thus, enhancing their capital adequacy in the long-run. For this reason, it was found out that a strong correlation between customers deposits and the ability of banks to provide loans and advances to customers since they use those deposits to lender the credits. Pecking Order Theory supported the objective on the effect of non-withdrawable deposits on financial intermediation efficiency of DTS in Kenya because the theory recognizes the fact that firms usually depend on internal funds to financing their operations until they are depleted after which they borrow debts and if this is not sustainable then they turn to equity financing.

CONCLUSION

On the effect of non-withdrawable deposits on financial intermediation efficiency of DTS in Kenya, the study revealed inverse but statistically significant effect of non-withdrawable deposit on financial intermediation efficiency of DTS in Kenya. As such, the study findings indicate a negative contribution of non-withdrawable deposits on DTS financial intermediation efficiency. As such, it can be concluded that an increase in the amount of non-withdrawable deposits tends to inhibit the financial intermediation efficiency of DTS. This can be explained by the fact that an increase in the amount of non-withdrawable deposits will mean that DTS will likely issue out significant amounts of loans to their customers and this is likely to impact their financial intermediation function especially where customers fail to honour their loans payment on due dates.

RECOMMENDATIONS

Practical Recommendations

The study established that non-withdrawable deposits held had a negative but statistically significant effect on financial intermediation efficiency of DTS operating in Kenya. Even though the effect of non-withdrawable deposits had a negative effect on the financial intermediation efficiency, the same was statistically significant, hence, the study recommends that DTS in Kenya should strive to enhance their marketing capability so as to attract more customers and make their financial intermediation services more manageable by receiving non-withdrawable deposits from depositors and issuing out loans to creditors.

Policy Recommendations

The study findings were of great significant to the management of SACCOs in Kenya. The study therefore recommends that the management of DTS across the country need to ensure that they are involved in making their financial structure decisions that are very likely to effectively mitigate against any possible financial crisis which may arise due to lack of investment funds. This is because, ineffective financial structure decisions are likely to affect the leverage, non-withdrawable deposits and share capital all which may eventually lead to financial distress.

The study findings were of great significant to the policy makers such as SASRA who are concerned with the regulation of DTS. Therefore, the study recommends that policy makers in Kenya that are concerned with DTS regulation should ensure that that DTS across the country implement and adopt effective and sound financial structure decisions in order to enhance their financial intermediation efficiency and thus minimize the instances of DTS plunging into financial crisis that has caused many people across the country to lose a lot of money in the past.

The study was also of great significance to scholars and academicians who might be interested to carry-out further research on the relationship between financial structure and financial intermediation efficiency. Therefore, the study recommends that interested scholars and academicians should look at the findings of this study and make sure that they are able to identify other aspects of financial structure that are likely to influence the financial intermediation efficiency role of various financial institutions in the country.

LIMITATIONS OF THE STUDY

The study was limited to examining the relationship between financial structure and financial intermediation efficiency of DTS in Kenya. As such, the study was theoretically, conceptually, contextually and methodologically limited. Theoretically, the study was limited to three major theories namely Modigliani and Miller Capital Structure Irrelevance Theory, Trade-Off Theory of Capital Structure and Pecking Order Theory. Although there were some weaknesses that were identified with these theories, their overall strengths significantly surpassed these weaknesses as a result of continued theoretical development as was supported by the empirical evidence.

The study was also limited conceptually given the fact that the study was undertaken in Kenya as there was no any other identified study that had been done examining the relationship between financial structure and financial intermediation efficiency of DTS. For this reason, the findings of this study were only limited to DTS operating in Kenya and therefore cannot be generalized for any other DTS operating outside the country.

Contextually, the study was limited to all 175 SASRA licensed and regulated DTS that operates from across the country, thus, limiting the study population. In addition, the study was also limited because it didn't sample all other non-deposit taking SACCOs that operate in Kenya; hence, the findings of the study were limited to DTS only and not to other SACCOs that operate in the country. However, this was mitigated since the study used data spanning over a five years period amongst the identified DTS.

Methodologically, the study was limited by the fact that it only randomly sampled 63 DTS as opposed to targeting all 175 of them in order to be able to draw a much more valid conclusion. In addition, the study was methodically limited since was based on linear regression technique which is based on linear assumptions; hence, one must possess sufficient interpretation skills in order to understand and interpret those assumptions. In addition, the linear regression technique upon which the study was based which may have significant limitations on the study findings if not properly interrupted.

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