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ANALYZING THE IMPACT OF SURPLUS MARGINS ON THE FINANCIAL STABILITY OF SAVINGS AND CREDIT COOPERATIVES (SACCOS) IN ENUGU STATE, NIGERIA

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Abstract

This study analyzed the impact of surplus margins on the financial stability of savings and credit cooperatives (SACCOs) in Enugu State, Nigeria. The specific objectives of the study are to determine the effect of savings growth on performance of savings and credit cooperative societies in Enugu State. The study adopted ex-post facto research design. The data for this study were sourced from secondary data which were collected from published annual reports and financial statement of the selected SACCOs from 2013 to 2022. A total of 15 Savings and Credit Cooperative Societies (SACCOs) constituted the population of the study. However, a sample of 10 SACCOs was assembled from the population. Only the SACCOs with high records of performance during the period of the study were considered in the sample. Using pooled regression analysis, the research analyzes data derived from financial statements of selected cooperatives, focusing on the growth rate of member savings and its correlation with Return on Assets (ROA). Results indicate a significant positive relationship between savings growth and cooperative performance, as evidenced by an f-statistic of 5.719119 ($p < 0.05$) and a Durbin-Watson statistic near 2. The positive coefficient (0.647279) supports the hypothesis that increased savings positively influence ROA. The study also reveals a statistically significant t-Statistic (4.810692) for the savings growth rate ($p < 0.05$), emphasizing the substantial impact on cooperative performance. In conclusion, fostering savings growth emerges as a key driver for enhancing the financial stability and success of credit cooperatives in Nigeria.

Keywords: *Savings Growth, Credit Cooperatives, Financial Performance, ROA, Societies*

1.1 Introduction

Savings and credit cooperatives, commonly known as SACCOs, are financial institutions that operate on a cooperative basis, with the primary objective of serving the financial interests of their members. SACCOs are owned and controlled by their members, who pool their financial resources together to create a cooperative entity. The fundamental purpose of SACCOs is to provide financial services to their members, enabling them to save, access affordable credit, and improve their economic well-being (Adusei et al., 2021).

The role of SACCOs in serving the financial interests of members is multifaceted and essential, particularly for individuals who may have limited access to traditional banking services. One of the core functions of SACCOs is to encourage savings among their members (Almehdawe et al., 2020). By offering a secure and convenient platform for members to save their money, SACCOs promote a culture of thrift and financial discipline. These savings serve as a valuable resource that can be utilized to provide loans and other financial services to members (Ariza-Garzón, et al., 2020).

In addition to fostering savings, SACCOs play a crucial role in facilitating access to credit. Many members of SACCOs may have limited access to formal credit markets, making it challenging for them to obtain loans from traditional financial institutions. SACCOs bridge this gap by providing accessible and affordable credit options to their members. By leveraging the pooled savings of members, SACCOs can offer loans at competitive interest rates, thereby empowering individuals and small businesses to invest, expand, and improve their financial situations.

Furthermore, SACCOs often prioritize the specific needs and interests of their members, as they are member-focused institutions. Unlike profit-driven financial institutions, SACCOs are driven by the collective well-being of their members. This member-centric approach allows SACCOs to tailor their products and services to meet the unique financial requirements of their members, including customized loan products, flexible repayment terms, and financial education programs. By understanding the diverse needs of their members, SACCOs can effectively serve as financial intermediaries, supporting economic development and poverty reduction (Bayai & Ikhide, 2018).

SACCOs also contribute to the overall financial stability and resilience of their members. By providing a safe and reliable platform for savings and credit, SACCOs help individuals and communities mitigate financial risks and cope with unforeseen expenses or emergencies. The cooperative nature of SACCOs fosters a sense of community and mutual support among members, enhancing their collective ability to withstand economic shocks and improve their socio-economic well-being.

Understanding the role of SACCOs in serving the financial interests of members is crucial for policymakers, researchers, and stakeholders in the financial sector. It highlights the unique value proposition of SACCOs in promoting financial inclusion, empowering individuals, and fostering economic growth at the grassroots level. By recognizing and supporting the role of SACCOs, we can create an enabling environment that facilitates their growth, enhances their effectiveness, and maximizes their positive impact on the financial lives of their members.

1.2 Statement of the Problem

Ideally, savings and credit cooperatives (SACCOs) aim to maintain surplus margins that ensure financial sustainability, growth, and the ability to provide optimal services to their members. The ideal scenario involves a delicate balance between generating surplus margins and meeting the diverse financial needs of their members.

The problem arises from the potential mismanagement or inadequate determination of surplus margins within SACCOs. Inaccurate assessment and utilization of surplus margins may lead to financial instability, hindering the cooperative's ability to fulfill its core functions, such as offering competitive interest rates, providing dividends, and ensuring the long-term viability of the organization.

Additionally, there may be challenges in defining and implementing effective surplus margin policies that consider the varying economic conditions, regulatory requirements, and the dynamic financial landscapes in which SACCOs operate. Inconsistent or inappropriate surplus margin practices may jeopardize the overall financial health of SACCOs.

If the issues related to surplus margin management persist without resolution, SACCOs may face severe consequences. Financial instability may lead to reduced member benefits, increased loan interest rates, and limitations in offering competitive financial products. The failure to address these challenges could result in a loss of member trust, decreased membership, and, ultimately, the collapse of SACCOs, negatively impacting the economic well-being of the communities they serve.

Furthermore, the inability to adapt surplus margin practices to changing economic conditions and regulatory environments may expose SACCOs to increased risks, potentially leading to insolvency and threatening the broader cooperative movement. Therefore, resolving these problems is crucial to ensuring the sustained financial stability and success of savings and credit cooperatives.

1.3 Objectives of the Study

The main objective of the study is to analyze the impact of surplus margins on the financial stability of savings and credit cooperative societies (SACCOS) in Enugu State while the specific objective of the study is to;

i. determine the effect of savings growth on performance of savings and credit cooperative societies in Enugu State.

1.4 Research Questions

The study provided answers to the research question:

i. To what extent do savings growths affect performance of savings and credit cooperative societies in Enugu State?

1.5 Statement of Hypotheses

The hypotheses stated in null and alternate forms are denoted by (H_0) and (H_1) respectively below:

H_0: Savings growth has no positive and significant effect on performance of savings and credit cooperative societies in Enugu State.

H_1: Savings growth has positive and significant effect on performance of savings and credit cooperative societies in Enugu State.

2.0 Review of Related Literature

2.1 Conceptual Review

2.1.1 Concept of SACCOs

Savings and Credit Cooperatives, commonly known as SACCOs, are member-owned financial institutions that operate on cooperative principles to provide financial services to their members. SACCOs play a unique role in serving the financial interests of their member-owners. Unlike profit-oriented financial institutions, SACCOs prioritize surplus margin generation over maximizing profits. This is achieved through an active pricing policy, offering competitive interest rates on savings and loans that are typically lower than those charged by conventional banks (Ariza-Garzón, et al., 2021). The core concept of SACCOs revolves around fostering a culture of saving and availing credit facilities within a community or a specific group of individuals. Here are key elements that define the concept of SACCOs:

Cooperative Structure

SACCOs operate as cooperative entities, adhering to the principles of mutual assistance and collective decision-making. Members collectively own, control, and benefit from the SACCOs, emphasizing democratic governance.

Membership

SACCOs consist of members who share a common bond, such as belonging to the same community, workplace, or profession. The membership base is integral to the cooperative spirit, promoting a sense of community and trust among members.

Savings Mobilization

One primary function of SACCOs is to encourage and facilitate regular savings among members. Members contribute to a common pool of funds, and these savings form the basis for the provision of various financial services.

Credit Provision

SACCOs extend credit facilities to their members, offering loans for various purposes such as business development, education, housing, or emergencies. The loans are often provided at reasonable interest rates, promoting financial inclusion and empowerment (Bernardi, et al., 2021).

Financial Inclusion

SACCOs play a crucial role in promoting financial inclusion by providing access to financial services for individuals who may have limited or no access to traditional banking. This is particularly significant in rural and underserved urban areas.

Profit Distribution

Unlike traditional banks, SACCOs operate not for profit but for the mutual benefit of their members. Surplus generated from operations is often distributed among members in the form of dividends, interest on savings, or used to improve and expand SACCOs services (Boehmke & Greenwell, 2019).

Democratic Governance

SACCOs operate on the principle of "one member, one vote." Members participate in decision-making processes, including the election of the board of directors and voting on important matters affecting the SACCOs.

Education and Training

SACCOs often engage in educating their members on financial literacy, cooperative principles, and responsible financial management. This emphasis on education contributes to the overall economic empowerment of members.

Regulation and Supervision

SACCOs are subject to regulatory oversight to ensure their financial stability and protect the interests of members. Regulatory bodies may vary by country, and adherence to regulations is crucial for the credibility and sustainability of SACCOs.

2.1.2 Concept of Savings Growth

Savings and Credit Cooperatives (SACCOs) represent financial institutions established by individuals seeking to collectively address common challenges by raising funds and providing loans to members at reasonable interest rates (Bretos & Marcuello, 2017). The surplus margins generated by SACCOs enable them to build a capital base, strengthen their financial position, and operate efficiently. This facilitates the enhancement of members' economic and social well-being. Over time, SACCOs have emerged as significant contributors to the global financial sector, commanding a substantial share of savings. According to Abell (2004), the primary benefit for members is the ability to accumulate savings, enabling them to access loans.

The primary role of SACCOs is to advance the economic interests of their members, with a specific focus on promoting thriftiness by offering opportunities for savings accumulation and providing reasonable interest without associated risks (Akinwumi, 2006). SACCOs also aim to create a fund source for providing members with loans at fair interest rates and favorable repayment terms. Additionally, SACCOs continuously educate members on regular savings practices, wise utilization of their savings, and offer services such as financial counseling to address various financial challenges. The management of risks is also a critical service provided to ensure the safety of members' savings and loans.

Furthermore, SACCOs play a pivotal role in poverty alleviation by improving the economic and social conditions of their members, granting access to essential financial services. They also serve as a means for members to collectively counter the exploitation of vulnerable individuals by powerful entities. Through pooling their resources, SACCOs empower their members to meet their needs (Aforka, 1990). The formation of a SACCO brings various advantages to members, including increased encouragement to save due to the accessibility of SACCOs, better interest rates on savings and loans compared to other alternatives, and the imparting of responsible financial management skills to members (Abrahamsen, 1976).

2.1.3 Performance of Savings and Credit Cooperative Societies

Evaluating the performance of a cooperative financial institution poses increased challenges. Fried, Lovell, and Eeckaut (1993) undertook an assessment of the performance of credit unions in the United States, focusing on their capacity to deliver maximum service within their resource constraints and operating environment. They devised a model, utilizing a free disposal hull of observed service/resource data, and gauged performance through the lenses of dominance and efficiency. The model incorporated environmental variables to elucidate variations in measured performance, assuming that credit unions aim to maximize benefits for their memberships.

The model delineates benefits provided by credit unions with dimensions of quantity, price, and variety or convenience. Fried, Lovell, and Eeckaut (1993) measured credit unions' performance based on their ability to deliver maximum service in each dimension given their available resources. The assessment involved analyzing dominance relationships and productive efficiency. The findings revealed a significant presence of dominance, indicating numerous potential role models for each inefficient credit union. On average, there was approximately 20% productive inefficiency, suggesting ample room for improvement, particularly in the quality dimension compared to the price and variety dimensions. This implies that credit unions can enhance their performance by expanding their membership base and increasing the number of accounts per member. Fried, Lovell, and Eeckaut (1993) proposed extending their study by establishing a panel of credit unions observed over several years to calculate productivity growth rates, providing an additional criterion for evaluating credit unions' performance. This contemporary study uses return on assets of SACCOs as a key performance measure.

2.2 Theoretical Review

The study on analyzing the impact of surplus margins on the financial stability of savings and credit cooperatives (SACCOS) is theoretical underpinned on loanable fund theory which has evolved over time with contributions from various economists. The development of the theory has undergone insight from various scholars from John Rae (1848), Knut Wicksell (1898), Irving Fisher (1896), Eugen von Böhm-Bawerk (1884) to John Maynard Keynes (1936).

2.2.1 Loanable Funds Theory (LFT)

The Loanable Funds Theory (LFT) suggests that interest rates are determined by the interaction of the supply and demand for savings in the financial market. Savers supply funds, and borrowers demand funds. The equilibrium interest rate is reached where the supply of savings equals the demand for investments. According to this theory, the demand for and supply of loanable funds are the basis on which to determine the interest rates. LFT uses a classical market analysis to describe the supply, demand, and interest rates for loans in the market for loanable funds. According to these early proponents, the supply of a loanable fund comes from the firms or individuals who want to save, and they are the lenders. The demand for loanable funds comes from the entrepreneurs or investors who want to buy capital assets (i.e., to invest), and they are the borrowers. Negotiations in the loanable market are made in terms of the real interest rate. The market interest rate is therefore determined where the demand for and supply of loanable funds are equal. This means that the loanable funds market works on the principle of equilibrium. At equilibrium, both savers and investors are the happiest possible and the interest rate spread should not be so wide that one party feels exploited. This is because, as the interest rate on loan increases, it becomes more expensive to borrow, and the demand for the loan will decrease. On the other hand, as the interest rate on savings decreases, the supply of loanable funds decreases because lower interest rate discourages net savers.

2.3 Empirical Review

Westly and Shaffer (1997) in their study titled "Credit Union Policies and Performance in Latin America" presents conceptual frameworks for explaining credit union loan delinquency and profitability, followed by empirical estimation and discussion bearing in mind that controlling loan delinquency is one of the most critical tasks a financial institution faces in ensuring its long term survival. They pointed out that earning positive profits in order to be able to plow at least some of those profits back into the capital base of the institution is also one of the keys to building a healthy; growing financial intermediary.

Westly and Shaffer (1997) adopted regression equation models to assess credit Union's performance. They measured performance based on delinquency and profitability. Delinquency was hypothesized and found to depend in important ways on the incentives credit unions create for their borrowers to repay loans. These incentives range from the loan and deposit rates the credit union sets, to the overall financial health of the credit union, to the use of loan collateral and the extent to which the credit union creates a serious culture of loan repayment. Certain other credit union policy variables which operate only partially through borrower incentives were also found to be important. Chief among these is the relative wage rate between credit unions and other financial institutions. Profitability was explained first within the framework of a traditional Trans log profit function. This was shown to be admissible as long as the credit union's only departure from profit maximization was to alter prices (loan or deposit rates) so as to favor borrowers or savers. Further departures from efficiency were modeled using a profit function analogue to Mester (1989) separable-expense-preference cost function. Within either framework, credit union price and delinquency control policies were found to be important determinants of profitability. So important was the issue of delinquency control to maintaining profitability that higher wage rates and often higher deposit rates were found to increase profitability in part because of their beneficial impacts on loan repayment, despite the fact that raising these rates directly increases costs.

Dong and Featherstone (2004) in their study titled "Technical and Scale Efficiencies for Chinese Rural Credit Cooperatives: A Bootstrapping Approach in Data Envelopment Analysis" employed a bootstrap procedure that allows testing of statistical inference of nonparametric scale efficiency measures as well as pure and overall technical efficiency for China's RCCs (Rural Credit Cooperatives) in individual provinces in different years. Their empirical results suggest important evidence on efficiency in China's RCCs. As the experimental reforms are currently being undertaken in eight provinces and cities, the evidence proves extremely useful. The estimated efficiency results are close to one and to each other, which indicates that RCCs in each province are mandated to take the same technology and practices and engage in similar scales of production.

3.0 Methodology

3.1 Research Design

The study adopted *ex-post facto* research design. This is because secondary data is used for the study. The importance of *ex-post facto* research design is that it is a realistic approach in solving cooperative business and social science problems which involves gathering records of past event.

3.2 Sources of Data

The data for this study were sourced from secondary data which were collected from published annual reports and financial statement of the selected SACCOs from 2013 to 2022.

3.3 Area of the Study

The study was conducted in Nigeria and specifically on Savings and Credit Cooperative Societies in Enugu State, Nigeria.

3.4 Population

A total of 15 Savings and Credit Cooperative Societies (SACCOs) quoted on the Nigeria Stock Exchange during the period 2013 to 2022. These 15 SACCOs constituted the population of the study.

3.5 Sample Size Determination

A sample of 10 Savings and Credit Cooperative Societies (SACCOs) were assembled from the population. Only the SACCOs with high records of performance during the period of the study were considered in the sample.

3.6 Model Specification

The model specifications for the study are shown below:

ROA = $\alpha + \beta_1 SAV\_G + \varepsilon$

Where:

ROA = Return on Assets as a Performance Proxy for the sampled SACCOs

SAV_G = Savings Growth

β_1 = Coefficients of the Independent Variables

α = Constant term

ε = Error margin

3.7 Method of Data Analysis

Ordinary Least Square Regression Analysis was utilized to analyze the data collected for the study. Adjusted Coefficient of Determination (R-Square) was used to examine the extent to which the variations in the dependent variable is explained by the independent variable of the study. Savings growth is the independent variable while return on asset is the dependent variable and was the proxy for SACCOs' performance.

4.0 RESULTS AND DISCUSSIONS

Table 1: Summary of Pooled Regression Results.

Dependent Variable: ROA

Method: Panel Least Squares

Date: 11/06/23 Time: 14:12

Sample: 2013 2022

Periods included: 10

Cross-sections included: 10

Total panel (balanced) observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SAV_G	0.647279	0.134550	4.810692	0.0010
C	0.077075	0.090889	0.848009	0.3990

R-squared	0.009135	Mean dependent var	0.757275
Adjusted R-squared	-0.003568	S.D. dependent var	0.319243
S.E. of regression	0.319812	Akaike info criterion	0.582517
Sum squared resid	7.977828	Schwarz criterion	0.642067
Log likelihood	-21.30066	Hannan-Quinn criter.	0.606392
F-statistic	5.719119	Durbin-Watson stat	1.737394
Prob(F-statistic)	0.003028		

Source: ***E-view 12.0 Statistical Output, 2023***

Table 1 presents the results of the pooled regression analysis conducted to test the hypothesis. The obtained f-statistics of 5.719119, which is significant at 0.003028 (less than 0.05), indicate that the model's estimates are fitting. The Durbin-Watson statistic, registering at 1.737394 and approaching 2, implies the absence of serial correlation.

The positive sign of the coefficient (0.647279) aligns with the anticipated positive relationship, indicating that the growth rate of member savings positively influences the performance (ROA) of credit cooperatives. Given this positive coefficient sign, the null hypothesis is rejected, and the alternative hypothesis is accepted, affirming that savings growth exerts a positive impact on the performance of savings and credit cooperative societies (SACCOs) in Nigeria.

Furthermore, the regression results highlight the significance of the t-Statistic (4.810692) associated with the savings growth rate variable (0.0010 < 0.05). This outcome underscores the substantial impact of savings growth on the performance of credit cooperatives in Nigeria.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of findings

The findings from the test of hypothesis revealed significant insights into the relationship between savings growth and the performance of credit cooperatives in Nigeria. The conducted pooled regression analysis, with an f-statistic of 5.719119 deemed significant at 0.003028 (below 0.05), indicates the model's aptness in estimating the relationship.

The Durbin-Watson statistic, standing at 1.737394 and approaching the ideal value of 2, suggests the absence of serial correlation in the data. The positive coefficient sign (0.647279) in relation to the growth rate of member savings aligns with expectations, signifying a positive influence on the performance (ROA) of credit cooperatives. This positive result leads to the rejection of the null hypothesis, with the alternative hypothesis accepted, confirming the positive impact of savings growth on the performance of savings and credit cooperative societies (SACCOs) in Nigeria.

Additionally, the t-Statistic (4.810692) for the savings growth rate variable, with a significance level of 0.0010 (< 0.05), underscores the substantial and statistically significant effect of savings growth on the performance of credit cooperatives in Nigeria. This reinforces the importance of savings growth as a contributing factor to the overall success and financial health of credit cooperatives in the Nigeria.

5.2 Conclusion

In conclusion, the findings from the pooled regression analysis underscore the significant and positive relationship between savings growth and the performance of credit cooperatives in Nigeria. The model's fittingness, as indicated by the significant f-statistic (5.719119), validates its effectiveness in estimating this crucial relationship. The absence of serial correlation, as suggested by the Durbin-Watson statistic nearing the ideal value of 2, enhances the robustness of the analysis.

The positive coefficient sign (0.647279) associated with the growth rate of member savings supports the hypothesis that savings growth exerts a favorable influence on the performance (ROA) of credit cooperatives. This positive impact is not only statistically significant, leading to the rejection of the null hypothesis, but also aligns with the anticipated positive relationship. Consequently, the alternative hypothesis is accepted, confirming the pivotal role of savings growth in enhancing the performance of savings and credit cooperative societies (SACCOs) in Nigeria.

The t-Statistic (4.810692) for the savings growth rate variable, with a significance level of 0.0010 (< 0.05), further emphasizes the substantial effect of savings growth on credit cooperatives' performance. This implies that fostering growth in member savings significantly contributes to the overall success and financial stability of credit cooperatives in the Nigerian context.

5.3 Recommendations

In light of the findings of the study, it is recommended that credit cooperatives in Nigeria prioritize strategies that encourage and facilitate the growth of member savings. This may involve targeted financial education programs, attractive savings products, and efficient member engagement. Such initiatives can not only contribute to the financial well-being of individual members but also enhance the overall performance and sustainability of credit cooperatives in the country.

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