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Loan Management Strategies and Financial Sustainability of Co-Operative Societies in Nigeria

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ABSTRACT

This study examined the effect of loan management strategies on the financial sustainability of co-operative societies in Nigeria. The research specifically investigated two core operational dimensions of loan management such as credit appraisal strategies and credit monitoring practices as independent variables against financial sustainability as dependent variable. Using a survey approach, structured questionnaires were administered to a sample of board trustees comprising presidents, managers, secretaries, and treasurers who steer the administrative and financial governance of these grassroots financial institutions. Out of the distributed instruments, data from 278 respondents drawn from 100 randomly selected co-operative societies were successfully retrieved and deemed fit for analysis. The collected data were processed using descriptive statistics, Pearson product-moment correlation, and ordinary least squares analysis. Empirical results revealed that loan management strategies exercise highly significant combined and individual influence on institutional financial sustainability. Specifically, the regression models revealed that pre-disbursement credit appraisal systems exert a strong, positive, and statistically significant effect on financial sustainability (beta = 0.551), (p = 0.000), accounting for the highest individual variance at (25.8%). On the other hand, post-disbursement credit monitoring practices similarly demonstrated a significant positive influence (beta = 0.457), (p = 0.000), explaining (20.6%) of structural variance. Based on the findings, the study recommends the formal institutionalization of independent credit evaluation committees to mitigate nepotism, and the deployment of digital credit risk screening tools to curb adverse selection. Furthermore, management boards must enforce post-disbursement fund audits and formalize quarterly physical inspections to address moral hazard. To resolve prolonged delinquencies, co-operatives must strictly execute constitutional by-laws regarding direct legal sanctions and collateral liquidation.

Keywords**:** *Creditor appraisal strategies; Credit monitoring practices; Financial sustainability; Cooperative societies*

1. INTRODUCTION

In recent years, the financial landscape of Nigeria has undergone significant transformations, particularly within the co-operative sector. Co-operative societies have increasingly become important instruments for promoting financial inclusion, mobilizing savings, and providing credit facilities to individuals who may have limited access to conventional banking services. These organizations play a significant role in supporting low-income earners, small-scale entrepreneurs, farmers, artisans, and other economically vulnerable groups by facilitating access to affordable financial resources and fostering socio-economic development at the grassroots level. Through their member-owned and democratically controlled structure, co-operative societies contribute to poverty reduction, wealth creation, and community development while strengthening economic resilience among their members (International Cooperative Alliance (ICA), 2023; World Bank, 2022).

In Nigeria, the growing relevance of co-operative societies has been driven by persistent challenges associated with financial exclusion, unemployment, and limited access to formal credit markets, making them indispensable components of the country's financial and developmental framework (Central Bank of Nigeria [CBN], 2023). As a matter of fact, co-operative societies are member-based associations formed to provide mutual assistance among members, especially in savings, credit, and other welfare services (Egor & Obodagu, 2023). In Nigeria, for instance, co-operatives play a critical role in financial inclusion, especially for rural dwellers, smallholder farmers, wage income workers, and those excluded or underserved by formal financial institutions (Onugu e*t al.*2024; Chilokwu et al. 2025). One of their primary functions is providing loans to members thus facilitating capital access, smoothing consumption, and enabling productive investments.

Co-operative societies face multiple challenges in managing loans. These challenges include but not limited to high default rates, weak mechanisms of loan appraisal, insufficient monitoring, inadequate recovery strategies, issues with collateral or guarantee systems, and sometimes manual or non-automated record-keeping (Chilokwu *et al*. 2025; Onugu, et al., 2024). Such weaknesses undermine their ability to maintain financial sustainability that is, the capacity to sustain operations over time, ensure prudent management of funds, cover costs of operations, maintain liquidity, satisfy member demands, and preserve capital (Ojiagu & Chijioke, 2023; Odgubemi & Alade, 2023).

Co-operative societies, by their nature, aim to promote self-help and mutual assistance among their members, thereby fostering economic empowerment and social cohesion. According to the International Co-operative Alliance (2020), co-operatives contribute significantly to the socio-economic development of communities by providing affordable credit and savings option. However, the sustainability of these organizations hinges on effective loan management strategies, which are critical in ensuring that they can meet their financial obligations while also supporting their members' needs. Recent empirical studies show that organizational factors such as member training, conflict/crisis management, cohesion, participative leadership and transparency are significantly linked with better credit repayment and lower default (Onugu, Obasanya, & Nwosu, 2024; Nwosu & Onugu, 2025).

Loan management encompasses the processes involved in the administration of loans, including loan origination, monitoring, and collection (Ojo, 2019). Poor loan management can lead to high default rates, which jeopardizes the financial sustainability of co-operative societies (Adebayo & Ojo, 2021). Additionally, credit management practices like setting collateral, enforcing repayments, having reliable monitoring, and recovery mechanisms have been found to influence financial performance positively (Chilokwu, et al. 2025). Yet, many co-operatives in Nigeria are still using manual systems for record-keeping and collection, which contributes to delays, inefficiencies, potential for loss, and higher risks (BrandSpur, 2025) all of which impair financial sustainability.

Financial sustainability, defined as the ability of an organization to maintain its financial health over time, is crucial for the longevity and effectiveness of co-operatives (Mokogwu, 2020; Uford, 2017). Consequently, assessing the various loan management strategies employed by co-operative societies, understanding how effective they are, and quantifying their influence on financial sustainability is vital. This investigation not only fills important empirical gaps but also can point toward actionable improvements for co-operative management, regulators, and policy makers. Despite the importance of effective loan management strategies, there is a paucity of empirical research examining their effect on financial sustainability of co-operative societies in Nigeria.

Hypotheses of the Study

The following hypotheses were tested:

Ho_1: Credit appraisal system has no significant effect on financial sustainability of co-operative societies in Delta State, Nigeria

Ho_2: Credit monitoring has no significant influence on financial sustainability of co-operative societies

2. REVIEW OF RELATED LITERATURE

Overview of Co-Operative Societies

Co-operative societies are voluntary associations of individuals who pool their resources to meet common economic, social, and cultural needs through jointly owned and democratically controlled enterprises (International Co-operative Alliance [ICA], 2022). In Nigeria, co-operatives play an important role in promoting financial inclusion, particularly among low-income groups excluded from formal banking systems (Eze & Iwu, 2021). They provide savings, loans, and investment services that empower members economically and socially. The Co-operative Societies Act (2004) regulates their operations, emphasizing accountability, transparency, and member participation.

The management of loans within co-operative societies is a critical area of study, particularly in the context of Nigeria's evolving economic landscape. This chapter reviews existing literature on loan management strategies and their implications for financial sustainability in co-operative societies. By synthesizing various theoretical frameworks and empirical studies, this literature review aims to provide a comprehensive understanding of how effective loan management can enhance the financial performance of co-operative societies while addressing the unique challenges they face. The chapter is structured to first explore the theoretical underpinnings relevant to loan management, followed by an examination of key themes, including the role of effective loan management, the challenges encountered by co-operative societies, and the significance of financial sustainability.

The literature on loan management strategies in co-operative societies highlights various approaches, including risk assessment, member education, and the use of technology (Ojo & Abiola, 2019). Empirical studies have shown that effective loan management can lead to improved financial performance and sustainability (Ogunleye, 2021). However, there is a gap in the literature regarding the specific strategies employed by co-operative societies in Nigeria and their direct impact on financial sustainability.

Co-operative societies are member-owned organizations that operate on the principles of mutual assistance and collective benefit. In Nigeria, these societies play a pivotal role in promoting economic development, particularly in rural areas where access to financial services is limited. They provide members with access to credit, savings, and other financial services, thereby enhancing their economic well-being. The co-operative model is grounded in principles such as voluntary membership, democratic governance, and equitable distribution of benefits, which collectively foster a sense of community and shared responsibility among members.

The significance of co-operative societies in the Nigerian economy cannot be overstated. They serve as vital instruments for poverty alleviation, income generation, and employment creation. By pooling resources, members can access larger sums of capital than they would individually, enabling them to invest in income-generating activities. Furthermore, co-operative societies contribute to financial inclusion by providing services to underserved populations, thus bridging the gap between formal financial institutions and the unbanked. This role is particularly crucial in a country where a significant portion of the population remains outside the formal banking system.

One of the primary challenges faced by co-operative societies in Nigeria is limited access to capital. Many co-operatives struggle to secure funding from traditional financial institutions due to stringent lending criteria and a lack of collateral. This limitation hampers their ability to offer competitive loan products and expand their services. Additionally, the reliance on member contributions for funding can create liquidity constraints, particularly during periods of economic downturn. Co-operatives must navigate these challenges by exploring alternative funding sources, like government grants, partnerships with non-governmental organizations, and innovative financing models.

Loan Management Strategies

Loan management refers to the systematic process of appraising, approving, disbursing, monitoring, and recovering loans in order to minimize risk and ensure repayment (Oladejo & Olayinka, 2020). Effective loan management ensures that funds are allocated to creditworthy members, interest income is maximized, and loan losses are minimized (Afolabi, 2022). Loan management involves several components-credit appraisal, loan documentation, collateral management, supervision, and recovery strategies (Nnadi & Okoye, 2021). Effective loan management is essential for the sustainability of co-operative societies. It encompasses a range of practices aimed at ensuring that loans are disbursed, monitored, and repaid in a manner that minimizes risk and maximizes financial returns. The contemporary enterprise environment is increasingly described by rapid dynamism occasioned by both internal and external context (Akpoyibo, 2025c). Therefore, effective loan management approach becomes imperative.

Key principles of loan management include thorough credit assessment, risk evaluation, and the establishment of clear repayment terms. Additionally, fostering a culture of financial literacy among members is critical, as it empowers them to make informed decisions regarding borrowing and repayment. The integration of these principles into the operational framework of co-operative societies is vital for enhancing their financial sustainability
.
Loan management strategies can be grouped into five major areas:

(i) *Loan Appraisal Procedures-The assessment of borrowers' capacity, character, collateral, and conditions before loan approval (Adewale & Osuji, 2020).*
(ii) *Loan Disbursement and Monitoring -Ensures that loans are used for intended purposes and are repaid as agreed (Onyekwere & Eze, 2021).*
(iii) *Repayment Enforcement Mechanisms – Sanctions, incentives, or legal remedies that ensure timely repayment (Olaoye, 2020).*
(iv) *Member Financial Literacy and Education-Helps members understand repayment obligations and prudent loan usage (Okafor & Nwankwo, 2023).*
(v) *Loan Diversification and Interest Rate Policy -Balances risk and return by spreading loan exposure across sectors and setting rates aligned with risk (Bello, 2022).*

Each of these components plays a crucial role in determining the overall financial health of co-operative societies. The framework also recognizes the external factors influencing loan management, such as regulatory policies, economic conditions, and market dynamics. By situating loan management within this broader context, the framework facilitates a holistic understanding of the challenges and opportunities faced by co-operative societies in Nigeria.
Effective loan management is pivotal in enhancing the financial performance of co-operative societies. By implementing sound lending practices, co-operatives can minimize default rates, optimize interest income, and improve liquidity. Research indicates that societies with robust loan management systems tend to exhibit stronger financial indicators, such as higher return on assets and equity.

Moreover, effective loan management fosters member trust and satisfaction, which are essential

for member retention and growth. When members perceive that their co-operative is managing loans prudently, they are more likely to engage with the organization, whether through borrowing, saving, or participating in governance. Risk management is a critical aspect of loan management that directly impacts financial sustainability. Co-operative societies must assess and mitigate various risks associated with lending, including credit risk, operational risk, and market risk. Implementing comprehensive risk assessment frameworks allows co-operatives to identify potential defaults early and take corrective actions.

Furthermore, diversification of loan portfolios can serve as a risk mitigation strategy. By offering a variety of loan products tailored to different member needs, co-operatives can spread risk and enhance their resilience against economic fluctuations. This approach not only safeguards the financial stability of the organization but also promotes financial inclusion among members. The regulatory environment in Nigeria poses significant challenges for co-operative societies. Inconsistent policies and regulatory frameworks can hinder the growth and sustainability of these organizations. Co-operatives often face bureaucratic hurdles in obtaining licenses and complying with regulatory requirements, which can divert resources away from core operations.

Moreover, the lack of a supportive legal framework for co-operative societies can limit their ability to engage in strategic partnerships and access external funding. Advocacy for policy reforms that promote a conducive environment for co-operatives is essential for enhancing their financial sustainability.

Financial Sustainability

Financial sustainability refers to an organization's ability to generate sufficient income to meet operational expenses, maintain capital adequacy, and achieve long-term viability without external subsidies (Muriithi, 2020). In co-operatives, sustainability depends on effective loan portfolio management, profitability, liquidity, and institutional capacity (Oluwatosin, 2021). Indicators such as Portfolio at Risk (PAR), Operational Self-Sufficiency (OSS), Return on Assets (ROA), and Capital Adequacy Ratio (CAR) are commonly used to assess financial sustainability (Wanjiku & Kilonzo, 2021). Financial sustainability is crucial for the long-term viability of co-operative societies, particularly in Nigeria's dynamic economic environment. Sustainable co-operatives contribute to local economies by providing access to credit, promoting entrepreneurship, and creating jobs. Their ability to withstand economic shocks is vital for maintaining stability within communities.

Furthermore, financially sustainable co-operatives can play a significant role in poverty alleviation by empowering members through access to financial services (Akpan & Uford, 2024). By fostering economic resilience, these organizations contribute to broader development goals and enhance the overall well-being of their members. Beyond economic considerations, financial sustainability in co-operative societies fosters social cohesion and community development. Co-operatives often serve as platforms for collective action, enabling members to collaborate on initiatives that address local challenges. Financially sustainable co-operatives can invest in community projects, education, and health services, thereby enhancing the quality of life for their members and the surrounding community.

Moreover, the democratic governance structure of co-operatives promotes active participation and engagement among members, reinforcing social ties and community solidarity. This aspect of co-operative societies is particularly important in Nigeria, where social networks play a vital role in economic and social interactions.

Credit Appraisal System and Financial Sustainability

Credit appraisal is a fundamental component of loan management that involves assessing the creditworthiness and repayment capacity of prospective borrowers before loans are approved. It

entails a systematic evaluation of an applicant's financial position, business viability, repayment history, and overall credibility to ensure that credit is extended to borrowers who possess both the capacity and willingness to repay. According to Oluwaseun and Adewale (2022), the credit appraisal system forms the foundation of prudent lending practices by ensuring that loans are granted only to borrowers who demonstrate acceptable levels of credit risk. In co-operative societies, credit appraisal is particularly important because these institutions pursue both social and economic objectives. While they seek to improve members' welfare through access to credit, they must also maintain financial sustainability by minimizing loan defaults and preserving the quality of their loan portfolio (Eze & Onwuchekwa, 2020). However, Akpoyibo (2026a) emphasizes that appraisal systems in Nigeria faces several ethical and structural drawbacks/constraints.

A sound credit appraisal system contributes significantly to the financial sustainability of co-operative societies by reducing credit risk and improving the quality of lending decisions. The appraisal process commonly involves the evaluation of the "Five Cs" of credit—Character, Capacity, Capital, Collateral, and Conditions—which collectively provide a comprehensive assessment of a borrower's risk profile. Nwankwo (2021) emphasized that the Five Cs model remains one of the most reliable frameworks for credit evaluation because it combines qualitative and quantitative measures of borrower risk. In addition, credit appraisal includes the examination of borrowers' financial statements, cash flow projections, debt obligations, and business performance to determine their repayment ability (Iheanacho, 2021). By identifying high-risk applicants before loan approval, the appraisal system minimizes the incidence of non-performing loans and protects the financial resources of the co-operative society.

Credit appraisal also serves as a strategic tool for enhancing financial sustainability through effective loan management. Loan management encompasses all activities relating to loan planning, approval, disbursement, monitoring, and recovery (Okoro & Ibe, 2023). Within this framework, credit appraisal functions as a preventive risk management mechanism that ensures only qualified borrowers receive credit facilities. This proactive approach minimizes loan losses, improves repayment performance, and strengthens the liquidity position of co-operative societies. Consequently, institutions with effective appraisal systems are better positioned to maintain stable cash flows, improve profitability, and sustain their lending operations over the long term.

Furthermore, credit appraisal promotes transparency, accountability, and financial discipline within co-operative societies by ensuring that lending decisions are based on objective and measurable criteria rather than personal relationships or favoritism (Chukwuma & Ezeani, 2022). Such transparency strengthens members' confidence in the management of the society and encourages responsible borrowing behaviour, both of which contribute to institutional stability and financial sustainability.

Recent developments in financial technology have further strengthened the relationship between credit appraisal and financial sustainability. Modern credit appraisal systems increasingly utilize automated credit scoring models, predictive analytics, and digital databases to improve the speed, consistency, and accuracy of lending decisions. Adeniyi (2022) observed that technology-driven appraisal tools enhance decision-making by reducing human bias and improving operational efficiency. Similarly, Ugochukwu and Nnamdi (2023) reported that the adoption of digital credit appraisal systems by Nigerian co-operative societies has significantly improved loan recovery performance, reduced default rates, and enhanced overall financial sustainability through real-time borrower monitoring and data-driven credit decisions.

Despite its importance, effective credit appraisal in many Nigerian co-operative societies is constrained by inadequate recordkeeping, limited access to reliable borrower information, and low levels of financial literacy among members. These challenges reduce the effectiveness of the appraisal process, increase the likelihood of poor lending decisions, and contribute to the accumulation of non-performing loans (Iheanacho, 2021). Consequently, strengthening

institutional capacity through continuous staff training, improved digital record management systems, and regular capacity-building programmes for credit officers remains essential for enhancing credit appraisal practices and ensuring the long-term financial sustainability of co-operative societies.

Credit Monitoring System and Financial Sustainability

Credit monitoring is an essential component of loan management that involves the continuous supervision and evaluation of borrowers' repayment behaviour and financial condition after loan disbursement. It is a systematic process that enables lending institutions to monitor loan performance, detect early warning signs of potential default, and implement corrective measures before loan losses occur. According to Eze and Onwuchekwa (2020), credit monitoring provides an effective mechanism for tracking loan performance, identifying repayment challenges, and taking appropriate actions to minimize financial losses. In co-operative societies, an effective credit monitoring system contributes directly to financial sustainability by maintaining loan quality, reducing default risk, and ensuring a continuous flow of loan repayments that supports future lending activities.

Credit monitoring extends beyond the initial stages of loan appraisal and disbursement to include regular reviews of loan accounts, field inspections, periodic assessments of borrowers' financial performance, and continuous evaluation of loan utilization. Okoro and Ibe (2023) emphasized that proactive credit monitoring enables co-operative societies to detect problems such as delayed repayments, diversion of loan funds, and declining business performance at an early stage. Through timely follow-up and supervision, co-operatives ensure that loans are utilized for their intended purposes, thereby reducing credit risk, improving repayment performance, and strengthening their financial sustainability.

In co-operative societies, credit monitoring is typically carried out by loan or credit committees that maintain regular communication with borrowers and closely monitor repayment schedules. This collaborative approach promotes transparency, accountability, and responsible borrowing because members function as both owners and beneficiaries of the institution (Oluwaseun & Adewale, 2022). Continuous monitoring, periodic financial reviews, and consistent borrower engagement enable co-operative societies to maintain high-quality loan portfolios, preserve liquidity, and sustain members' confidence in the institution (Charles & Uford, 2023).

As a strategic component of loan management, credit monitoring plays a significant role in promoting financial sustainability through the early identification and management of non-performing loans. Adeniyi (2022) asserted that the effectiveness of any credit management framework depends largely on an institution's ability to monitor loans continuously after disbursement.

By identifying repayment challenges at an early stage, co-operative societies can implement corrective measures such as borrower counseling, loan restructuring, or intensified follow-up before loans deteriorate into bad debts. These proactive interventions reduce loan losses, improve portfolio quality, strengthen liquidity, and enhance the long-term financial sustainability of co-operative societies. Technological advancements have strengthened the effectiveness of credit monitoring systems and their contribution to financial sustainability. The adoption of loan management software, mobile banking applications, electronic repayment platforms, and digital dashboards enables co-operative societies to monitor loan repayments in real time, generate timely reports, and respond quickly to emerging repayment challenges. Ugochukwu and Nnamdi (2023) reported that Nigerian co-operative societies using digital credit monitoring systems achieved higher collection efficiency, improved loan recovery, and earlier detection of delinquent loans, thereby enhancing operational efficiency and financial sustainability.

Theoretical Framework

Agency Theory, developed by Jensen and Meckling (1976), explains the relationship between principals (co-operative members) and agents (management/loan officers). This theory is particularly relevant to co-operative societies, where members are both owners and beneficiaries, necessitating a balance between individual interests and collective goals. It posits that conflicts of interest may arise when managers pursue self-interest rather than the collective welfare of members. Effective loan management systems such as monitoring, reporting, and incentive alignment, help reduce agency problems.

In co-operative societies, members delegate authority to elected management committees and weak internal controls or poor supervision can result in moral hazard and loan defaults (Eze & Ogbuabor, 2020). Credit monitoring, therefore, serves as a control mechanism to align the borrower's behavior with the lender's expectations (Eze & Onwuchekwa, 2020). In co-operative societies, where loans are granted based on mutual trust, agency problems can be mitigated through close supervision and regular reporting systems.

3. METHODOLOGY

This study adopted a descriptive survey research design. The target population comprises of registered co-operative societies operating in Delta State as recognized by their respective co-operative departments. The population includes management committee members (executive/loan officers but particularly the board of trustees (BOT) i.e. the President, Manager, Secretary, Accountant, and Treasurer). According to the Federal Department of Co-operatives, 2025, Delta State has over 40,000 co-operative societies across the state. This figure comes from recent efforts by the state government to recertify these societies, aiming to identify functional ones and create a comprehensive database for better policy-making. The process has not been finalized. However, in 2017, the government disbursed to 593 verified societies across the state. For the purpose of this research, 100 co-operative societies would be selected across the three (3) senatorial districts: Delta North-36, Delta Central-32 and Delta South-32.

Krejcie and Morgan developed and recommended the sample table for researchers to use (see appendix iv). Again, Saunders, Lewis and Thornhill (2019) stated that a sample size between300 and 400 respondents is generally considered statistically adequate for correlation, regression and SEM, given a 95% confidence level and 5% margin of error. Ehiwario, Onyemekonwu and Giweze (2024), used 337 respondents to successfully conduct inferential analysis on co-operative members.

Arising from the above, a sample size of Three Hundred (300) respondents was chosen from across the 100 co-operative societies in Delta State for this research. A multistage sampling technique was also employed for this study. At the first stage, purposive sampling was used to select the study area because of the high concentration of registered co-operative societies. At the second stage, stratified sampling was adopted to classify the 100 population into homogeneous groups based on the type of co-operative society and 10 respondents to be chosen from each of the 100 societies to arrive at 1000 population. Finally, proportionate simple random sampling was used to select respondents from each stratum.

The study used structured questionnaire which was designed to address the demographic information of respondents and variables of appraisal, monitoring and financial sustainability. Responses were measured using a five-point Likert scale:1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. A pilot test was conducted on 30 respondents outside the main sample and correlated using the Cronbach's alpha coefficient

Table 1: Results of Cronbach Alpha Reliability Coefficients

Items	Cronbach Alpha Index	Number of Items
Financial Sustainability	0.863	5

Credit Appraisal System	0.865	5
Credit Monitoring System	0.862	5

Source: Computed by the Researcher (2026)

In this study, the dependent variable is financial sustainability while the independent variable is loan management strategies (measured using loan appraisal and monitoring). On the basis of the above, the following simple regression model was estimated:

$$FS = \beta_0 + \beta_1 CAS + \beta_2 CMS + e$$
$$FS = \beta_0 + \beta_1 CAS_i + e,$$
$$FS = \beta_0 + \beta_2 CMS_{i,} + e,$$

Where: FS = Financial Sustainability; CAS = Credit Appraisal System (thoroughness of credit evaluation); CMS = Credit Monitoring System (frequency and effectiveness of follow-up); a = Constant (intercept) ; b = Regression coefficient (slope) ; e = Error term. The quantitative data was analyzed using SPSS 27. Descriptive statistics (mean, frequency, and standard deviation) was used to describe respondent characteristics of the questionnaire items and demographic information of respondents. In addition, Karl Pearson correlation was used to test relationships among variables of the study. On the other hand, simple regression model was used to test the relevant hypotheses and to determine the strength and direction of effects. Hypotheses will be tested at a 5% significance level ($p < 0.05$).

4. RESULTS AND DISCUSSION

Table 2: Demographics of the Respondents

Parameters	**Frequency**	**Percentage**
Gender		
Male	236	84.9
Female	42	15.1
Total	278	100.0
Age		
36-45 Years	24	8.6
46-55 Years	60	21.6
Above 55 Years	194	69.8
Total	**278**	**100.0**
Parameters	**Frequency**	**Percentage**
Educational Qualifications		
SSCE	18	6.5
OND/NCE	24	8.6
HND/B.Sc	188	67.6
M.Sc/PhD	48	17.3
Total	**278**	**100.0**
Position in Cooperative Society		
President	90	32.4
Manager	9	3.2
Secretary	134	48.2
Treasurer	45	16.2
Total	**278**	**100.0**
Years of Membership/Service in the Cooperative		
1-5 years	21	7.6
6-10 years	26	9.4
Above 10 years	231	83.1
Total	**278**	**100.0**

Source: *Compiled by the Researcher (2026)*

Table 2shows the distribution of respondents based on gender. The result revealed that 236 respondents representing 84.9% were male, while 42 respondents representing 15.1% were female. This indicates that the majority of the respondents involved in the study were male. The table also presents the distribution of respondents according to age range. The result indicated that 24 respondents representing 8.6% were between 36–45 years, 60 respondents representing 21.6% were between 46–55 years, while 194 respondents representing 69.8% were above 55 years. This shows that the majority of the respondents were above 55 years of age.Furthermore, the table shows distribution of respondents based on educational qualification. The result revealed that 18 respondents representing 6.5% possessed SSCE qualifications, 24 respondents representing 8.6% possessed OND/NCE qualifications, 188 respondents representing 67.6% possessed HND/B.Sc. qualifications, while 48 respondents representing 17.3% possessed M.Sc./PhD qualifications. This indicates that the majority of the respondents possessed HND/B.Sc. qualifications.

The distribution of respondents according to their positions in the cooperative society was also presented. The result showed that 90 respondents representing 32.4% were presidents, 9 respondents representing 3.2% were managers, 134 respondents representing 48.2% were secretaries, while 45 respondents representing 16.2% were treasurers. This indicates that the majority of the respondents were secretaries in their respective cooperative societies. The table shows the distribution of respondents based on years of membership or service in the cooperative society. The result revealed that 21 respondents representing 7.6% had spent between 1–5 years in the cooperative, 26 respondents representing 9.4% had spent between 6–10 years, while 231 respondents representing 83.1% had spent above 10 years in the cooperative society. This indicates that the majority of the respondents had over 10 years of membership or service in the cooperative society.

Table 3: Pearson Correlation Result for Appraisal System and Financial Sustainability

Variable	*N*	*R*	r^2	r^2%	Remark
Credit Appraisal System Financial Sustainability	278	0.508	0.258	25.8	Positive Relationship

Source: *Compiled by the Researcher (2026)*

Table 43 presents the Pearson's product moment correlation analysis on the extent to which credit appraisal system influences financial sustainability of co-operative societies in Delta State. The result revealed a correlation coefficient (*r*) of 0.508, indicating a moderate positive relationship between credit appraisal system and financial sustainability of co-operative societies. The coefficient of determination (r^2) of 0.258 showed that credit appraisal system accounted for 25.8% of the variance in financial sustainability of co-operative societies in Delta State, while the remaining 74.2% could be attributed to other variables not examined in the study. The finding implies that improvement in credit appraisal system is associated with improvement in the financial sustainability of co-operative societies in Delta State.

Table 4: Pearson Correlation Result for Credit Monitoring and Financial Sustainability

Variable	*N*	*R*	r^2	r^2%	Remark
Credit Monitoring System Financial Sustainability	278	0.454	0.206	20.6	Positive Relationship

Source: *Compiled by the Researcher (2026)*

Table 4 presents the Pearson's Product Moment Correlation analysis on the extent to which credit monitoring influences financial sustainability of co-operative societies in Delta State. The result revealed a correlation coefficient (r) of 0.454, indicating a moderate positive relationship between credit monitoring and financial sustainability of co-operative societies. The coefficient of determination (r^2) of 0.206 showed that credit monitoring accounted for 20.6% of the variance

in financial sustainability of co-operative societies, while the remaining 79.4% could be attributed to other variables not examined in the study. Finding implies that effective credit monitoring contributes positively to financial sustainability of co-operative societies in Delta State.

Table 5: Mean/Standard Deviation Response on Credit Appraisal System

S/N	Items	Mean	Std. Dev
1	The society has a formal credit appraisal policy that is conducted before every loan is approved	2.146	1.001
2	The society verifies the income and employment status of loan applicants.	2.771	0.793
3	Loan applicants are required to provide guarantors as part of the appraisal process.	2.967	0.782
4	Credit appraisal contributes to better loan recovery performance.	2.746	0.936
5	The appraisal process enhances the society's financial sustainability.	2.776	0.501

Source: *Compiled by the Researcher (2026)*

Table 5 showed the mean/standard deviation responses on credit appraisal system. The result reveals that out of the five (5) items on credit appraisal system, three (3) items scored above 2.5 cut-off point of mean. However, the result suggests that respondents agreed/perceived that cooperative societies usually verify the income and employment status of loan applicants as well as the applicants being required to provide guarantors as part of the credit appraisal process. Hence, to an extent, credit appraisal system influences financial sustainability of co-operative societies in Delta State.

Table 6: Mean/Standard Deviation Response on Credit Monitoring

S/N	Items	Mean	Std. Dev
1	Members are reminded of due repayment dates before deadlines.	3.483	0.592
2	There is an internal control mechanism and formal credit monitoring system to track overdue loans.	3.408	0.585
3	Credit monitoring ensures early recovery of loans.	3.395	0.758
4	Credit monitoring contributes to the society's financial sustainability.	3.095	0.969
5	The credit monitoring system promotes accountability and transparency.	3.251	0.406

Source: Compiled by the Researcher (2026)

Table 6 showed the mean/standard deviation responses on credit monitoring. The result reveals that out of the five (5) items on credit monitoring; all the items scored above 2.5 cut-off point of mean. Hence, the result suggests that respondents agreed/perceived that cooperative societies usually engage in credit monitoring. Overall, to an extent, credit monitoring influence financial sustainability of co-operative societies in Delta State.

Ho1: Credit appraisal system has no significant effect on financial sustainability of co-operative societies

Table 7: Credit Appraisal System and Financial Sustainability

Model	**Sum of Square**	***Df***	**Mean Square**	***F***	**Sig**
Regression	575.988	1	575.988	96.070	.000[b]
Residual	1654.764	276	5.996		
Total	2230.752	277			
			Variables in Equation		
Model	**Unstandardized Coefficient**		**Standardised Coefficient**	***T***	**Sig**
	B	**Std. Error**	**Beta**		
(Constant)	10.258	1.198		8.563	0.000
Credit Appraisal System	0.551	0.056	0.508	9.802	0.000

α = 0.05, *R* = 0.508, *R*-Square = 0.258
Source: *Compiled by the Researcher (2026)*

Table 7 presents the linear regression analysis on the relationship between credit appraisal system and financial sustainability of co-operative societies. The result revealed an F-value of 96.070 with a corresponding p-value of 0.000, which is less than the 0.05 level of significance. Therefore, the null hypothesis was rejected. This implies that credit appraisal system has a significant effect on the financial sustainability of co-operative societies in Delta State. The result further showed a correlation coefficient (R) of 0.508, indicating a moderate positive relationship between credit appraisal system and financial sustainability.

The coefficient of determination (R^2) of 0.258 revealed that credit appraisal system accounted for 25.8% of the variation in financial sustainability of co-operative societies, while the remaining 74.2% could be attributed to other factors not included in the model. The regression coefficient analysis showed that credit appraisal system had a positive contribution to financial sustainability with an unstandardized beta coefficient (B) of 0.551, standardized beta coefficient (Beta) of 0.508, t-value of 9.802, and p-value of 0.000. This indicates that an increase in effective credit appraisal system would significantly increase the financial sustainability of co-operative societies in Delta State.

Ho2: Credit monitoring has no significant influence on financial sustainability of co-operative societies

Table 8: Credit Monitoring and Financial Sustainability

Model	**Sum of Square**	***Df***	**Mean Square**	***F***	**Sig**
Regression	459.481	1	459.481	71.597	0.000[b]
Residual	1771.271	276	6.418		
Total	2230.752	277			
	Variables in Equation				
Model	**Unstandardized Coefficient**		**Standardised Coefficient**	***T***	**Sig**
	B	**Std. Error**	**Beta**		
(Constant)	12.135	1.165		10.415	0.000
Credit Monitoring	0.457	0.054	0.454	8.461	0.000

α = 0.05, *R* = 0.454, *R*-Square = 0.206
Source: *Compiled by the Researcher (2026)*

Table 8 presents the linear regression analysis on the relationship between credit monitoring and financial sustainability of co-operative societies. The result revealed an F-value of 71.597 with a corresponding p-value of 0.000, which is less than the 0.05 level of significance. Therefore, the null hypothesis was rejected. This implies that credit monitoring has a significant influence on the financial sustainability of co-operative societies in Delta State. The result further showed a correlation coefficient (R) of 0.454, indicating a moderate positive relationship between credit monitoring and financial sustainability.

The coefficient of determination (R^2) of 0.206 revealed that credit monitoring accounted for 20.6% of the variation in financial sustainability of co-operative societies, while the remaining 79.4% could be attributed to other factors not included in the model. The regression coefficient analysis showed that credit monitoring had a positive contribution to financial sustainability with an unstandardized beta coefficient (B) of 0.457, standardized beta coefficient (Beta) of 0.454, t-value of 8.461, and p-value of 0.000. This indicates that effective credit monitoring would significantly improve the financial sustainability of co-operative societies in Delta State.

The findings also support Chukwuma and Ezeani (2022), who argued that objective and transparent credit appraisal procedures promote accountability, fairness, and financial discipline in lending decisions. Lending based on measurable criteria rather than personal relationships enhances members' confidence in the management of cooperative societies and encourages responsible borrowing behaviour, thereby strengthening institutional sustainability.

In addition, the empirical evidence is consistent with the technological perspective advanced by Adeniyi (2022) and Ugochukwu and Nnamdi (2023), who observed that the adoption of automated credit scoring systems, predictive analytics, and digital borrower databases improves the speed, consistency, and accuracy of lending decisions. These technology-driven appraisal systems reduce human bias, improve loan monitoring, lower default rates, and ultimately enhance the financial sustainability of cooperative societies. The significant positive effect obtained in this study suggests that cooperative societies in Delta State can further improve their financial sustainability by strengthening digital credit appraisal systems and continuously building the capacity of credit officers.

Furthermore, the findings agree with Eze and Ogbuabor (2020), who argued that in cooperative societies, members delegate authority to elected management committees to administer loan activities on their behalf. Without effective monitoring and internal control systems, weak supervision may encourage moral hazard, loan diversion, repayment delays, and increased loan defaults. The positive relationship established in this study suggests that cooperative societies that strengthen their monitoring systems are better able to minimize these agency problems, improve loan recovery, preserve liquidity, and enhance long-term financial sustainability.
Similarly, the findings corroborate Eze and Onwuchekwa (2020), who maintained that credit monitoring serves as a control mechanism that aligns borrowers' behaviour with lenders' expectations through continuous supervision, regular reporting, and timely intervention. The significant positive coefficient obtained in this study indicates that effective monitoring enables cooperative societies to identify repayment challenges early, enforce loan conditions, encourage responsible borrower behaviour, and reduce the incidence of non-performing loans. This ultimately strengthens the quality of the loan portfolio and improves institutional sustainability.

5. CONCLUSION AND RECOMMENDATIONS

This study examined the effect of loan management strategies on financial sustainability of co-operative societies in Delta State, Nigeria. An analysis of 278 co-operative society trustees in Delta State was used and the study indicates that loan management strategies, specifically credit appraisal and monitoring are critical to financial sustainability. The study found that structured credit appraisal systems and post-disbursement monitoring have positive impacts on financial

health. Based on the findings, the following recommendations are made:

(i) ***Institutionalization of a standardized credit appraisal system:*** *There is need to establish independent credit evaluation committees. For instance, management should constitute dedicated Credit Evaluation Committees composed of competent personnel to eliminate nepotism and insider-lending bias. Also, loan vetting processes must strictly move beyond social relations to evaluate an applicant's actual business capitalization, revenue generation capacity, and repayment history. More so, management boards must automate screening and credit appraisal tracking.*

(ii) ***Reinforcement of continuous post-disbursement credit monitoring:*** *There is need to enforce post-disbursement fund audits. For instance, co-operative trustees must introduce systems to ensure that members utilize loans strictly for the commercial purposes declared during the appraisal stage; this active tracking deters fund diversion toward dead-end consumer spending. Also, credit officers should utilize proactive member-tracking schedules. More importantly, the management board should formalize quarterly physical inspections of businesses funded by co-operative capital to keep risk management adaptive.*

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