

INFLUENCE OF LOAN DEFAULTS ON FINANCIAL PERFORMANCE OF UNIVERSITY WORKER COOPERATIVE IN ANAMBRA STATE, NIGERIA.

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Article Info

Keywords: loan defaults, financial performance, University workers. Cooperative, liquidity, and Return on investment.

DOI

10.5281/zenodo.14288113

Abstract

The study titled “Influence of Loan Defaults on the Financial Performance of University Worker Cooperatives in Anambra State” aims to investigate how loan defaults impact key financial performance indicators—Net Profit Margin, liquidity, and Return on Equity (ROE)—of university worker cooperatives in Anambra State, Nigeria. Anchored on agency theory, this research explores the relationship between cooperative members (agents) and management (principals) and examines how misaligned financial responsibilities contribute to loan defaults. A descriptive survey research design was employed, targeting staff members from federal and state universities in Anambra, with a sample size of 382 respondents. Data were collected using structured questionnaires and analyzed using descriptive and Pearson’s product correlation analyses. The findings revealed significant positive effect of loan default on net profit, liquidity, and return on equity of university worker cooperatives in the study area. The study concludes that managing loan defaults is critical to cooperatives’ financial sustainability. It recommends that strict approval policies can help minimize the risk of defaults by ensuring that loans are issued primarily to members with a proven ability to repay and establishment of a system to monitor early signs of financial distress, such as delayed payments, so that the cooperative can proactively reach out to members facing difficulty. and organize workshops focused on budgeting, debt management, and the importance of timely repayments. These sessions can help members manage their personal finances effectively and make informed borrowing decisions.

1.1 Background of the study

The financial performance of cooperative societies, especially those within academic institutions, has garnered significant interest recently. University worker cooperatives, which provide financial services such as loans to

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their members, play a crucial role in supporting the financial stability and welfare of university staff. However, loan defaults pose a considerable threat to their sustainability. Loan defaults occur when borrowers fail to repay their loans as agreed, leading to financial instability within the cooperative. According to Demirgüç Kunt et al. (2022), loan defaults can significantly undermine cooperatives' capital base, constraining their ability to offer further financial services and support to members.

Recent studies by Gupta and Patel (2023) and Brown et al. (2022) have emphasized that the ripple effects of loan defaults extend beyond immediate financial losses. These defaults can erode member trust and confidence in the cooperative's ability to manage funds effectively, thereby affecting membership growth and retention. In addition, the administrative burden of managing defaults diverts resources from other productive activities. The negative impact on cash flows can also limit the cooperative's capacity to invest in growth opportunities and improve service delivery, which is essential for maintaining competitiveness in the financial sector.

Understanding the influence of loan defaults on university worker cooperatives' financial performance is critical for developing effective risk management strategies and policies. This study explores the extent to which loan defaults affect the financial health of these cooperatives, drawing on empirical evidence and theoretical frameworks. By analyzing recent data and insights from Sharma and Singh (2022) and Silva and Oliveira (2020), this research provides a comprehensive understanding of the challenges posed by loan defaults and offers recommendations for mitigating these risks. Ultimately, these findings will enhance the resilience and financial performance of university worker cooperatives.

The financial stability and performance of cooperative societies are paramount, especially within university settings where staff welfare significantly hinges on the efficient operation of these cooperatives. University worker cooperatives typically offer a range of financial services, including savings and loan products, aimed at improving the financial well-being of their members. However, loan defaults, where borrowers fail to meet their repayment obligations, pose a significant threat to the viability of these cooperatives. This study examines the influence of loan defaults on the financial performance of university worker cooperatives by drawing on recent literature and empirical studies to understand the interplay of various variables involved.

Loan default is a critical variable that directly impacts cooperatives' financial health. According to Demirgüç Kunt et al. (2022), high default rates can deplete cooperatives' capital reserves, restricting their ability to lend to other members and support community development initiatives. Loan defaults can arise from various factors, including economic downturns, poor credit assessment procedures, and inadequate loan monitoring systems. As highlighted by Sharma and Singh (2022), the lack of robust credit risk management strategies can intensify default incidence leading to financial distress within cooperatives.

Financial performance, the dependent variable in this study, encompasses various indicators such as profitability, liquidity, and solvency. Gupta and Patel (2023) note that loan defaults can adversely affect cooperatives' profitability by reducing their interest income. Additionally, defaults can strain liquidity, as funds that could have been used for further lending or investments are tied up in nonperforming loans. Silva and Oliveira (2020) argued that sustained high default rates can lead to solvency issues, where cooperatives struggle to meet their long-term financial obligations, thereby jeopardizing their operational sustainability.

Another critical variable to consider is the quality of the cooperative's loan portfolio. The portfolio's composition, including the mix of high-risk and low-risk loans, directly influences the likelihood of default. Brown et al. (2022) suggested that diversifying loan portfolios and adopting stringent credit assessment criteria can mitigate the risks associated with defaults. Effective loan management practices, such as regular monitoring and follow-up with borrowers, are essential for maintaining a healthy loan portfolio and ensuring timely repayments.

The role of cooperative governance and management practices cannot be overlooked in this discussion. Strong governance structures, transparent management and accountability are crucial to mitigating the risk of loan defaults. Kato and Wamala (2023) emphasized that cooperatives with robust governance frameworks can better implement effective risk management strategies and maintain financial stability. This involves setting clear policies for loan disbursements, ensuring member education on financial responsibilities and establishing mechanisms for early detection and management of default risks.

Furthermore, the socioeconomic environment in which university worker cooperatives operate plays a significant role in influencing loan defaults. Economic factors, such as inflation, unemployment rates, and overall economic stability, can affect borrowers' ability to repay loans. Njoroge and Wanjiku (2021) pointed out that cooperatives operating in economically volatile regions are more susceptible to higher default rates. Understanding these external factors is crucial for developing comprehensive risk management strategies that account for a broader economic context.

Therefore, the influence of loan defaults on university worker cooperatives' financial performance is multifaceted, involving various interrelated variables. This study provides a thorough analysis of these variables by drawing on recent empirical studies and theoretical insights. By examining the impact of loan defaults on profitability, liquidity, solvency, loan portfolio quality, governance practices, and socioeconomic environment, this research offers valuable recommendations for enhancing university worker cooperatives' financial resilience. By comprehensively understanding these factors, cooperatives can develop more effective strategies to mitigate the risks associated with loan defaults and ensure long-term financial stability and growth.

1.2 Statement of the Problem

University worker cooperatives are essential in providing financial support and services to university staff. However, the increasing incidence of loan defaults has become a significant challenge, jeopardizing their sustainability and financial performance. Loan defaults, in which borrowers fail to meet their repayment obligations, directly affect the cooperative's financial stability by eroding capital reserves, affecting liquidity, and increasing operational costs. Despite the crucial role of these cooperatives, there is a lack of comprehensive studies examining the impact of loan defaults on their financial performance, necessitating this research to fill the existing gap.

The erosion of capital reserves due to high loan default rates is a primary concern for university worker cooperatives. As highlighted by DemirgüçKunt et al. (2022), loan defaults result in significant losses of interest income, which are essential for a cooperative's operational sustainability and growth. Funds tied up in nonperforming loans reduce the cooperative's ability to extend credit to other members, thereby diminishing its capacity to support staff welfare and financial needs. This capital depletion not only restricted the cooperative's lending capacity but also undermined its role as a reliable financial institution in the university setting.

Liquidity crises represent another critical issue arising from loan defaults. Liquidity is vital for a cooperative's day-to-day operations and its ability to meet short-term financial obligations. Gupta and Patel (2023) emphasized that persistent loan defaults can lead to severe liquidity constraints, forcing cooperatives to curtail their services or face potential insolvency. The inability to maintain adequate liquidity can erode member confidence and trust, which are fundamental to cooperative success. This erosion of trust can lead to a decline in member participation, further intensifying the financial strain on the cooperative.

Loan defaults pose a multifaceted problem for university worker cooperatives, impacting their capital reserves, liquidity, administrative efficiency, and overall financial stability. Despite the vital role these cooperatives play in supporting university staff, there is a significant gap in understanding the full extent of the impact of loan

defaults on university financial performance. This research aims to address this problem by providing a comprehensive analysis of how loan defaults influence university worker cooperatives' financial health. Through this study, more effective risk management strategies and policies can be developed to ensure the sustainability and resilience of these essential financial institutions.

1.3 Objective of the study

Against this backdrop, the broad objective of this study is to examine the influence of loan defaults on the financial performance of the University Worker Cooperative in Anambra State, while the specific objectives are to:

1. Assess effect of loan default on the net profit margin of university worker cooperatives.
2. evaluate the effects of loan defaults on university worker cooperative liquidity.
3. Determine the effects of loan default on Return on Equity (ROE) of university worker cooperatives.

1.4 Research questions

1. What is the effect of loan default on the net profit margin of university worker cooperatives?
2. How do loan defaults affect university worker cooperative liquidity
3. What is the relationship between Return on Equity (ROE) and loan defaults in university worker cooperatives?

1.5 Statement of Hypothesis in null form

1. H_0 : Loan default has no effect on the net profit margin of university worker cooperatives.
2. H_0 : Loan defaults do not affect university worker cooperative liquidity.
3. H_0 : There is no significant relationship between Return on Equity (ROE) and loan defaults in university worker cooperatives.

Conceptual Review

Loan Default

Loan default occurs when a borrower fails to meet the legal obligations of a loan, significantly affecting financial institutions and their clientele. In Nigeria, the prevalence of loan defaults is rising, driven by factors such as economic instability, inadequate financial literacy, and income fluctuations (Okonkwo & Nnadi, 2023). The ramifications extend beyond immediate financial losses for lenders; they can lead to stringent credit policies and reduced lending capacity, particularly affecting cooperatives that rely on loan repayments for sustainability and growth (Uche & Adesina, 2022). This context is particularly relevant for university worker cooperatives, which often provide financial assistance to members to enhance their socioeconomic well-being.

For the University Worker Cooperative in Anambra State, understanding the dynamics of loan defaults is crucial. As Adebayo and Ifeoma. (2023) highlighted, a high rate of defaults can diminish the cooperative's financial resources, affecting its ability to extend further credit and support its members. The financial performance of such cooperatives is heavily reliant on loan repayment rates thus, the implications of loan defaults can significantly hinder their operational viability. A focus on mitigating loan defaults is essential for preserving cooperative capital and maintaining stable financial performance.

Moreover, the cooperative's reliance on member contributions and loan repayments means that defaults not only affect liquidity but also erode trust among members (Olufemi & Ibe, 2021). When members observe an increase in defaults, they may become hesitant to engage with the cooperative because they fear that their investments. This cycle can lead to a decrease in the cooperative's membership base and financial stability, making it imperative to develop strategies to address the underlying causes of loan defaults.

The concept of loan default is critical for assessing the financial performance of university workers in Anambra State. By understanding the patterns and impacts of defaults, the cooperative can devise strategies to improve

loan recovery and enhance overall financial health, ultimately benefiting its members and sustaining its operational goals.

Net Profit Margin

Net Profit Margin (NPM) is a critical measure of a cooperative's profitability, indicating the percentage of revenue that remains as profit after all expenses have been deducted. Healthy NPMs are essential for sustaining operations and fulfilling member expectations within cooperatives (Bello & Ojo, 2022). For university worker cooperatives in Anambra State, understanding the implications of loan defaults on NPM is crucial, as increased defaults can significantly erode profitability, thereby impacting financial performance.

When loan defaults rise, cooperatives face immediate financial pressure due to reduced income from loan repayments. Uche and Adesina (2022) asserted that this reduction in revenue can lead to a lower NPM, forcing cooperatives to either increase fees for services or reduce their operational expenditures, both of which may adversely affect member satisfaction and retention. Hence, maintaining a positive NPM is vital for ensuring that cooperatives continue to operate effectively while providing support to their members.

Moreover, cooperatives can adopt strategies to enhance their NPM despite the challenges posed by loan defaults. Adebayo et al. (2023) highlighted that improving cost management and operational efficiencies can counteract the effects of defaults on profitability. By streamlining processes and reducing unnecessary expenditures, cooperatives can protect their NPM and ensure sustainable financial performance despite external pressures.

The concept of Net Profit Margin is particularly relevant to the University Worker Cooperative in Anambra State because it underscores the need for effective financial management strategies. By focusing on maintaining a healthy NPM, the cooperative can mitigate the impacts of loan defaults and ensure long-term viability and success.

Liquidity

Liquidity refers to a cooperative's ability to meet its short-term obligations and effectively manage cash flows. For university worker cooperatives in Anambra State, maintaining adequate liquidity is vital, especially in the context of loan defaults that can strain financial resources (Adeoye & Ogunleye, 2022). A decline in loan repayments due to defaults can jeopardize the cooperative's ability to fulfill its commitments, underscoring the importance of effective liquidity management.

Given loan defaults, liquidity management becomes a strategic priority for cooperatives. According to Nwosu and Eze (2023), cooperatives that employ proactive liquidity strategies, such as maintaining adequate cash reserves and closely monitoring cash flow patterns, are better positioned to navigate financial challenges. Ensuring sufficient liquidity enables the cooperative to continue supporting its members and fulfilling its operational responsibilities despite fluctuations in loan repayment rates.

Furthermore, effective liquidity management involves balancing short-term and long-term financial needs. Adebayo and Ojo (2022) emphasized that cooperatives must be vigilant about their liquidity ratios to ensure that they can meet both immediate and future financial obligations. By regularly assessing liquidity positions, cooperatives can make informed decisions about lending policies, member contributions, and investments, ultimately enhancing their financial performance.

In conclusion, liquidity is a critical concept for university worker in Anambra State, particularly considering the influence of loan defaults. By prioritizing effective liquidity management strategies, the cooperative can safeguard its financial health and maintain its capacity to support its members, thereby enhancing its overall performance in the competitive financial landscape.

2.2 Theoretical Review

For a study on the influence of loan defaults on the financial performance of university worker cooperatives in Anambra State, several relevant theories can be applied, such as the following:

Agency Theory

Agency theory was developed by Michael and William (1976.) Agency theory provides a valuable framework for understanding the relationship between principals (owners or stakeholders) and agents (managers or decision makers) within organizations, and its relevance to the research topic "Influence of Loan Defaults on the Financial Performance of the University Worker Cooperative" is significant.

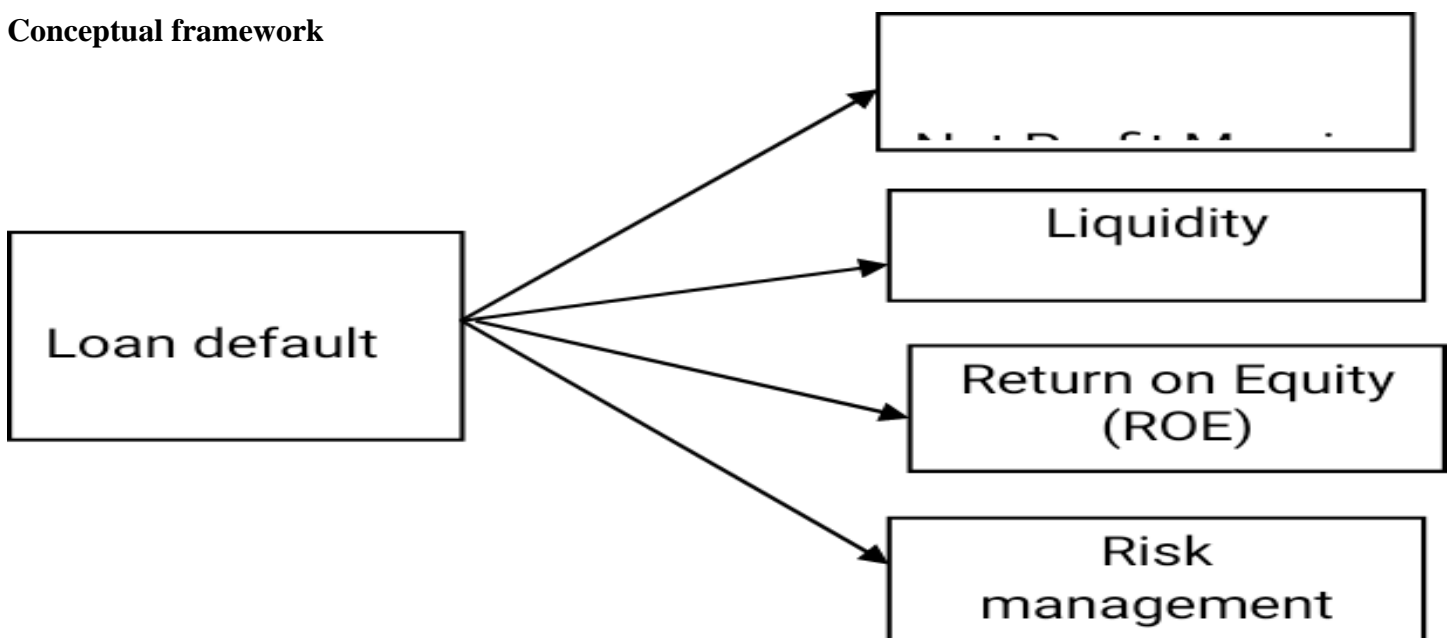
The agency theory posits that principals seek to maximize their utility, which may involve maximizing firm value or achieving other objectives, such as profit maximization or growth. However, agents have their own preferences and objectives that may not always align with those of the principals. This misaligned interest can lead to agency problems, such as the following:

Principal agent Conflict: This occurs when agents pursue their own interests at the expense of the principals. For example, managers may prioritize personal perks or short-term gains over shareholders' long-term interests.

Adverse Selection: This occurs when principals fail to fully observe or evaluate the actions and intentions of agents before delegating decision-making authority. As a result, they may select agents that are not aligned with their interests, leading to suboptimal outcomes.

Moral Hazard: This occurs when agents are given an incentive to take excessive risks or shirk responsibilities knowing that the costs of their actions will be borne by the principals. For example, managers may engage in risky investment strategies that maximize bonuses without considering the long-term implications for shareholders.

Conceptual framework



The conceptual framework places Loan Default at the core, highlighting its central role in influencing Financial Performance. Loan Default refers to the failure of borrowers to meet their repayment obligations, which can significantly impact a financial institution's profitability and sustainability. The framework indicates that a high rate of loan defaults can lead to diminished financial performance metrics, such as liquidity, net profit margin, and return on equity (ROE). These financial performance indicators are crucial for assessing the health of an organization; for instance, liquidity reflects an entity's ability to meet short-term obligations, whereas net profit margin and return on equity (ROE) provide insights into overall profitability and efficiency in generating returns for shareholders.

In addition, the framework underscores the importance of Risk Management Strategies as a proactive measure to mitigate loan default. Effective risk management practices can help identify potential defaults early, enabling financial institutions to implement corrective actions, such as adjusting lending criteria or enhancing borrower support. By reducing the likelihood of loan defaults through strategic interventions, these risk management strategies ultimately improve financial performance. The relationships illustrated in the framework not only clarify the dynamics between loan defaults and financial performance but also emphasize the critical role of proactive risk management in fostering a healthier financial environment, thus enhancing the overall understanding of these interactions within the research context.

Methodology

Research Design

The research design of this work is a survey research design.

The area of study is the Anambra State.

Population of the Study

The specific population of the study comprises all federal and state university staff that are cooperative, there are 8580 and 13,028 who are actively registered members of cooperatives in their respective institutions. The distribution of the population according to each institution is presented in Table 3.1.

Table 3.1: Population of university worker cooperative societies members according to each institution

S/N	University name	Number of Active members	Population
	Nnamdi Azikiwe University, Awka, Nigeria	6740	9028
	Chukwuemeka Odumegwu Ojukwu University, Igbariam campus,	1840	4000
	Total	8,580	13,028

Source: UWMCS Awka, COOU, Igbariam. 2024

Sample Size and Sampling Technique

The sample size of this study is 367 members of the University Worker cooperative in Anambra State. The number was obtained by applying the Taro Yamane sample size determination formula. The formula is given as follows:

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

Here, n = sample size

N = population of the study

1 = constant in value

e = error in the margin (usually 5% [0.05])

Hence, n = 8580

$$\begin{aligned}
 &= \frac{1 + 8580 (0.05)^2}{8580} \\
 &= \frac{1 + 8580(0.0025)}{8580} \\
 &= \frac{1 + 21.45}{22.45} \\
 &= \frac{8580}{22.45}
 \end{aligned}$$

n = 382.

Method of Data Analysis

The analysis was performed using descriptive statistical tools, such as the frequency distribution table and mean and simple percentages. The responses derived from the Likert scale were assigned numerical values to decide their position on the measured variable and to analyze their data.

DATA PRESENTATION

Distribution according to the influence of Loan Default on Financial Performance.

S/N	Items	SA (5)	A (4)	UD (3)	D (2)	SD (1)	n = 367	Mean f _{fx} — n	Total	Decision
I	Net Profit Margin									
1	Loan defaults significantly reduce net profit margin.	103 (515)	122 (488)	152 (456)	60 (120)	30 (30)	367 (1609)	1609 — 367	4.4	Accept
2	Increased loan defaults create financial losses for the cooperative.	112 (560)	130 (520)	45 135	50 100	30 30	367 1345	1345 367	3.7	Accept
3	Loan default rates directly affect cooperative financial performance.	100 500	120 480	50 150	55 110	42 42	367 1282	1282 367	3.5	Accept
4	The cooperative can maintain a strong net profit margin despite loan defaults.	60 300	85 340	80 240	92 184	50 50	367 1114	1114 367	3.0	Accept
5	Proper loan management can mitigate negative effects on net profit.	110 550	130 520	55 165	45 90	27 27	367 1352	1352 367	3.7	Accept
	Grand Mean								3.7	Accepted

Field survey, 2024

Table 3 represents the effect of loan default on Net Profit Margin. The grand mean of 3.7 is accepted because it is significantly above the threshold of 3.0. This implies that loan default affects the net profit margin of the University Worker Cooperative. The Net Profit Margin is a key profitability metric, reflecting the cooperative's ability to generate profit from its revenue after covering all expenses, including those related to loan management. When members default on their loans, the cooperative incurs direct financial losses. These losses stem from

unpaid loan balances and the cost of administering defaulted loans, such as collection efforts and legal actions. In addition, these defaults can indirectly reduce profitability by tying up funds that could otherwise be used for investment or operational needs. As a result, the cooperative's overall profitability declines, which can limit its ability to reinvest in member services or develop new offerings. The findings illustrate the significant impact of loan defaults on university worker cooperatives' net profit margin. Loan defaults not only reduce immediate profitability, restrict financial flexibility, affect member dividends, and necessitate strengthened risk management strategies. To mitigate these impacts, the cooperative should adopt policies to improve loan recovery and minimize defaults. By safeguarding its Net Profit Margin, the cooperative can enhance its financial stability, improve its member benefits, and ensure more sustainable operations in the future.

General distribution according to loan default effect

S/N	Items	SA (5)	A (4)	UD (3)	D (2)	SD (1)	n = 367	Mean ffx — n	Total	Decision
Effect of Loan Default										
1	Loan defaults negatively affect the net profit margin of the university cooperative.	105 525	120 480	50 150	52 104	40 40	367 1299	1299 367	3.5	Accept
2	Frequent loan defaults reduce cooperative liquidity affecting its ability to meet obligations.	130 650	110 440	40 120	57 114	30 30	367 1354	1354 367	3.7	Accept
3	There is a significant relationship between loan defaults and Return on Equity (ROE) in the cooperative.	95 475	140 560	45 135	57 114	30 30	367 1314	1314 367	3.6	Accept
4	Loan default rates can affect the long-term sustainability of university worker cooperatives.	100 500	130 520	45 135	52 114	40 40	367 1309	1309 367	3.6	Accept
5	Managing loan default risks should be a priority to enhance the financial performance of the cooperative.	110 550	130 520	50 150	47 94	30 30	367 1344	1344 367	3.7	Accept
	Grand Mean								3.6	Accepted

Field survey, 2024

Table 4: Distribution according to loan default effects on university worker cooperative liquidity

S/N	Items	SA (5)	A (4)	UD (3)	D (2)	SD (1)	n = 367	Mean £fx — n	Total	Decision
ii	Liquidity									
1	Loan defaults negatively affect cooperative liquidity.	120 600	150 600	40 120	40 80	17 17	367 1417	1417 367	3.9	Accept
2	Loan default rates reduce available cash reserves for operations.	110 550	140 560	55 165	45 90	17 17	367 1382	1382 367	3.8	Accept
3	High loan defaults limit cooperatives' ability to meet short-term obligations.	115 575	140 560	50 150	40 80	22 22	367 1387	1387 367	3.8	Accept
4	The cooperative can maintain liquidity despite loan defaults.	50 250	80 320	70 210	90 180	77 77	367 1037	1037 367	2.8	Reject
	Grand Mean								3.6	Accepted

Field survey, 2024

Table 4 presents a representation of the effect of loan default on university worker cooperative liquidity. The grand mean of 3.6 is accepted because it is significantly above the threshold of 3.0. This implies that loan default affects the liquidity of university workers. Liquidity represents the cooperative's ability to access enough cash or liquid assets to cover immediate obligations, such as loan disbursements, operational costs, and other short-term

liabilities. Adequate liquidity is essential for smooth daily operations because it ensures that the cooperative can fulfill its commitments to both members and external creditors. When loan defaults rise, however, cash that was expected from loan repayments does not materialize, limiting the funds available to the cooperative and impairing its liquidity position.

This finding underscores the significant impact of loan defaults on university workers' liquidity. Loan defaults limit cash flows, which can impair a cooperative's ability to meet its short-term obligations, provide reliable loan services, and maintain operational stability. To counter these effects, the cooperative should implement strengthened risk management and loan recovery strategies. By improving its liquidity, the cooperative can not only secure its financial health but also reinforce member confidence, ensure service continuity, and support sustainable growth over the long term.

Table 5: Distribution of loan default effects on return on equity (ROE) of university worker cooperative.

S/N	Items	SA (5)	A (4)	UD (3)	D (2)	SD (1)	n = 367	Mean f _{fx} — N	Total	Decision
iii.	Return on Equity									
1	Loan defaults reduce the return on equity for the cooperative.	118 590	125 500	52 156	50 100	22 22	367 1368	1368 367	3.7	Accept
2	The cooperative's ROE is directly influenced by the loan default level.	115 575	130 520	50 150	45 90	27 27	367 1362	1362 367	3.7	Accept
3	Higher loan default rates lead to lower ROE.	122 610	135 540	42 126	40 80	28 28	367 1384	1384 367	3.8	Accept
4.	The cooperative's ROE remains stable despite loan defaults.	55 275	75 300	80 240	85 170	72 72	367 1057	1057 367	2.9	Reject
5.	Effective loan management improves the cooperative's ROE.	110 550	120 480	60 180	50 100	27 27	367 1337	1337 367	3.6	Accept
	Grand Mean								3.5	Accepted

Field survey, 2024

Table 5 presents a representation of the effect of loan default on the Return on Equity (ROE) of the University Worker Cooperative. The grand mean of 3.5 is accepted because it is significantly above the threshold of 3.0. This implies that Loan default would affect Return on Equity (ROE) of university workers. ROE is a key indicator of how effectively a cooperative uses its members' investments to generate profit. Higher ROE values reflect better returns on the equity invested by members, strengthening members' confidence in cooperative management

and financial performance. A strong ROE demonstrates that members' contributions are being efficiently utilized to create value. However, when loan defaults increase, they directly reduce profits, thereby lowering ROE and impacting the cooperative's overall financial attractiveness to its members.

The findings reveal the significant effect of loan defaults on university worker cooperatives' return on equity. High loan default rates reduce ROE, affecting member confidence, capital growth potential, and cooperative ability to expand services. To counter these impacts, the cooperative should adopt stronger risk management practices, improve loan recovery processes, and promote financial education to its members. By safeguarding ROE, the cooperative can enhance its financial stability, maintain member trust, and strengthen its foundation for sustainable growth.

4.2 Test of Hypothesis

In this section, the research hypothesis that was earlier formulated states that loan defaults do not affect net profit in the study area. It was tested using the Pearson Product Correlation analysis. Questions i-v of Table (3) were used to test the hypothesis.

Table (7): Observed Frequency from Table 5 to Summarize the Hypothesis.

X	Y	XY	X ²	Y ²
103	105	10,815	10609	11,025
122	120	14,640	14,884	14,400
152	50	7600	23,104	2,500
60	52	3120	3600	2,704
30	40	1200	900	1,600
367	367	37375	53,097	32,229

Field survey, 2024

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

Here, N = sample size
 $\sum X$ = the sum of x (independent variable)
 $\sum Y$ = the sum of y (dependent variable)
 $\sum x^2$ = the sum of square x values
 $\sum y^2$ = the sum of square y values.
 $\sum xy$ = the sum of the product of x and y:

$$r = \frac{5(37375) - (367) \times (367)}{\sqrt{[5 \times (53097) - (367)^2][5 \times (32229) - (367)^2]}}$$

$$r = \frac{187875 - 134,689}{\sqrt{[265,485 - 734] [161,145 - 734]}}$$

$$r = \frac{53186}{\sqrt{(264,751) (160,411)}}$$

$$r = 53186 = 53186$$

$$\sqrt{42,468,972,661} = 206,080$$

$$r = 0.258$$

N shows the values obtained from the 5-point Likert scale responses to the items of the questionnaire copies. The values are based on the 5-1 scale responses

Decision: The result of the computed hypothesis shows that there is a positive relationship between loan defaults and net profit with a calculated $r = 0.258$. Hence, we reject the null hypothesis that states "Loan defaults do not

have an effect on the net margin profit of university workers” and accept the alternative hypothesis that states “Loan defaults do have effect on Net Margin Profit of University Worker Cooperative”.

Table (8): Observed frequencies from Table 5 to Summarize the Hypothesis.

X	Y	XY	X ²	Y ²
130	95	12350	16900	9025
110	140	15,400	12100	19600
40	45	1800	1600	2025
57	57	3249	3249	3249
30	30	900	900	900
367	367	33,699	34,749	34,799

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

Here, N = sample size

$\sum X$ = the sum of x (independent variable)

$\sum Y$ = the sum of y (dependent variable)

$\sum x^2$ = the sum of square x values

$\sum y^2$ = the sum of square y values.

$\sum xy$ = the sum of the product of x and y

$$r = \frac{5(33,699) - (367) \times (367)}{\sqrt{[5 \times 34,749 - (367)^2][5 \times 34,799 - (367)^2]}}$$

$$r = \frac{168,495 - 134,689}{\sqrt{[173,745 - 734](173,995 - 734)}}$$

$$r = \frac{33,806}{\sqrt{(173,011)(173,261)}}$$

$$r = \frac{33,806}{33,806} = \frac{33,806}{33,806}$$

$$\sqrt{29,976,058,871} = 173,136$$

$$r = 0.1905$$

N shows the values obtained from the 5-point likert scale responses to the items of the questionnaire copies. The values are based on the 5-scale responses

Decision: The result of the computed hypothesis shows that there is a positive relationship between loan defaults and liquidity, with a calculated $r = 0.195$. Hence, we reject the null hypothesis that states "Loan defaults do not have effect on Liquidity of University Worker Cooperative" and accept the alternate hypothesis that "Loan default do have effect on Liquidity of University Worker Cooperative".

Table (9): Observed Frequency from Table 5 to Summarize The Hypothesis.

X	Y	XY	X ²	Y ²
120	118	14,400	14,400	13,924
150	125	18,750	22,500	15,625
40	52	2080	1600	2704
40	50	2000	1600	2500
17	22	374	289	484
367	367	37,364	40,389	35,237

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

Here, N = sample size

$\sum X$ = the sum of x (independent variable)

$\sum y$ = the sum of y (dependent variable)

$\sum x^2$ = the sum of square x values

$\sum y^2$ = the sum of square y values.

$\sum xy$ = the sum of the product of x and y

$$r = \frac{5(37,364) - (367) \times (367)}{\sqrt{[5 \times (40,389) - (367)^2][5 \times (35,237) - (367)^2]}}$$

$$r = \frac{186,820 - 134,689}{\sqrt{(201,945 - 734)(135,689 - 734)}}$$

$$r = \frac{52,131}{\sqrt{(201,211)(134,955)}}$$

$$r = \frac{52,131}{\sqrt{27,154,430,505}} = \frac{52,131}{164,786}$$

$$r = 0.316$$

N shows the values obtained from the 5-point likert scale responses to the items of the questionnaire copies. The values are based on the 5-1 scale responses

Decision: The result of the computed hypothesis shows that there is a positive relationship between loan defaults and Return on Equity (ROE), with a calculated $r = 0.316$. Hence, we reject the null hypothesis that states "Loan default do not have effect on Return on Equity (ROE) of University Worker Cooperative" and accept the alternative hypothesis that "do have effect on of University Worker Cooperative".

4.3. Discussion of Findings

A grand mean of 3.7 and a positive correlation ($r = 0.258$) indicate that loan defaults have a notable effect on net profit margin. The rejection of the null hypothesis reinforces this, implying that loan defaults diminish cooperative profitability. This impact highlights the importance of maintaining strict loan recovery processes and implementing measures to minimize defaults to protect cooperative profitability. The grand mean of 3.6 and the correlation ($r = 0.195$) demonstrate a significant relationship between loan defaults and liquidity, indicating that defaults negatively affect the cooperative's cash flow. This finding emphasizes the need for effective liquidity management practices to ensure that loan defaults do not compromise the cooperative's ability to meet its short-term financial obligations. Improved credit checks, regular monitoring of loan performance, and flexible repayment options could help mitigate this risk. With a grand mean of 3.5 and a correlation ($r = 0.316$), loan defaults have a strong effect on ROE. This relationship suggests that defaults reduce members' returns on their invested equity, which could impact member satisfaction and trust in the cooperative. Addressing loan default issues could lead to higher returns for members, reinforcing their commitment and potentially encouraging further investments.

The findings underscore the need for cooperatives to implement robust risk management practices to mitigate loan defaults. Addressing these defaults is essential for maintaining profitability, liquidity, and member returns. The cooperative's balanced demographic and economic representation, alongside a significant base of mid-term members, positions it well to take proactive steps in strengthening loan recovery efforts and tailoring services to

meet diverse financial needs. By enhancing financial management practices, the cooperative can not only secure financial stability but also strengthen its reputation as a reliable financial partner within the university community.

Conclusion

This study examined the influence of loan defaults on the financial performance of a university worker cooperative in Anambra State, Nigeria, revealing significant relationships among loan defaults, Net Profit Margin, liquidity, and Return on Equity (ROE).

The net profit margin is critical for assessing a cooperative's ability to generate profit from its activities after covering all expenses. When loan defaults occur, anticipated income is reduced, leading to lower profitability. This reduction can constrain the cooperative's capacity to reinvest in operations, expand services, or improve member benefits. Ultimately, high loan default rates limit the cooperative's ability to grow and meet its objectives, impacting the overall financial health of the institution. Adequate liquidity is essential for the cooperative to fulfill its immediate financial obligations, including loan disbursements to members, covering operational costs, and meeting short-term liabilities. When loans are not repaid, the cooperative's cash flow suffers, creating liquidity constraints. Insufficient liquidity not only hampers the cooperative's daily operations and diminishes its capacity to offer new loans, provide financial assistance to members in need, and maintain operational stability. A liquidity crunch due to loan defaults can further complicate the cooperative's financial planning and expose it to increased risk during economic downturns.

When loan defaults increase, the cooperative's profit decline, resulting in lower ROE. Reduced ROEs can undermine member confidence because members may feel that their investments do not yield expected returns. This diminished confidence may deter further investment from members, weaken the cooperative's capital base, and limit its capacity to expand or fund new projects. Over time, low ROE due to persistent loan defaults can affect a cooperative's ability to attract and retain members, threatening its growth and sustainability.

5.3 Recommendations

Based on the findings of this study, the following recommendation was suggested to this study:

1. Given the significant impact of loan defaults on a cooperative's Net Profit Margin, Liquidity, and Return on Equity (ROE), a more robust loan assessment process is necessary. Stricter approval policies can help minimize the risk of defaults by ensuring that loans are issued primarily to members with proven ability to repay. Implement a detailed credit assessment procedure that evaluates members' income stability, repayment history, and other financial obligations. This helps cooperatives make informed lending decisions and reduce the likelihood of defaults.
2. Develop an internal credit rating system to categorize members based on risk profile. Members with higher credit ratings may receive favorable loan terms, whereas those with lower ratings may be limited to smaller loans or require additional guarantees.
3. Establish a system to monitor early signs of financial distress, such as delayed payments, so that the cooperative can proactively reach out to members facing difficulty. Interventions such as flexible payment arrangements or temporary deferrals can help members to stay on track. Offering tailored repayment options for members experiencing financial difficulties, such as extended terms or interest-only periods, can support repayment and reduce the need for aggressive collection actions.
4. A structured collection process involving regular follow-ups and reminder notifications will ensure prompt attention to overdue accounts. The cooperative should also consider setting up a dedicated recovery team to handle delinquent accounts more efficiently, thereby minimizing the financial impact on the organization.

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