



Effect of Non-Performing Loans on Banks Willingness to Finance Construction Projects in Enugu State, Nigeria

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Abstract

This study examined the effect of non-performing loans on banks' willingness to finance construction projects in Enugu State, Nigeria. Specifically, the study sought to determine the effect of loan default rates on credit approval and to evaluate the effect of bad-debt recovery challenges on the volume of bank financing for construction projects in Enugu State. A descriptive survey research design was adopted. Primary data were collected through a structured questionnaire administered to bank staff involved in credit assessment and lending decisions. The study population comprised 1,498 bank staff, from which a sample size of 306 respondents was determined using the Freund and Williams formula at a 5% margin of error. Of the 306 questionnaires administered, 231 were correctly completed and returned, representing a valid response rate of 75.5%. The data were analysed using descriptive statistics and inferential statistics, while the hypotheses were tested using the Z-test. The findings revealed that loan default rate had a statistically significant negative effect on credit approval for construction projects ($Z = -8.043$, $p < .05$). Similarly, bad-debt recovery challenges had a statistically significant negative effect on the volume of bank financing for construction projects ($Z = -8.372$, $p < .05$). The study concluded that increasing loan default rates and challenges associated with bad-debt recovery adversely affect banks' willingness to approve and provide financing for construction projects in Enugu State. The study recommends that banks strengthen their credit-risk assessment, loan-monitoring, and debt-recovery mechanisms to reduce loan defaults, improve recovery efficiency, and enhance confidence in financing viable construction projects.

Keywords: Non-performing loans; Loan default rate; Bad-debt recovery; Bank financing; Construction projects; Credit approval; Construction finance; Enugu State, Nigeria.

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Introduction

The issue of non-performing loans (NPLs) has remained a major challenge in the global banking industry due to its adverse effect on financial stability and credit creation. Historically, banks across the world have depended on loan repayment as a major source of profitability and liquidity for financing economic activities, including construction and infrastructure development. However, the global financial crises experienced in different economies exposed banks to rising loan defaults, weak debt recovery systems, and declining willingness to finance long-term projects. In developed and developing nations, increasing non-performing loans have forced banks to adopt stricter lending policies in order to minimize financial risk. According to Aliyu (2024), non-performing loans weaken the efficiency of banks and reduce their capacity to extend credit facilities to productive sectors of the economy. Globally, financial institutions have become more cautious in financing construction projects because such projects are capital intensive, involve long repayment periods, and are exposed to economic uncertainties.

In Nigeria, the banking sector has continued to experience significant challenges arising from rising loan default rates, inflation, exchange rate fluctuations, and poor credit management practices. The Central Bank of Nigeria has consistently emphasized the need for prudent lending policies to reduce the growth of non-performing loans within the financial system. Ojarikre, Dauda and Blessing (2025) noted that the increasing volume of non-performing loans in Nigeria threatens banking sector growth and discourages banks from granting long-term loans to risky sectors. Similarly, Gloria and Eunekwe (2024) observed that macroeconomic instability contributes significantly to the growth of non-performing loans among Nigerian banks, thereby affecting their lending performance. The Nigerian construction sector particularly depends on bank financing for project execution, but many banks have become reluctant to provide adequate credit due to fear of default and poor debt recovery experiences. Recent infrastructure financing reports further revealed that access to project finance in Nigeria is constrained by concerns over repayment risk and project bankability.

From the local perspective, banks in Enugu State face increasing challenges in financing construction projects because many contractors experience delayed payments, rising material costs, and unstable economic conditions. Construction firms in the state often depend on bank loans to execute public and private infrastructure projects, yet the rising incidence of bad debts and loan defaults discourages banks from increasing their credit exposure to the sector. Adamu and Idris (2024) explained that inadequate financing significantly contributes to delays in construction project delivery in Nigeria. In Enugu State, the unwillingness of banks to finance construction projects may lead to abandoned projects, unemployment, slow infrastructural development, and reduced economic growth. Therefore, the persistent increase in non-performing loans has created uncertainty within the banking system, making it necessary to examine the effect of non-performing loans on banks' willingness to finance construction projects in Enugu State, Nigeria.

Statement of the Problem

Ideally, banks are expected to provide adequate financing for construction projects in order to promote infrastructural development, economic growth, employment generation, and urban expansion in Enugu State, Nigeria. The banking sector plays an important role in mobilizing financial resources and granting credit facilities to

contractors and construction firms for the execution of residential, commercial, and public infrastructure projects. Construction projects require huge capital investments and long-term financing, making banks essential partners in project development. In a stable financial environment, banks should willingly extend loans to viable construction projects while maintaining effective credit risk management practices to ensure sustainability and profitability.

However, the increasing rate of non-performing loans has become a major problem affecting banks' willingness to finance construction projects in Nigeria. Many banks have experienced rising cases of loan defaults, poor repayment culture, and difficulties in recovering bad debts from borrowers, especially within the construction sector. The situation is worsened by inflation, economic instability, rising construction material costs, delayed government payments to contractors, and weak project cash flows, all of which increase the risk of loan repayment failure. As a result, banks have become more cautious in approving loans for construction projects due to fear of financial losses and declining asset quality. This has led to stricter lending conditions, high collateral requirements, reduced credit approval, and lower volume of bank financing available to construction firms in Enugu State.

The consequences of this problem are enormous for both the banking sector and the economy of Enugu State. Reduced willingness of banks to finance construction projects may lead to project delays, abandonment of infrastructure projects, unemployment, slow urban development, and reduced economic growth. Construction firms may also face inadequate working capital needed for project execution and expansion. Furthermore, persistent non-performing loans weaken the financial stability and profitability of banks, thereby reducing their ability to support other productive sectors of the economy. Despite various efforts by financial regulators and banks to strengthen credit risk management, the problem of non-performing loans continues to affect lending decisions in the construction sector. It is against this background that this study seeks to examine the effect of non-performing loans on banks' willingness to finance construction projects in Enugu State, Nigeria.

Objectives of the study

The main objective of the study was to evaluate the effect of non-performing loans on banks' willingness to finance construction projects in Enugu State, Nigeria. The specific objectives were to:

- i. Determine the effect of loan default rate on credit approval for construction projects by banks in Enugu State, Nigeria.
- ii. To evaluate the effect of bad debt recovery challenges on the volume of bank financing for construction projects in Enugu State, Nigeria.

Research Questions

The following Research questions guided the study:

- i. What is the effect of loan default rate on credit approval for construction projects by banks in Enugu State, Nigeria?
- ii. What is the effect of bad debt recovery challenges on the volume of bank financing for construction projects in Enugu State, Nigeria?

Statement of the Problem

The following Hypotheses guided the study:

- i. Loan default rate has effect on credit approval for construction projects by banks in Enugu State, Nigeria.
- ii. Bad debt recovery challenges have effect on the volume of bank financing for construction projects in Enugu State, Nigeria.

Review of Related Literature

Conceptual Review

Non-performing Loans (NPLs)

Non-performing loans (NPLs) refer to loans in which borrowers fail to meet agreed repayment obligations over a specified period, thereby exposing banks to financial risk and reducing the quality of their loan portfolios. In the Nigerian banking sector, NPLs have become a major concern because they weaken banks' liquidity position, reduce profitability, and discourage lending to sensitive sectors such as construction. According to Ahmed Alhaji Aliyu (2024), macroeconomic instability, inflation, and poor credit management significantly contribute to the rise in non-performing loans among Nigerian banks. Non-performing loans reduce banks' confidence in borrowers and often result in tighter lending conditions, especially for capital-intensive projects such as road construction, housing development, and infrastructure financing in Enugu State. Amity Agi Ijuwo (2024) observed that high non-performing loan ratios negatively affect credit risk management practices and reduce the capacity of deposit money banks to extend new loans.

Components of non-performing loans (NPLs)

The Components of non-performing loans (NPLs) include: Loan Arrears (Payment Delinquency), Loan default rate, Substandard Loans, Doubtful Loans, Loss Loans (Bad debts), Restructured or Renegotiated Loans, Impaired Loans, Non-Accrual Loans, Provisioned Loans as noted in the following areas and authors: (International Monetary Fund, 2019, Basel Committee on Banking Supervision, 2017, Rose & Hudgins, 2013, Mishkin, 2016, CBN, 2020, IASB, 2018, FDIC, 2019 and Basel Committee on Banking Supervision, 2017.

Components of non-performing loans (NPLs) that was used in the study

Loan default rate

Loan default rate refers to the frequency at which borrowers fail to repay loans according to agreed contractual terms. High default rates in the construction sector create uncertainty for banks because construction projects usually require large capital commitments and long repayment periods. In Enugu State, banks often assess the repayment history of contractors before approving loans for construction activities. When default rates increase, banks become reluctant to approve additional credit facilities due to fear of financial losses. Oniore, Dauda, and Blessing (2025) explained that rising non-performing loans and default risks threaten the stability of Nigerian financial institutions and reduce their willingness to provide long-term financing. Similarly, the Central Bank of Nigeria has maintained strict prudential regulations to ensure banks minimize risky lending practices associated with

loan defaults. High default rates therefore lead to stricter collateral requirements, increased interest rates, and reduced accessibility of construction financing in Enugu State.

Bad debt recovery challenges

Bad debt recovery challenges refer to the difficulties banks encounter when attempting to recover loans from defaulting borrowers. These challenges may arise from weak legal systems, poor collateral documentation, lengthy judicial processes, corruption, and economic instability. In Nigeria, debt recovery remains a major obstacle affecting the efficiency of banks' lending operations. Monitoring Activities and Non-Performing Loans of Financial Institutions in Nigeria by Ilelaboye and Alade (2025) noted that ineffective monitoring and weak recovery systems contribute significantly to the persistence of bad debts within financial institutions. Construction projects are particularly vulnerable because contractors often depend on delayed government payments, fluctuating material prices, and unstable project cash flows. Recent evidence from construction financing studies showed that payment delays and cost estimation problems negatively affect contractors' ability to repay bank loans in Nigeria. Consequently, banks become more conservative in granting loans to construction firms in Enugu State due to fears that recovery of bad debts may become difficult and expensive.

Banks' willingness to finance construction projects

Banks' willingness to finance construction projects refers to the readiness of financial institutions to provide loans and credit facilities for infrastructure and real estate development. Construction projects require substantial long-term funding, making banks important stakeholders in economic development. However, banks' willingness to finance these projects depends largely on the level of credit risk associated with borrowers. When non-performing loans and loan defaults increase, banks reduce their exposure to the construction sector by tightening lending policies. Economic conditions in Nigeria, including inflation, exchange rate instability, and high interest rates, have also contributed to cautious lending behavior among banks. Reports on Nigeria's financial system indicated that credit to the private sector remains relatively low due to high lending risks and weak recovery prospects. Therefore, banks in Enugu State may become unwilling to finance construction projects if previous loans granted to contractors become non-performing.

Components of Banks' willingness to finance construction projects

Components of banks' willingness to finance construction projects refer to the key financial, project, and institutional factors that influence a bank's decision to grant credit to construction firms or projects. These components are widely discussed in financial intermediation and project financing literature. These include: Borrower's Creditworthiness, Volume of bank financing, Availability and Quality of Collateral, Project Viability and Feasibility, Risk Assessment and Default Probability; Credit approval, Expected Return and Interest Rate, Cash Flow Projections, Macroeconomic and Industry Conditions Regulatory and Policy Environment, Management Competence and Experience, Loan Structure and Tenor as noted by the following authors: (Brealey, Myers & Allen, 2020, Rose & Hudgins, 2013, Gittinger, 1982; Brigham & Houston, 2019, Sinkey, 2002, Mishkin, 2016, Brigham & Houston, 2019, Mishkin, 2016, CBN, 2024, Gitman, 2015 and Rose & Hudgins, 2013).

Components of Banks' willingness to finance construction projects used in the study

Credit approval

Credit approval refers to the process through which banks evaluate and authorize loan applications submitted by individuals, firms, or contractors. Banks examine borrowers' repayment capacity, collateral security, credit history, and project feasibility before approving loans. In Enugu State, construction firms seeking bank financing are often subjected to rigorous risk assessment procedures because construction lending involves high uncertainty. Ijuwo (2024), rising non-performing loans force banks to strengthen credit risk management practices, thereby making loan approval conditions more stringent. Loan default experiences in the banking sector also encourage financial institutions to reduce the number of approved construction loans. Consequently, many contractors face difficulties accessing funds needed for project execution, expansion, and infrastructure development. This situation slows economic growth and limits the pace of urban development within the state.

Volume of bank financing

Volume of bank financing for construction projects refers to the total amount of loans, credit facilities, and financial support provided by banks to fund construction activities such as residential buildings, commercial properties, roads, and infrastructure projects. It reflects the willingness and capacity of banks to support construction sector development through project financing, mortgage loans, and infrastructure credit facilities. In 2025, the volume of bank financing for construction projects was influenced by factors such as interest rates, credit risk, regulatory policies, and economic conditions. Jesse Wade (2025), observed that construction loan volumes showed moderate growth in residential projects despite declines in some real estate development loans, indicating cautious bank participation in construction financing.

Matt Smith (2025) noted that banks provide construction financing based on expected project cash flows and the ability of projects to generate future revenue, making project viability an important condition for financing approval. Furthermore, Preston (2025) explained that banks in 2025 became more selective in granting construction loans because of rising interest rates and stricter lending conditions, which affected the overall volume of financing available for construction projects.

Theoretical Review

The following theories guided the study:

Credit Risk Theory by John H. Mays (1998) and Financial Intermediation Theory by Gurley and Shaw (1960)

The study was anchored on Credit Risk Theory by John H. Mays (1998) because it supports the view that increasing loan defaults and bad debt recovery challenges negatively affect credit approval and the volume of bank financing for construction projects.

Credit Risk Theory by John H. Mays (1998).

Credit Risk Theory explains that banks must carefully evaluate the possibility of borrowers failing to repay loans before granting credit facilities. The theory emphasizes that lending decisions are largely influenced by the level of

risk associated with borrowers and the probability of loan default. According to the theory, when non-performing loans increase within the banking sector, banks become more cautious in approving new loans because high default rates threaten profitability, liquidity, and financial stability. This theory is relevant to the study because banks in Enugu State may reduce their willingness to finance construction projects when previous construction loans become non-performing or difficult to recover.

Financial Intermediation Theory by Gurley and Shaw (1960).

Financial Intermediation Theory states that banks act as intermediaries between surplus units (savers) and deficit units (borrowers) by mobilizing deposits and channeling them into productive investments within the economy. The theory explains that banks are expected to provide financial support to sectors such as construction in order to promote economic growth, employment generation, and infrastructural development. However, the effectiveness of banks in performing this intermediation role depends on the quality of their loan portfolios and the ability of borrowers to repay loans. When non-performing loans and bad debts increase, banks experience financial constraints and become reluctant to extend further credit facilities. This theory is relevant to the study because it explains how rising non-performing loans can weaken banks' willingness to finance construction projects in Enugu State, Nigeria.

Empirical Review

Loan Default Rate and Credit Approval for Construction Projects

Ijuwo (2024) investigated the relationship between non-performing loans and credit risk management among listed deposit money banks in Nigeria. The study employed a survey research design and data were analyzed using multiple regression analysis. The findings showed that rising loan default rates negatively affected credit approval decisions of banks, particularly in sectors with high capital requirements such as construction. The study recommended stricter credit monitoring systems to reduce default risks.

Aliyu (2024) studied macroeconomic variables and non-performing loans of banks in Nigeria using secondary data obtained from the Central Bank of Nigeria. The study adopted an econometric research design and employed Vector Error Correction Model (VECM) for analysis. Findings indicated that high loan default rates reduced banks' confidence in approving loans for construction projects due to uncertainty in repayment. The study concluded that persistent defaults negatively affect bank lending decisions.

Gloria and Eunekwe (2024) examined the macroeconomic determinants of non-performing loans in Nigeria. The study adopted an ex-post facto research design and used time series data analyzed through regression analysis. The result revealed that increasing default rates among borrowers contributed to stricter credit approval conditions imposed by banks on construction firms. The study noted that banks became more selective in granting loans to avoid future bad debts.

Adamu and Idris (2024) investigated the effect of financing on project delivery delays in Nigerian construction projects. The study adopted a descriptive survey design using questionnaires administered to contractors and

financial institutions. Data were analyzed using mean score and regression analysis. Findings showed that banks' reluctance to approve construction loans was largely influenced by previous experiences of loan defaults within the sector. The study concluded that poor loan repayment history discourages banks from financing construction projects.

Ojarikre, Dauda, and Blessing (2025) examined the impact of non-performing loans on banking sector lending in Nigeria using quarterly data from 2007Q1–2023Q4. The study adopted an ex-post facto research design and utilized Ordinary Least Square (OLS) regression technique for analysis. Findings revealed that increasing loan default rates significantly reduced banks' willingness to approve credit facilities for long-term projects such as construction and infrastructure development. The study concluded that high default risk discourages banks from granting construction loans due to fear of financial losses.

Bad Debt Recovery Challenges and Volume of Bank Financing for Construction Projects

Ijuwo (2024) examined the relationship between non-performing loans and credit risk management practices in Nigerian deposit money banks. The study employed a survey design and analyzed data using regression analysis. Findings showed that challenges associated with recovering bad debts discouraged banks from increasing the amount of credit granted to construction firms and contractors. The study concluded that effective debt recovery systems are necessary for improving the volume of bank financing to the construction sector.

Ilelaboye and Alade (2025) examined monitoring activities and non-performing loans of financial institutions in Nigeria. The study adopted a correlational research design and used panel data analyzed with fixed effect regression technique. Findings revealed that poor debt recovery mechanisms reduced the volume of loans banks were willing to provide to high-risk sectors such as construction. The study concluded that ineffective recovery systems negatively influence bank financing decisions.

Nnadi and Najjobyo (2025) studied the financial and operational effects of cost estimation inaccuracies and payment delays in Nigerian construction projects. The study used a survey research design and analyzed responses using Structural Equation Modelling (SEM). Findings showed that delayed payments and weak debt recovery practices significantly reduced banks' confidence in increasing financing for construction projects. The study concluded that poor recovery experiences affect the volume of construction financing.

Okpalaeze (2025) evaluated the bankability of infrastructure projects in Nigeria and its implication for access to project finance. The study adopted a qualitative research design using document analysis and expert interviews. Findings indicated that banks reduced the volume of financing for infrastructure and construction projects due to difficulties associated with debt recovery and repayment uncertainty. The study emphasized the importance of effective loan recovery policies in improving construction financing.

Oniore, et al., (2025) investigated the impact of macroeconomic instability on non-performing loans in Nigeria. The study utilized quarterly time series data analyzed through Ordinary Least Square (OLS) estimation. Findings revealed that poor debt recovery systems and increasing bad debts reduced banks' willingness to expand loan portfolios for

construction financing. The study concluded that recovery challenges contribute significantly to reduced lending volume.

Gap in Empirical Studies

The empirical studies reviewed focused mainly on non-performing loans, credit risk management, and banking sector performance in Nigeria, with little attention given to how non-performing loans affect banks' willingness to finance construction projects specifically in Enugu State, Nigeria. Most of the studies concentrated on the general banking sector without examining the construction industry, despite its dependence on bank financing for project execution. In addition, previous studies paid limited attention to variables such as loan default rate, bad debt recovery challenges, credit approval, and volume of bank financing within the context of construction projects. Therefore, this study seeks to fill the identified gap by examining the effect of non-performing loans on banks' willingness to finance construction projects in Enugu State, Nigeria.

Methodology

Research design

The study adopted a survey research design to examine the effect of non-performing loans on banks' willingness to finance construction projects in Enugu State, Nigeria. The survey design was considered appropriate because it enabled the researcher to obtain relevant information from respondents concerning non-performing loans and construction financing.

Area of the study

The area of the study is Enugu State, Nigeria. Enugu State is located in the South-East geopolitical zone of Nigeria and is known for increasing construction and infrastructural development activities. The state also has the presence of several deposit money banks and registered construction firms involved in financing and executing construction projects. The selected banks include First Bank of Nigeria Limited, United Bank for Africa Plc, and Zenith Bank Plc, while the selected construction firms include Arab Contractors Nigeria Limited, Setraco Nigeria Limited, and CCECC Nigeria Limited.

Sources of Data

Both primary and secondary sources of data were used for the study. Primary data were obtained through structured questionnaires administered to respondents, while secondary data were sourced from journals, textbooks, conference papers, and publications from the Central Bank of Nigeria.

Population of the study

The population of the study comprised staff of selected deposit money banks and registered construction firms operating in Enugu State. The selected banks include First Bank of Nigeria Limited, United Bank for Africa Plc, and Zenith Bank Plc, (The regional offices were used for the study) while the selected construction firms include Arab

Contractors Nigeria Limited, Setraco Nigeria Limited, and CCECC Nigeria Limited. Therefore, the study limited population to all management, senior and junior staff of each of these organizations with a total of 1498 as shown in table 1.

Table 1 Population Distribution

	Firms	Staff Categories				
		Mgt	Senior	Junior	Total	%
1.	First Bank	12	21	17	50	3
2.	United Bank for Africa	14	32	21	67	4
3.	Zenith Bank Plc	13	34	23	70	5
4.	Arab Contractors	34	125	271	430	29
5.	Setraco Nigeria	40	128	264	432	29
6.	CCECC Nigeria	55	118	276	449	30
	Total	168	458	872	1498	100

Source: Personnel office, 2026

Table 1 study shows that six firms which were selected from deposit money banks and registered construction firms operating in Enugu State.

Sample Size Determination

To determine the adequate sample size, the study used Freund and William's statistical formula as quoted by (Uzoagulu, 2011).

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

Where n = Sample Size

N = The population

p = Probability of success/proportion

q = Probability of failure/proportion

Z = Standard (error of mean) normal deviate

e = Limit of tolerable error (or level of significance)

N = 1498

p = .5

q = (1 – .5) = .5

Z = 95 percent = 1.96

e = 0.05percent

$$= \frac{(1.96)^2 \times 1498 \times .5 \times .5}{1498(0.05)^2 + (1.96)^2 \times .5 \times .5}$$

$$\frac{3.8416 \times 1498 \times .25}{3.745 + 3.8416 \times .25}$$

$$\frac{1438.679}{3.745 + .9604} = \frac{1438.679}{4.705} = 305.776 \approx \underline{\underline{306.}}$$

Bowley's (1976) proportional allocation formula for stratified sampling was used to allocate the samples:

$$nh = \frac{n(Nh)}{N}$$

Where:

Nh = Group population from each stratum

n = overall sample size

N = the overall population

nh = sample size from each stratum, in this case each state.

Table 2: Computation/Allocation of Sample Size

	Organisations	Population	Calculation	Sample	
1.	First Bank	50	$\frac{50 \times 306}{1498} =$	10	3
2.	United Bank for Africa	67	$\frac{67 \times 306}{1498} =$	14	5
3.	Zenith Bank Plc	70	$\frac{70 \times 306}{1498} =$	14	5
4.	Arab Contractors	430	$\frac{430 \times 306}{1498} =$	88	29
5.	Setraco Nigeria	432	$\frac{432 \times 306}{1498} =$	88	29
6.	CCECC Nigeria	449	$\frac{449 \times 306}{1498} =$	92	30
Total		1498		306	100

Source: Field Survey, 2026

Sampling Techniques

A stratified random sampling procedure was used for selecting the participants in this study. This technique was employed to ensure a fairly equal representation of the variables for the study. The stratification was based on unselected deposit money banks and registered construction firms operating in Enugu State. Within each section, selection of staff was by simple random sampling.

Instrument for data collection

The instrument for data collection was a structured questionnaire designed on a five-point Likert scale. The validity of the instrument was determined through face and content validity, while the reliability of the instrument was tested using Cronbach Alpha reliability method

Validity of the Instrument

To ascertain the validity of the research instrument, the researcher subjected it to face to face validation by a panel of judges comprising three internal assessors, and two management experts that examined the items, and agreed that they were in line with the objectives of the study. No need for amendments, finally, the design of the questionnaire was made easy for the respondents to pick their preferred choice from the options provided.

Reliability of the Instrument

To test for reliability of the instrument, the study distributed 10 copies of the questionnaire to other **firm's** outside the study area and, the Cronbach Alpha method was used to compute the internal consistency reliability estimate of the items. The instrument had an overall reliability Cronbach co-efficient of 0.81 which indicated that the instrument was reliable and, therefore, considered appropriate for use.

Table 3a Cronbach Alpha Reliability Test

		N	%
Cases	Valid	10	100.0
	Excluded	0	.0
	Total	10	100.0

a. Listwise deletion based on all variables in the procedure.

Table 3b Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	NO of Items
.81	.81	10

SPSS 20.0 Output

Methods of Data Analyses

The data collected were analyzed using descriptive statistics such as frequency tables, percentages, mean, and standard deviation, while hypotheses were tested using regression analysis with the aid of Statistical Package for Social Sciences (SPSS). The study adopted this method to determine the relationship between non-performing loans and banks' willingness to finance construction projects in Enugu State, Nigeria. For the 5-point likert scale questions, the scale and decision rule stated below was used in analysing the findings.

Scale

Strongly Agree (SA)	-	5
Agree (A)	-	4
Neutral (N)	-	3
Disagree (D)	-	2
Strongly Disagree (SD)	-	1

Decision Rule

If Mean >3.0, the respondents agree

If mean ≤ 3.0 , the respondents disagree

Data from the questionnaire were collected and analyzed using simple percentages, mean and standard deviation, Z- test statistic tool was used to test the hypotheses.

Z –Test

$$Z = \frac{\bar{X} - \mu}{\frac{\sigma}{\sqrt{n}}}$$

Where;

$\bar{X}$ = Population mean

μ = Sample mean

σ = Standard deviation

n = Sample size

Data Presentation and Analysis

Distribution and returned Questionnaire

The chapter presents and analyzes the data collected for the study. The presentation and interpretation of data were based on the questionnaire administrated to the staff of the selected manufacturing firms in Southeast, Nigeria.

Table 4 Distribution and Return of the Questionnaire

Firms	Distributed	No Returned	Percent	No not Returned	Percent
1. First Bank	10	7	2	3	1
2. United Bank for Africa	14	11	4	3	1
3. Zenith Bank Plc	14	12	4	2	-
4. Arab Contractors	88	73	24	15	5
5. Setraco Nigeria	88	75	24	13	4
6. CCECC Nigeria	92	53	17	39	13
Total	306	231	76.0	75	24

Source: Field Survey, 2026

Table 4 shows that 306 distributed copies of the questionnaire, two hundred and thirty one were returned and used while 75 (24 percent) were not returned and were not used.

The effect of loan default rate on credit approval for construction projects by banks in Enugu State, Nigeria.

Table 5: Responses on the effect of loan default rate on credit approval for construction projects by banks in Enugu State, Nigeria.

	5 SA	4 A	3 N	2 DA	1 SD	ΣFX	- X	SD	Decision
1 Loan default rate significantly influences the credit approval process for construction projects by banks in Enugu State, Nigeria.	595 119 51.5	232 58 25.1	42 14 6.1	32 16 6.9	24 24 10.4	925 231 100%			Agree
2 High rates of loan default increase the level of risk perceived by banks, making them more cautious in approving loans for construction activities.	580 116 50.2	232 58 25.1	42 14 6.1	48 24 10.4	19 19 8.2	921 231 100%	4.00	1.340	Agree
3 Banks often tighten their lending conditions and demand stricter collateral requirements when default rates are high.	610 122 52.8	232 58 25.1	42 14 6.1	34 17 7.4	20 20 8.7	938 231 100%	4.06	1.291	Agree
4 Loan default rate situation reduces access to finance for contractors and construction firms, thereby slowing down project execution and infrastructure development.	610 122 52.8	232 58 25.1	42 14 6.1	34 17 7.4	20 20 8.7	938 231 100%	4.06	1.291	Agree
5 Conversely, lower loan default rates encourage banks to approve more construction loans due to increased confidence in borrowers' repayment ability.	605 121 52.4	232 58 25.1	42 14 6.1	32 16 6.9	22 22 9.5	933 231 100%	4.04	1.313	Agree
Total Grand mean and standard deviation							4.03	1.3098	

Source: Field Survey, 2026

Table 5, 177 respondents out of 231 representing 76.6 percent agreed that Loan default rate significantly influences the credit approval process for construction projects by banks in Enugu State, Nigeria with mean score of 4.00 and standard deviation of 1.340. High rates of loan default increase the level of risk perceived by banks, making them more cautious in approving loans for construction activities 174 respondents representing 75.3 percent agreed with mean score of 3.99 and standard deviation of 1.314. Banks often tighten their lending conditions and demand stricter collateral requirements when default rates are high 180 respondents representing 77.9 percent agreed with mean score of 4.06 and standard deviation of 1.345. In addition, regular interaction with extension agents enables farmers to access timely agricultural information and innovations that support sustainable rural development 155 respondents representing 75.3 percent agreed with mean score of 3.95 and 1.291. Conversely, lower loan default rates encourage banks to approve more construction loans due to increased confidence in borrowers' repayment ability 179 respondents representing 77.5 percent agreed with a mean score of 4.04 and standard deviation 1.313.

The effect of bad debt recovery challenges on the volume of bank financing for construction projects in Enugu State, Nigeria.

Table 5: Responses on The effect of bad debt recovery challenges on the volume of bank financing for construction projects in Enugu State, Nigeria

		5	4	3	2	1	ΣFX	-	SD	Decision
		SA	A	N	DA	SD		X		
1	Bad debt recovery challenges reduce the willingness of banks to provide adequate financing for construction projects in Enugu State, Nigeria.	635	232	42	28	18	955			Agree
		127	58	14	14	18	231			
		55.0	25.1	6.1	6.1	7.8	100%	4.13	1.242	
2	Banks experience financial losses when they are unable to recover bad debts from defaulting borrowers in the construction sector.	595	232	42	45	19	933			Agree
		119	52	14	27	19	231			
		51.5	22.5	6.1	11.7	8.2	100%	3.97	1.338	
3	The difficulty in recovering loans increases the level of credit risk faced by banks, leading to stricter lending policies.	615	232	42	44	20	953			Agree
		123	52	14	22	20	231			
		53.2	22.5	6.1	9.5	8.7	100%	4.02	1.327	
4	Poor debt recovery discourages banks from increasing the volume of loans granted to contractors and construction firms.	570	232	42	60	21	925			Agree
		114	52	14	30	21	231			
		49.4	22.5	6.1	13.0	9.1	100%	3.90	1.375	
5	Effective debt recovery mechanisms can improve banks' confidence and enhance the volume of financing available for construction projects.	590	232	42	58	18	940			Agree
		118	52	14	29	18	231			
		51.1	22.5	6.1	12.6	7.8	100%	3.97	1.335	
Total Grand mean and standard deviation								4.779	1.3234	

Source: Field Survey, 2026

Table 5, 185 respondents out of 231 representing 80.1 percent agreed that Bad debt recovery challenges reduce the willingness of banks to provide adequate financing for construction projects in Enugu State, Nigeria with mean score of 4.13 and standard deviation of 1.242. Banks experience financial losses when they are unable to recover bad debts from defaulting borrowers in the construction sector 171 respondents representing 74.0 percent agreed with mean score of 3.97 and standard deviation of 1.338. The difficulty in recovering loans increases the level of credit risk faced by banks, leading to stricter lending policies 175 respondents representing 75.7 percent agreed with mean score of 4.02 and standard deviation of 1.327. Poor debt recovery discourages banks from increasing the volume of loans granted to contractors and construction firms 166 respondents representing 71.9 percent agreed with mean score of 3.95 and 1.345. Effective debt recovery mechanisms can improve banks' confidence and enhance the volume of financing available for construction projects 170 respondents representing 73.6 percent agreed with a mean score of 3.97 and standard deviation 1.335.

Test of Hypotheses

Test of Hypotheses One: Loan default rate has effect on credit approval for construction projects by banks in Enugu State, Nigeria.

One-Sample Kolmogorov-Smirnov Test

	Loan default rate significantly influences the credit approval process for construction projects by banks in Enugu State, Nigeria.	High rates of loan default increase the level of risk perceived by banks, making them more cautious in approving loans for construction activities.	Banks often tighten their lending conditions and demand stricter collateral requirements when default rates are high.	Loan default rate situation reduces access to finance for contractors and construction firms, thereby slowing down project execution and infrastructure development.	Conversely, lower loan default rates encourage banks to approve more construction loans due to increased confidence in borrowers' repayment ability.
N	231	231	231	231	231
Uniform Parameters ^{a,b}	Minimum 1 Maximum 5 Absolute .516	1 5 .503	1 5 .529	1 5 .529	1 5 .525
Most Extreme Differences	Positive .104 Negative -.516	.082 -.503	.087 -.529	.087 -.529	.095 -.525
Kolmogorov-Smirnov Z	-7.846	-7.649	-8.043	-8.043	-7.978
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

a. Test distribution is Uniform.

b. Calculated from data.

Decision Rule:

Since the calculated z-value (-8.043) > critical z-value (.000) at the 5% significance level, we reject the null hypothesis (H_{01}).

Decision:

Furthermore, comparing the calculated Z- value ranges from $-7.649 < -8.043$ against the critical Z- value of .000 (2-tailed test at 95percent level of confidence) the null hypothesis were rejected. Thus the alternative hypothesis was accepted which states that Loan default rate had significant negative effect on credit approval for construction projects by banks in Enugu State, Nigeria.

Test of Hypotheses Two: Bad debt recovery challenges has effect on the volume of bank financing for construction projects in Enugu State, Nigeria.

One-Sample Kolmogorov-Smirnov Test

		Bad debt recovery challenges reduce the willingness of banks to provide adequate financing for construction projects in Enugu State, Nigeria.	Banks experience financial losses when they are unable to recover bad debts from defaulting borrowers in the construction sector.	The difficulty in recovering loans increases the level of credit risk faced by banks, leading to stricter lending policies.	Poor debt recovery discourages banks from increasing the volume of loans granted to contractors and construction firms.	Effective debt recovery mechanisms can improve banks' confidence and enhance the volume of financing available for construction projects.
N		231	231	231	231	231
Uniform Parameters ^{a,b}	Minimum	1	1	1	1	1
	Maximum	5	5	5	5	5
Most Extreme Differences	Absolute	.551	.515	.532	.494	.511
	Positive	.078	.082	.087	.091	.078
	Negative	-.551	-.515	-.532	-.494	-.511
Kolmogorov-Smirnov Z		-8.372	-7.830	-8.093	-7.501	-7.764
Asymp. Sig. (2-tailed)		.000	.000	.000	.000	.000

a. Test distribution is Uniform.

b. Calculated from data.

Decision Rule:

Since the calculated z-value (-8.372) > critical z-value (.000) at the 5% significance level, we reject the null hypothesis (H_{01}).

Decision:

Furthermore, comparing the calculated Z- value ranges from -7.501<-8.372 against the critical Z- value of .000 (2-tailed test at 95 percent level of confidence) the null hypothesis were rejected. Thus the alternative hypothesis was accepted which states that Bad debt recovery challenges had significant negative effect on the volume of bank financing for construction projects in Enugu State, Nigeria.

Discussion of Findings

Effect of loan default rate on credit approval for construction projects by banks in Enugu State, Nigeria.

From the result of hypotheses one, the calculated Z- value ranges from -7.649 < -8.043 against the critical Z- value of .000 which implies that Loan default rate had significant negative effect on credit approval for construction projects by banks in Enugu State, Nigeria. In support of the result in the literature review, Aliyu (2024) studied macroeconomic variables and non-performing loans of banks in Nigeria using secondary data obtained from the Central Bank of Nigeria. Findings indicated that high loan default rates reduced banks' confidence in approving loans for construction projects due to uncertainty in repayment. The study concluded that persistent defaults negatively

affect bank lending decisions and Gloria and Eunekwe (2024) examined the macroeconomic determinants of non-performing loans in Nigeria. The result revealed that increasing default rates among borrowers contributed to stricter credit approval conditions imposed by banks on construction firms.

Effect of bad debt recovery challenges on the volume of bank financing for construction projects in Enugu State, Nigeria.

From the result of hypotheses two, the calculated Z- value ranges from $-7.501 < -8.372$ against the critical Z- value of .000 which implies that Bad debt recovery challenges had significant negative effect on the volume of bank financing for construction projects in Enugu State, Nigeria. In support of the result in the literature review, Ijuwo (2024) examined the relationship between non-performing loans and credit risk management practices in Nigerian deposit money banks. Findings showed that challenges associated with recovering bad debts discouraged banks from increasing the amount of credit granted to construction firms and contractors and Ilelaboye and Alade (2025) examined monitoring activities and non-performing loans of financial institutions in Nigeria. Findings revealed that poor debt recovery mechanisms reduced the volume of loans banks were willing to provide to high-risk sectors such as construction.

Summary of Findings, Conclusion and Recommendation

Summary of Findings

- i. Loan default rate had significant negative effect on credit approval for construction projects by banks in Enugu State, Nigeria, $Z(-8.043, P. < .05)$; this indicates that banks closely consider the level of loan default risk before approving credit facilities for construction projects. It also implies that changes in default rates significantly influence banks' lending decisions and risk assessment procedures in the construction sector.
- ii. Bad debt recovery challenges had significant negative effect on the volume of bank financing for construction projects in Enugu State, Nigeria, $Z(-8.372, P. < .05)$, this indicates that difficulties associated with recovering bad debts significantly influence the amount of loans banks are willing to provide for construction projects. It also implies that effective debt recovery practices are important in determining banks' confidence and lending capacity within the construction sector.

Conclusion

The study concluded that Loan default rate and Bad debt recovery challenges had significant negative effect on credit approval and the volume of bank financing for construction projects by banks in Enugu State, Nigeria. Specifically, loan default rate and bad debt recovery challenges influence credit approval decisions and the volume of bank financing provided to construction firms. The increasing level of non-performing loans makes banks more cautious in granting construction loans due to fear of financial losses and repayment uncertainties. Therefore, effective credit risk management and debt recovery strategies are necessary to improve banks' confidence in financing construction projects.

Recommendations

The following recommendations were proffered

- i. Banks should strengthen their credit risk assessment and loan monitoring systems to reduce loan default rates and improve confidence in approving construction project financing.
- ii. Banks should establish stronger debt recovery mechanisms and improve loan monitoring strategies to minimize bad debts and enhance the volume of financing available for construction projects.

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