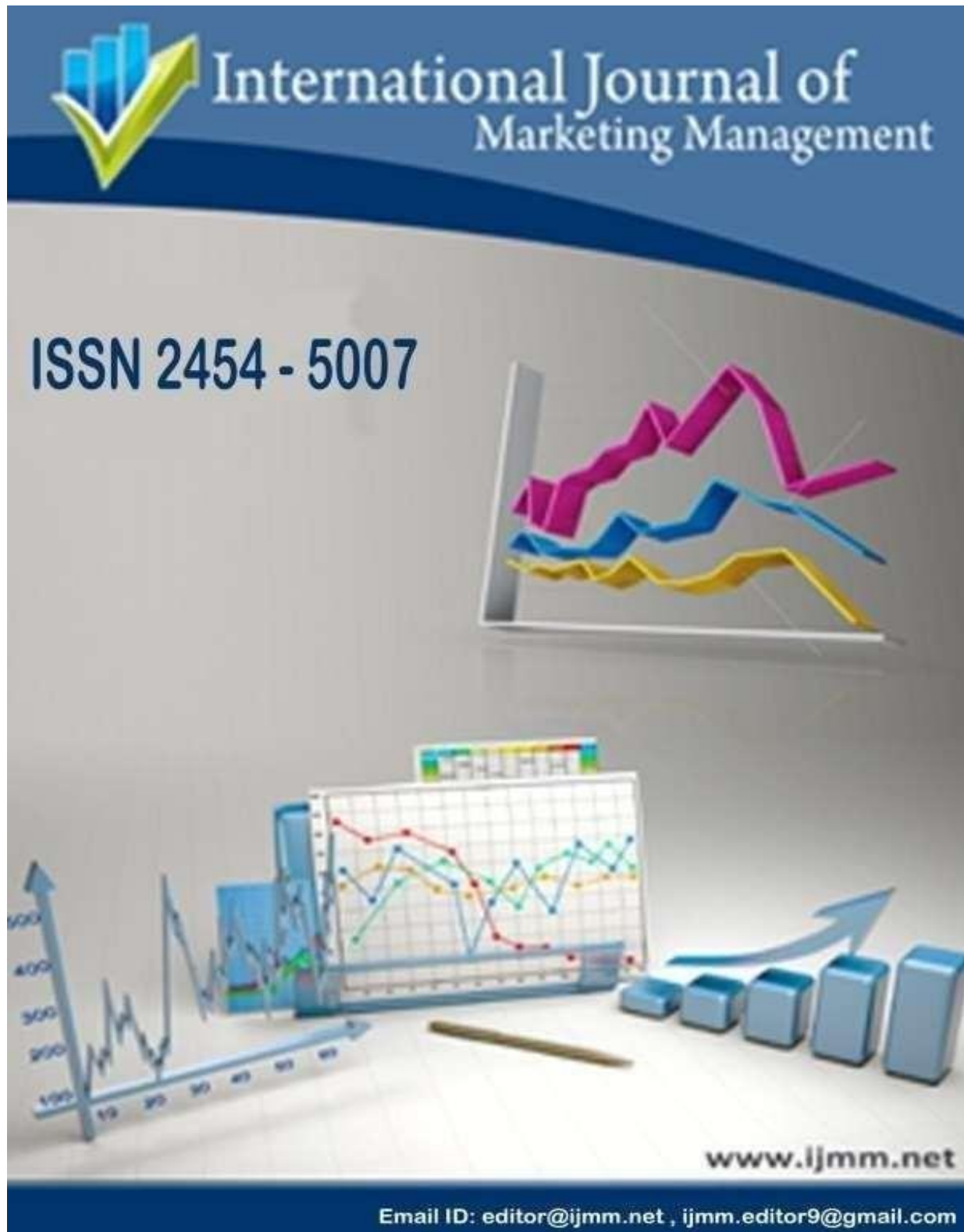




IMPACT OF NON-PERFORMING ASSETS ON PROFITABILITY OF SBI

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ABSTRACT

This paper analyzes the effect of Non-Performing Assets (NPAs) on bank profitability in the State Bank of India (SBI), India's largest government-owned bank. Spanning 2016–2025, it compares trends in NPAs, sectoral spread, and macroeconomic factors like exchange rate volatility. Important profitability metrics—Return on Assets (ROA), Return on Deposits (ROD), Net Interest Margin (NIM), Return on Investment (ROI), Loan Loss Provisions (LLP), Capital Adequacy Ratio (CAR), and Loan-to-Deposit Ratio (LTDR)—are analyzed via t-test, regression, and correlation. The results indicate a negative correlation between NPAs and profitability, demonstrating how stressed assets depress profits and curtail lending capability. The study also highlights SBI's strategies like credit monitoring, digital tools,

and proactive provisioning. It concludes that asset quality improvement, effective risk management, and policy support are crucial for long-term stability.

Keywords: Non-Performing Assets, SBI, Profitability, ROA, NIM, Risk Management, Banking Sector, Financial Stability

INTRODUCTION

The banking industry is a major engine of economic growth, mobilizing savings and directing them into productive investment in the fields of agriculture, industry, and infrastructure. Banks in India also have a pivotal role to play in financial inclusion and delivery of government-sponsored welfare schemes, thus facilitating inclusive growth. Of these, the State Bank of India (SBI) is the biggest public sector bank with an extensive

reach and diversified offerings from retail and corporate banking to socio-economic activities like Jan Dhan Yojana, MUDRA loans, and agricultural credit. Yet, its large exposure to infrastructure, agriculture, and industrial lending exposes it most to Non-Performing Assets (NPAs). NPAs, as loans overdue by 90 days or more, indicate deteriorating asset quality and weakness in credit judgment, borrower restraint, and external economic factors. Increasing NPAs cut down interest income, accentuate provisioning, erode profitability, and adversely impact major yardsticks like Return on Assets (ROA), Return on Investment (ROI), and Net Interest Margin (NIM). They further weaken investor confidence and limit the bank's lending growth. Furthermore, macroeconomic factors like inflation, GDP fluctuations, and exchange rate volatility directly influence repayment capacity, adding to the challenge. This study therefore aims to examine the impact of NPAs on SBI's profitability, considering both internal performance metrics and external economic factors, and highlights the importance of strong credit monitoring, risk management, and policy support to sustain SBI's financial stability and its critical role in national economic growth.

RESEARCH OBJECTIVES AND METHODOLOGY

The purpose of this research is to explore the influence of Non-Performing Assets (NPAs) on the profitability of India's largest public sector bank, the State Bank of India (SBI). It seeks to analyze the correlation between NPAs and other major profitability factors for a decade between F.Yr. 2015-16 and 2024-25. Secondary data has been gathered from credible sources including SBI annual reports, RBI publications, and other financial sources. The performance metrics chosen for research are Return on Assets (ROA), Return on Deposits (ROD), Net Interest Margin (NIM), Return on Investment (ROI), Loan Loss Provisions (LLP), Capital Adequacy Ratio (CAR), and Loan-to-Deposit Ratio (LTDR). These metrics are employed to analyze the impact of increasing NPAs on the financial performance of the bank.

Statistical techniques employed in the current research are the t-test, correlation analysis, and regression analysis. t-test is utilized to check for the significance of the differences of means of financial performance in different levels of NPA. Correlation analysis is adopted to quantify the direction and strength of association between NPAs and profitability

measures. Regression analysis assists in ascertaining the extent of influence of NPAs on various financial variables and to forecast future occurrences. All these tools together give an overall picture of how NPAs affect profitability and stability in SBI. The objectives of the research study are:

1. To Examine trends of NPAs in SBI over time to assess credit risk management.
2. To analyze profitability metrics to understand the impact of NPAs on earnings.

Analysis decomposes research findings, whereas interpretation makes inferences from the findings. For this research on NPAs and profitability of SBI, statistical applications like t-test, correlation, and regression were used with MS Excel/SPSS. The t-test measured differences in profitability with changing NPA levels, correlation examined the relationship between NPAs and proxies such as ROA, ROD, and NIM, and regression analyzed the overall effect on ROI, CAR, LLP, and LTDR. Together, these tools highlight the negative effect of NPAs on SBI's financial performance.

ANALYSIS AND INTERPERTATION HYPOTHESIS FRAMED

- There is no significant trend in the level of NPAs in SBI over time. (Trend Analysis)
- There is no significant impact of NPAs on the profitability metrics of SBI. (Regression/ANOVA)

OBJECTIVE 1: To Examine trends of NPAs in SBI over time to assess credit risk management.

TABLE NO :1 Descriptive Statistics

	N	Range	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
LLP	10	3.75	1.6200	1.15590	.498	.687	.054	1.334
ROA	10	1.31	.5550	.46874	-.076	.687	-1.311	1.334
LTDR	10	18.03	73.8740	5.23051	.595	.687	.892	1.334
ROI	10	6.66	29.4740	2.47181	.019	.687	-1.870	1.334
CAR	10	1.10	5.5920	.38075	.402	.687	-1.017	1.334

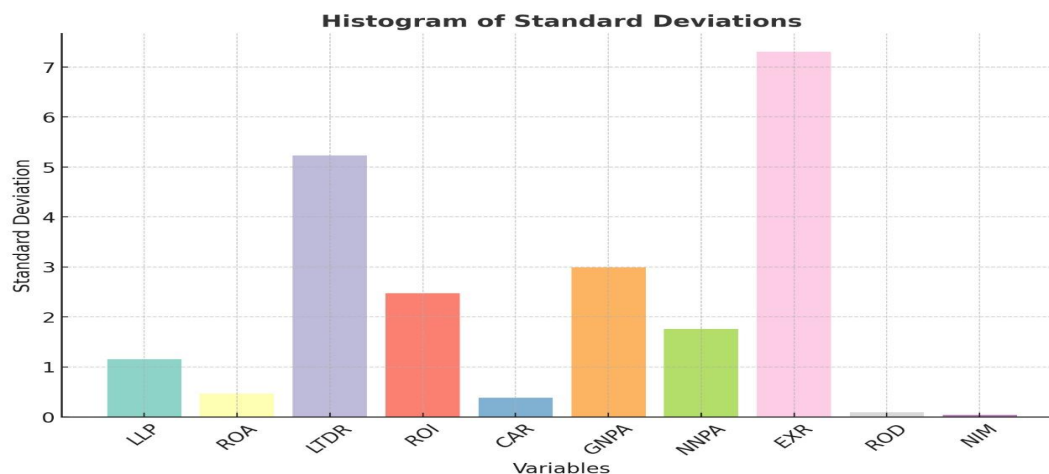
GNPA	10	9.70	5.5940	2.98506	.604	.687	.267	1.334
NNPA	10	5.26	2.2720	1.75788	.794	.687	-.191	1.334
EXR	10	21.13	74.2880	7.30748	.415	.687	-1.151	1.334
ROD	10	.26	.4460	.09058	-.192	.687	-1.005	1.334
NIM	10	.09	.2780	.03795	-.188	.687	-2.037	1.334
Valid N (listwise)	10							

SOURCE: Computer Data

INTERPERTATION

The analysis indicates that SBI still grapples with serious asset quality issues, with Gross NPAs (Mean = 5.59) and Net NPAs (Mean = 2.27) having high volatility and occasional spikes as a result of economic slowdown, sector stress, and defaults by borrowers. Otherwise, profit indicators are stable—ROA has an average of 0.56 and ROI 29.47—and show resilience. Efficiency measures such as LTDR (Mean = 73.87) and CAR (Mean = 5.59) indicate well-balanced lending, liquidity management, and sound capital management. Loan Loss Provisions monitor NPA variations to ensure stability protection. Overall, though NPAs continue to be fluctuating, SBI maintains profitability and financial solidity through provisioning, capital adequacy, and risk management processes.

CHART NO



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OBJECTIVE 2: To analyze profitability metrics to understand the impact of NPAs on earnings

TABLE NO: 2 T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
ROA	10	.5550	.46874	.14823
ROI	10	29.4740	2.47181	.78166
ROD	10	.4160	.12492	.03950
NIM	10	.2780	.03795	.01200
NETNPA	10	2.2720	1.75788	.55589

TABLE NO: 3 One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
ROA	3.744	9	.005	.55500	.2197	.8903
ROI	37.707	9	.000	29.47400	27.7058	31.2422
ROD	10.531	9	.000	.41600	.3266	.5054
NIM	23.167	9	.000	.27800	.2509	.3051
NETNPA	4.087	9	.003	2.27200	1.0145	3.5295

SOURCE: Computer Data

INTERPERTATION

The one-sample t-test highlights the relationship between SBI's profitability and its Non-Performing Assets (NPAs). Results indicate that all key profitability measures—Return on Assets (ROA), Return on Deposits (ROD), Return on Investment (ROI), and Net Interest Margin (NIM)—are statistically significant and positive, confirming that the bank maintains strong earnings despite asset quality stress. ROA ($t = 3.744$, $p = 0.005$) indicates effective asset utilization, ROI ($t = 37.707$, $p < 0.001$) portrays effective deployment of funds, ROD ($t = 10.531$, $p < 0.001$) represents effective use of deposits, and NIM ($t = 23.167$, $p < 0.001$) represents secure spreads and healthy intermediation. Simultaneously, Net NPAs (Mean = 2.27, $t = 4.087$, $p = 0.003$) continue to be a challenge since provisioning demands curtail profitability, constrain lending, and erode investor confidence. These findings portray a two-dimensional situation: SBI continues to deliver solid returns and exhibit operational strength, but its asset quality challenges present structural threats that dampen long-term performance. In all, the results highlight that although SBI is financially stable and can counter stress due to good management

practices, NPAs still have a detrimental effect. Therefore, the null hypothesis is rejected.

CONCLUSION

The research finds that Non-Performing Assets (NPAs) have a strong adverse effect on the profitability and health of the State Bank of India (SBI). The results strongly prove that an increase in NPAs lowers the bank's interest income, enhances provisioning, and curbs its lending ability, thus causing a direct burden to long-term viability and growth. Even though such issues continue, SBI has shown resilience by sustaining consistent profitability levels, conforming to the norms of capital adequacy, and implementing efficient provisioning practices to counter risks. This is proof that even though NPAs continue to be a cause of concern, they have not fully eroded the bank's capability to function efficiently. SBI's capacity to generate consistent returns even during periods of heightened NPA stress highlights its operational strength, sound governance practices, and effective capital management policies. However, the persistence of stressed assets continues to act as a drag on overall performance, underlining the need for stronger measures. The results reinforce that stricter credit appraisal procedures, efficient recovery mechanisms,

and robust monitoring systems must be prioritized to curb future NPA accumulation. At the same time, continued policy support, regulatory reforms, and proactive government initiatives will be essential in ensuring that SBI can safeguard its stability and continue playing a leading role in India's financial system. Overall, the study emphasizes both SBI's resilience and the urgent need for comprehensive strategies to address the structural issues associated with NPAs.

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BOOKS:

1. The book Managing Non-Performing Assets in Indian Public Sector Banks by S. K. Mujibar Rahaman provides an in-depth study of NPAs in PSBs and their effect on bank performance, which directly relates to SBI.
2. Legal Aspects of Recovery & Reduction of NPA in Banking Industries by Parineeta Goswami explains the legal framework (SARFAESI, DRT, Lok Adalats) for tackling NPAs, useful in linking profitability with recovery measures.
3. Credit Risk Management for Indian Banks by K. Vaidyanathan focuses on how credit risk practices and provisioning for NPAs impact banks' profitability.
4. Highlights of Non-Performing Assets and Banking System in India by Dr. S. K. Nath offers an updated overview of NPAs in Indian banks, which is helpful.