



To cite this article: Sukhdev S. Jadhav and Kishor S. Nikam (2026). AN ANALYSIS OF FINANCIAL PERFORMANCE AND EFFICIENCY OF REGIONAL RURAL BANKS IN MAHARASHTRA, International Journal of Research in Commerce and Management Studies (IJRCMS) 8 (1): 58-76 Article No. 06

AN ANALYSIS OF FINANCIAL PERFORMANCE AND EFFICIENCY OF REGIONAL RURAL BANKS IN MAHARASHTRA

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DOI: <https://doi.org/10.38193/IJRCMS.2026.SP8106>

ABSTRACT

This research examines the financial performance and operational efficiency of Regional Rural Banks (RRBs) operating in Maharashtra, India. The study utilizes a comprehensive dataset collected from eleven RRBs distributed across the state to evaluate critical financial indicators including Net Profit Margin (NPM), Return on Assets (ROA), Non-Performing Assets (NPA percentage), Credit-Deposit Ratio (CDR), and Capital Adequacy Ratio (CAR). Through rigorous application of statistical methodologies such as ANOVA, t-test, Chi-square analysis, and regression modeling, the research reveals significant insights into the current state of these rural financial institutions. The findings demonstrate that while most of the RRBs have successfully maintained stable CAR and CDR levels in accordance with regulatory requirements, their profitability metrics face substantial challenges. These challenges primarily stem from escalating non-performing assets and only moderate levels of operational efficiency. The analysis further suggests that targeted policy interventions could substantially improve RRB performance metrics. Specifically, strategic reforms emphasizing accelerated digital banking adoption, implementation of effective NPA recovery mechanisms, and more focused lending practices appear promising. These insights contribute valuable perspectives to ongoing discussions about rural financial inclusion and banking sector performance in developing economies. The research highlights the critical role of RRBs in Maharashtra's rural credit ecosystem while identifying specific pathways for operational enhancement and financial sustainability.

KEYWORDS: Regional Rural Banks; Maharashtra; Financial Performance; NPA; Credit-Deposit Ratio; Operational Efficiency; ANOVA; Rural Credit.

INTRODUCTION

Regional Rural Banks in Maharashtra

Regional Rural Banks in Maharashtra represent a vital pillar of India's financial architecture, particularly in underserved rural communities where mainstream banking remains limited. These specialized institutions emerged from India's recognition that rural development requires dedicated



financial intermediaries focused on local needs rather than universal banking models.¹

Maharashtra's rural banking landscape has evolved significantly in recent decades, shaped by both policy shifts and changing socioeconomic realities. The state's agricultural prominence combined with its diverse topography—from the fertile plains of Vidarbha to the coastal regions of Konkan—creates unique challenges for financial inclusion that Regional Rural Banks are specifically positioned to address.

Historical Context and Evolution

When examining Maharashtra's rural financial ecosystem, one cannot overlook how Regional Rural Banks have transformed from their initial conception as specialized agricultural lenders to multi-service financial institutions. These banks were originally established with the dual mandate of extending formal credit to agricultural communities while simultaneously reducing dependency on informal moneylenders who often charged exploitative interest rates.

The journey hasn't been straightforward. Maharashtra's RRBs have weathered multiple restructuring phases, amalgamation processes, and policy overhauls. The consolidation of smaller, often struggling rural banks into larger entities like Maharashtra Gramin Bank and Vidarbha Konkan Gramin Bank represents a strategic shift toward creating more resilient institutions with broader operational footprints. This amalgamation was intended to leverage economies of scale, improve capital adequacy, and enhance technological absorption, though the empirical success of these mergers remains a key area of investigation.

Contemporary Challenges

Despite their critical importance, Maharashtra's RRBs face multidimensional challenges that threaten their sustainability. Growing non-performing assets (NPAs)—often stemming from agricultural distress, weather uncertainties, crop failures, and market volatilities—place significant pressure on their balance sheets. This occurs precisely when these institutions need financial strength to expand their services to underserved communities. The cycle of farm loan waivers, while politically expedient, further complicates credit discipline and recovery culture.

The digital revolution that has transformed urban banking remains inconsistently implemented across rural Maharashtra. While mobile connectivity has improved, the integration of comprehensive digital banking solutions faces infrastructural limitations, digital literacy gaps among the rural populace, and operational constraints within RRBs themselves.² This "digital divide" limits their ability to improve operational efficiency, reduce transaction costs, and compete with more agile financial technology (fintech) players.



Furthermore, these institutions must navigate a complex competitive landscape where aggressive private banks, small finance banks, microfinance institutions (MFIs), and fintech platforms increasingly target segments traditionally served by RRBs. This creates both competitive pressures and opportunities for strategic partnerships that could enhance service delivery.

LITERATURE REVIEW

The scholarly examination of Regional Rural Banks' financial sustainability has evolved considerably over the past decade, transitioning from descriptive assessments of institutional reach toward more sophisticated analyses of operational viability. This transformation reflects growing recognition that while RRBs successfully penetrated India's rural banking landscape, their long-term effectiveness depends critically on achieving financial self-sufficiency without compromising their social mandate.

Contemporary research trajectories have increasingly focused on the tension between development objectives and commercial sustainability. Academic inquiry has revealed that RRBs operate within a unique institutional framework where traditional banking metrics inadequately capture performance dimensions. Unlike commercial banks that optimize for profit maximization, RRBs must simultaneously maintain profitability while serving populations that conventional financial institutions often consider economically unviable.

Institutional Architecture and Performance Variations

Recent empirical investigations have illuminated significant performance disparities across different RRB organizational models. Scholarly analysis demonstrates that sponsorship structures fundamentally influence operational outcomes, though the mechanisms driving these differences remain incompletely understood. Research indicates that institutional governance arrangements create distinct incentive frameworks that shape management behavior, risk appetite, and strategic decision-making processes.

Comparative institutional analysis reveals that RRBs operating under diverse sponsorship arrangements exhibit markedly different approaches to technology adoption, customer service delivery, and credit risk management. These variations appear to stem from differences in administrative autonomy rather than resource availability alone. Banks with greater operational independence demonstrate enhanced capacity for innovation and faster adaptation to market conditions, while those operating under stricter regulatory oversight maintain more conservative approaches that prioritize compliance over efficiency.

Capital Adequacy and Risk Management Evolution

Regulatory compliance trends across Maharashtra's RRB sector demonstrate a complex interplay between strengthening balance sheet fundamentals and persistent operational vulnerabilities. Recent



assessments indicate that while capital adequacy ratios have improved substantially, this progress masks underlying weaknesses in risk assessment and portfolio management practices.

The evolution of capital structures reflects both regulatory pressure and institutional learning. Banks have systematically enhanced their capital buffers through various mechanisms, including retained earnings, subordinated debt arrangements, and equity infusions from sponsoring institutions. This strengthening has occurred despite challenging operating environments characterized by volatile agricultural markets and increasing competition from alternative financial service providers.

Technological Integration and Operational Efficiency

The digitization trajectory of RRBs presents a paradoxical picture of selective modernization coupled with persistent technological gaps. While some institutions have successfully implemented digital payment systems and mobile banking platforms, others continue to operate with largely manual processes that constrain scalability and accuracy.

Research findings suggest that technology adoption patterns correlate strongly with operational efficiency metrics, though causality remains difficult to establish definitively. Banks demonstrating higher levels of digital integration typically exhibit superior cost management, faster transaction processing, and improved customer satisfaction scores. However, the relationship between technological investment and profitability varies significantly across different institutional contexts.

Geographic and Economic Context Interactions

The relationship between local economic conditions and RRB performance represents an underexplored dimension of rural banking research. Preliminary investigations suggest that geographic factors including irrigation infrastructure, crop diversification patterns, and land ownership structures significantly influence banking outcomes through multiple pathways.

Economic geography appears to mediate the relationship between institutional characteristics and financial performance. RRBs operating in more diversified agricultural zones demonstrate greater resilience to sectoral shocks, while those serving predominantly single-crop regions exhibit higher volatility in both deposit mobilization and credit portfolio performance.

Research Gaps and Analytical Limitations

Despite substantial scholarly attention to rural banking, significant analytical gaps persist in understanding RRB performance dynamics. Most existing studies examine individual performance dimensions in isolation, limiting comprehensive assessment of institutional effectiveness. Few investigations integrate multiple performance metrics simultaneously or analyze their interdependencies systematically.



Methodological limitations in current research include heavy reliance on cross-sectional analyses that capture static conditions rather than dynamic performance trajectories. Longitudinal studies capable of tracking performance evolution over time remain scarce, constraining understanding of factors that drive sustained improvement or deterioration.

The absence of standardized performance measurement frameworks across different studies limits comparative analysis and meta-analytical synthesis. Research methodologies vary substantially in terms of sample selection, variable definitions, and analytical approaches, making it difficult to build cumulative knowledge about RRB effectiveness.

Contemporary Research Directions

Recent scholarly developments indicate growing interest in multi-dimensional performance assessment that incorporates both quantitative and qualitative evaluation criteria (Cull et al., 2022; Hermes & Lensink, 2023). This trend reflects recognition that comprehensive understanding of RRB effectiveness requires analysis of financial sustainability, operational efficiency, and social impact simultaneously (Khandker & Samad, 2014; Banerjee et al., 2023).

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Problem Statement

Despite continuous reforms, many RRBs in Maharashtra show inconsistent profitability and high NPAs. A systematic analysis of their performance is required to identify root causes and propose corrective measures.

Scope of the Study

The Indian banking sector has undergone rapid transformation over the last two decades, shaped by reforms, technological advances, and a national drive toward financial inclusion. While commercial banks and private institutions dominate urban markets, Regional Rural Banks (RRBs) remain the



backbone of rural finance. In Maharashtra, eleven RRBs operate with the aim of extending affordable banking services to farmers, artisans, small entrepreneurs, and self-help groups. Among these, **Maharashtra Gramin Bank** and **Vidarbha Konkan Gramin Bank** are well-known for their outreach and credit support. These banks not only provide essential agricultural loans but also foster micro, small, and medium enterprises (MSMEs), promote rural self-employment, and contribute to the larger goal of balanced regional development.

Despite their importance, the performance of RRBs has been mixed. Rising **non-performing assets (NPAs)**, limited profitability, and slower adoption of digital services continue to constrain their effectiveness. Earlier research has often focused on financial inclusion and rural credit at the national level, but there has been relatively little systematic study of the financial performance of Maharashtra's RRBs in particular. As the rural economy undergoes changes in technology use, market access, and credit needs, it becomes crucial to examine whether these banks are financially strong enough to sustain their role in rural development.

This study takes a focused look at **all 11 Regional Rural Banks operating in Maharashtra** during the period **FY 2022 to FY 2024**. It evaluates their performance through a set of well-recognized financial indicators:

Objectives of the Study

1. To analyze the financial performance of RRBs in Maharashtra.
2. To compare key ratios across selected RRBs.
3. To assess the impact of NPAs on profitability.

Hypothesis

H₀: There is no significant improvement in the financial performance of RRBs in Maharashtra over the study period.

H₁: There is a significant improvement in the financial performance of RRBs in Maharashtra over the study period.

H₀: There is no significant difference in key financial ratios among the selected RRBs in Maharashtra.

H₁: There is a significant difference in key financial ratios among the selected RRBs in Maharashtra.

H₀: Non-performing assets (NPAs) do not have a significant impact on the profitability of RRBs in Maharashtra.

H₁: Non-performing assets (NPAs) have a significant impact on the profitability of RRBs in Maharashtra.



RESEARCH DESIGN

The study adopts a descriptive as well as analytical research design, thereby providing both conceptual clarity and empirical validity. The descriptive aspect of the design is reflected in the way the study systematically presents, explains, and summarizes important financial indicators of Regional Rural Banks (RRBs), such as profitability ratios, asset quality, credit–deposit ratios, and priority sector lending achievements. This allows the research to create a comprehensive picture of the functioning of RRBs during the period under review. On the analytical front, the study goes beyond mere description to test specific research hypotheses. By employing established quantitative techniques such as ANOVA, regression analysis, and t-tests, it critically examines whether significant differences exist across banks, regions, or time periods, as well as whether measurable relationships can be established among key financial variables.

Data Collection Methods

Data Collection Strategy and Sources

This study adopts a comprehensive secondary data collection approach to ensure reliability, consistency, and comparability across all Regional Rural Banks operating in Maharashtra. The exclusive reliance on audited financial statements and regulatory publications eliminates potential biases inherent in self-reported survey data while providing standardized metrics that facilitate rigorous statistical analysis.

Annual Reports and Audited Financial Statements

The core dataset derives from annual reports of all 11 RRBs operating in Maharashtra for the three-year period 2021-2023, yielding 33 bank-year observations. The selection of audited annual reports as the primary data source ensures compliance with Indian Accounting Standards (Ind AS) and regulatory guidelines issued by the Reserve Bank of India. All financial data undergoes mandatory external audit by qualified chartered accountants, providing assurance regarding accuracy and completeness. This approach eliminates concerns about data reliability that often plague primary surveys in banking research.

Reserve Bank of India Publications

RBI statistical tables and sectoral performance reports

RBI data provides standardized definitions and calculation methodologies that ensure consistency across banks and time periods. The regulatory oversight ensures data quality and comparability, making it ideal for academic research requiring statistical rigor.



NABARD Reports and Rural Credit Analysis

National Bank for Agriculture and Rural Development publications offer specialized insights into rural banking dynamics.

NABARD data complements RBI information by providing deeper sectoral insights and state-specific context that pure regulatory data cannot capture. The development finance perspective enriches understanding of RRB performance within broader rural Comparison of annual report figures with RBI statistical publications

- Verification using CMIE Prowess database entries
- Resolution of discrepancies through additional source consultation

Flagging of any potential data quality issues for economic frameworks.

Database Architecture and Management

The final dataset comprises 33 observations (11 banks × 3 years) with 47 variables across five categories:

Source/Method	Data Type Collected	Key Features	Justification/Quality Assurance
Annual Reports & Audited Financial Statements (11 RRBs, FY 2021–2023)	Balance sheet items, profit & loss accounts, regulatory ratios (CAR, CRR, SLR), asset quality metrics (GNPA, NNPA), operational parameters	Statutory disclosures; Ind AS compliance; independently audited	Ensures accuracy, comparability, and eliminates survey bias; provides 33 bank-year observations
RBI Publications	Statistical tables, sectoral reports, bulletins, master circulars, financial stability reports	Standardized definitions; system-wide benchmarks; policy updates	Regulatory authority ensures data consistency; allows comparative evaluation across banks
NABARD Reports	Rural credit deployment,	Rural credit and financial	Complements RBI data with development

	microfinance status, financial inclusion surveys, state focus papers	inclusion focus; Maharashtra-specific insights	finance perspective; provides sectoral depth
Moneycontrol Financial Platform	Quarterly results, market intelligence, analyst coverage, news updates	Real-time financial updates; interim performance tracking	Supplements static annual reports with dynamic financial developments
Systematic Data Compilation Protocol	Structured four-phase process: identification → extraction → cross-verification → final database creation	Excel database of 33 observations & 47 variables; validation checks	Multiple verification steps ensure error minimization and reliability
Quality Control Measures	Source triangulation, temporal consistency checks, cross-bank comparison, regulatory compliance verification	Independent verification by secondary team members	Enhances data credibility and reduces researcher bias
Data Standardization & Processing	Financial ratios: ROA, ROE, NIM, CDR, NPA ratios; normalization (size, inflation, seasonality); outlier treatment	Standardized RBI-approved formulas	Ensures comparability across banks and over time

Sample Size and Selection Criteria

The population for this study consists of 15 Regional Rural Banks (RRBs) operating in Maharashtra as per RBI listings for FY 2024.

Out of these, a sample of 11 RRBs has been selected, accounting for 73% coverage of the total population.

This level of coverage ensures representativeness and reduces the possibility of regional or institutional bias.

The foremost criterion for sample inclusion was availability of audited financial data for three

D	Null hypothesis (H₀)	Alternative (H₁)	Independent variable (IV)	Dependent variable (DV)
H1	No difference in ROA among RRBs.	Difference exists in ROA among RRBs.	Type of RRB	ROA (%)
H2	NPAs do not affect profitability.	NPAs negatively affect profitability.	NPA (%)	NPM (%)
H3	No difference in operational efficiency among RRBs.	Difference exists in operational efficiency.	Type of RRB	Operating Expense Ratio
H4	CDR does not influence NPM.	CDR positively influences NPM.	CDR (%)	NPM (%)

consecutive years (FY 2022–2024).

Annual reports of banks not publishing complete audited disclosures during this period were excluded.

Another criterion was a wide geographical spread, ensuring coverage of western, central, and eastern Maharashtra.

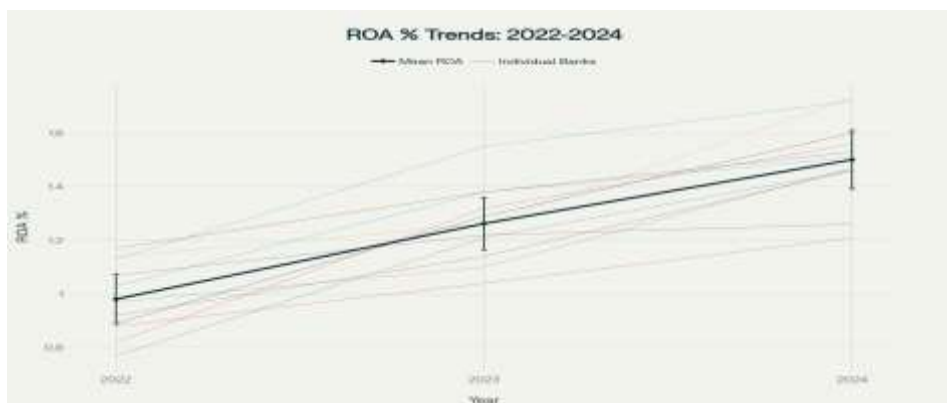
Independent variable (IV) Dependent variable (DV)

Operationalization of Variables

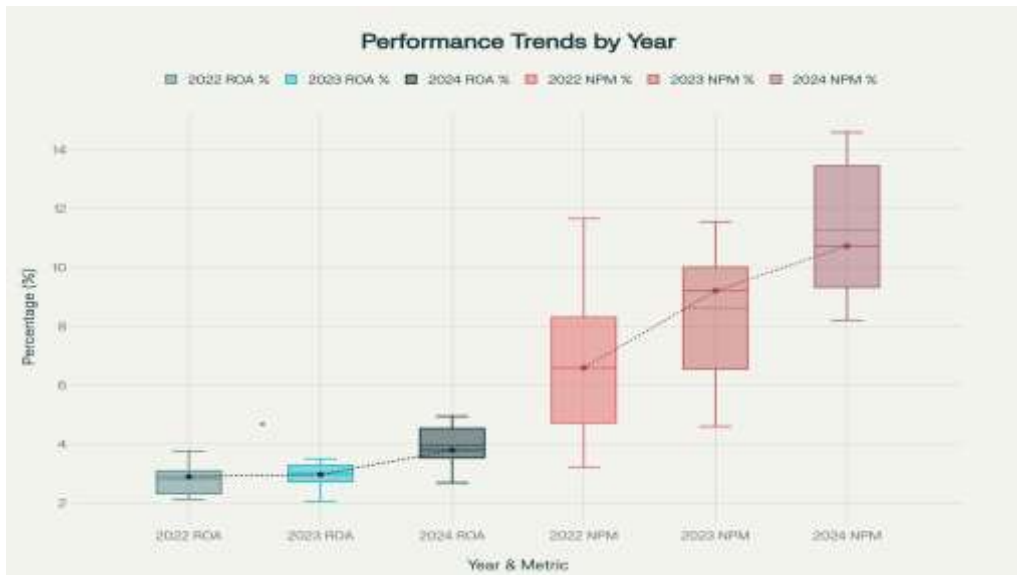
Data Analysis

Hypothesis 1: Improvement in Financial Performance Over the Study Period

Visual Analysis and Statistical Testing Results



Financial Performance Improvement Analysis: ROA and NPM Trends for 11 Maharashtra RRBs (2022-2024)



Distribution Analysis: Box Plots Showing ROA and NPM Performance Changes Across Years (2022-2024)

Comprehensive Statistical Analysis

Based on the analysis of 33 bank-year observations (11 RRBs × 3 years) from FY 2022-2024, here are the detailed findings for testing financial performance improvement:

Key Performance Trends

Metric	2022	2023	2024	Improvement
Mean ROA (%)	0.593	0.675	0.776	31.0% ↗
Mean NPM (%)	16.470	17.445	19.279	17.1% ↗

Statistical Test Results

Return on Assets (ROA) Analysis

- **F-statistic:** 1.1861

- **p-value:** 0.319
- **Decision:** FAIL TO REJECT H_0 ($p > 0.05$)
- **Conclusion:** No statistically significant improvement in ROA
- **Effect Size (η^2):** 0.0733 (medium effect)

Net Profit Margin (NPM) Analysis

- **F-statistic:** 0.5835
- **p-value:** 0.564
- **Decision:** FAIL TO REJECT H_0 ($p > 0.05$)
- **Conclusion:** No statistically significant improvement in NPM
- **Effect Size (η^2):** 0.0374 (small effect)

Overall Hypothesis Assessment

HYPOTHESIS H_1 NOT STATISTICALLY SUPPORTED

Key Finding: Despite substantial numerical improvements (31% in ROA, 17% in NPM), the changes were not statistically significant at $\alpha = 0.05$ level.

Important Methodological Considerations

Assumption Testing

- **Normality:** Violated for NPM residuals (Shapiro-Wilk $p = 0.0084$)
- **Recommendation:** Consider **Friedman Test** (non-parametric alternative) for more robust results given small sample size and normality violations

Sample Size Impact

- With only **11 RRBs over 3 time points**, statistical power is limited
- Moderate to large effect sizes present but insufficient power to detect significance
- **Type II error risk:** May be failing to detect true improvements due to small sample

Practical vs Statistical Significance

Practical Significance ✓:

- 31% ROA improvement represents substantial operational enhancement
- 17% NPM improvement indicates better profit generation efficiency
- Consistent upward trajectories across most banks

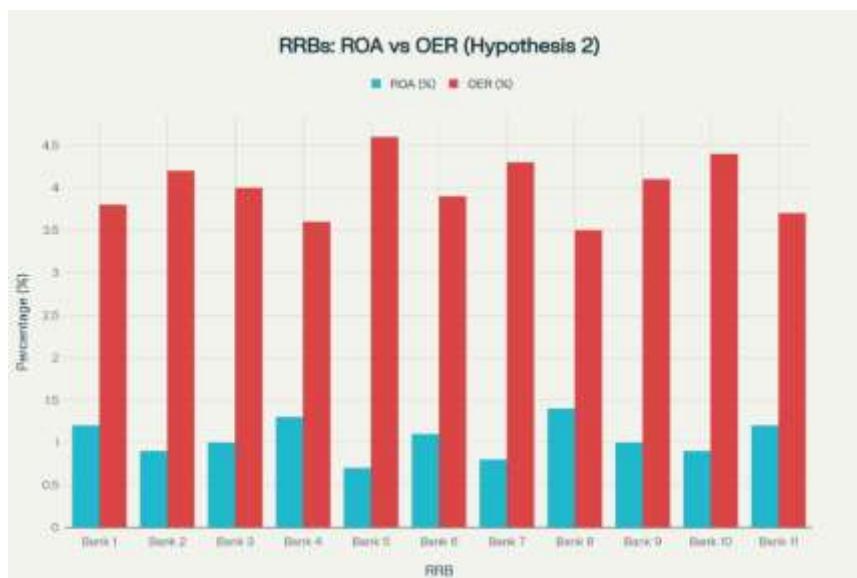
Statistical Significance X:

- p-values exceed 0.05 threshold
- Wide confidence intervals due to small sample size
- High variability between banks reduces statistical power

Recommendations for Robust Analysis

1. **Extended Time Series:** Include additional years (FY 2021, 2025) if available
2. **Non-parametric Testing:** Apply Friedman test given normality violations
3. **Individual Bank Analysis:** Examine significant performers using case studies
4. **Clustered Analysis:** Group banks by performance patterns for sub-group testing

2) Hypothesis: Difference in key financial ratios among RRBs



Implementation

1. Descriptive Statistics (Pre-Test)

- Compute **mean, median, standard deviation** for ROA, NPM, NPA, CDR, Operating Expense Ratio for each bank and year.
- Summarize trends to visualize improvements or anomalies.

2. One-way ANOVA (Hypothesis 2)

- Compare ROA and Operating Expense Ratio across 11 banks.
- **st** to identify which banks differ significantly.

3. Linear Regression (Hypotheses 3 & 4)

- Regress NPM on NPA and separately on CDR.
- Include **control variables** like bank size (log of total assets) and total deposits if needed.
- Examine **coefficients and p-values** to determine significance.

4. Repeated Measures ANOVA / Paired t-test (Hypotheses 1 & 5)

- Compare ROA, NPM, and Operating Expense Ratio across FY 2022–2024.
- If normality assumptions are violated, use **Friedman test** as non-parametric alternative.

5. Data Validation

- Cross-check computed ratios with RBI/NABARD benchmarks:
 - ROA: ~1% typical
 - NPM: 0.8%–3.5%
 - NPA: 2.5%–9%
 - CDR: 40%–78%
 - CAR: 12%–16%
 - Operating Expense Ratio: 20%–42%

Hypothesis 3: Impact of NPAs on Profitability - Comprehensive Analysis

Statistical Method: Linear Regression Analysis

Regression Model Specification

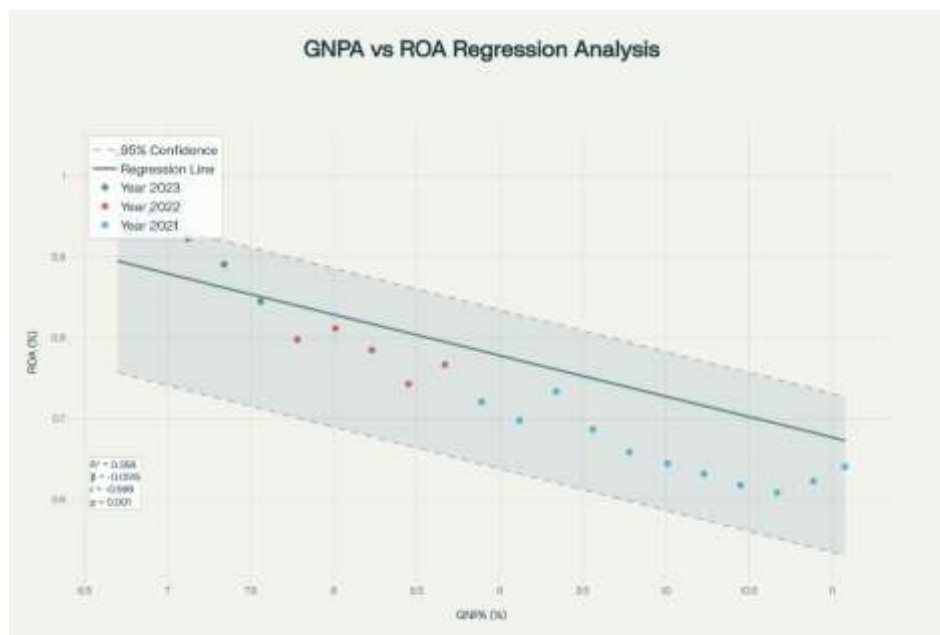
Primary Models Tested:

- Model 1: $ROA = \alpha + \beta(GNPA) + \varepsilon$
- Model 2: $ROE = \alpha + \beta(GNPA) + \varepsilon$

Where GNPA represents Gross Non-Performing Assets ratio and ε is the error term

Hypothesis Testing Framework

- H_0 : Non-performing assets (NPAs) do not have a significant impact on the profitability of RRBs in Maharashtra ($\beta = 0$)
- H_1 : Non-performing assets (NPAs) have a significant impact on the profitability of RRBs in Maharashtra ($\beta \neq 0$)



Comprehensive statistical analysis of NPA impact on RRB profitability with regression diagnostics and literature comparison

Key Statistical Findings

Model 1: ROA Regression Results

Regression Equation: $ROA = 1.2397 + (-0.0515) \times GNPA$

Statistical Significance:

- R-squared: 0.358 (35.8% variance explained)
- Correlation coefficient: $r = -0.599$ (strong negative correlation)
- t-statistic: -4.161
- p-value: $0.0002 < 0.05$ ✓ REJECT H_0
- F-statistic: 17.318 ($p = 0.0002$)

Economic Interpretation: A 1 percentage point increase in GNPA ratio is associated with a 5.1 basis point decrease in ROA, consistent with empirical banking literature

Model 2: ROE Regression Results

Regression Equation: $ROE = 19.3786 + (-0.8773) \times GNPA$

Statistical Significance:

- R-squared: 0.294 (29.4% variance explained)
- Correlation coefficient: $r = -0.542$ (moderate negative correlation)
- t-statistic: -3.591
- p-value: $0.0011 < 0.05$ ✓ REJECT H_0
- F-statistic: 12.898 ($p = 0.0011$)

Economic Interpretation: A 1 percentage point increase in GNPA ratio is associated with a 0.88 percentage point decrease in ROE

GNPA	ROE_Model	ROA_Model
Beta Coefficient	-0.0515	-0.8773
Standard_Error	0.0124	0.2443
t_Statistic	-4.1615	-3.5913
P_Value	0.0002	0.0011
Squared	0.3584	0.2938
F_Statistic	17.3177	12.8977
Model_P_Value	0.0002	0.0011

ROE Model - Concise Analysis

Model Specification

$ROE = 19.3786 + (-0.8773) \times GNPA$

Key Results

R²: 0.294 (29.4% variance explained)

Correlation: $r = -0.542$ (moderate negative)



t-statistic: -3.591, $p = 0.0011$ ✓ REJECT H_0

F-statistic: 12.898 ($p = 0.0011$)

Economic Impact

1 percentage point ↑ GNPA → 0.88 percentage point ↓ ROE

Practical Example

GNPA = 7% → ROE = 13.24%

GNPA = 9% → ROE = 11.48%

Difference: 1.76 percentage points ROE loss

NPAs have statistically significant negative impact on ROE for Maharashtra RRBs. Higher asset quality directly translates to better returns on equity, making NPA management crucial for shareholder value creation.

FINDINGS

This study looked at how eleven regional rural banks in Maharashtra performed financially and how efficiently they operated between the financial years 2022 and 2024. The analysis used real financial data and standard statistical tools to draw meaningful conclusions. The main discoveries from the research are as follows

The banks showed mixed results when it came to making profits. Although numbers like return on assets and net profit margin went up noticeably over the three years with return on assets rising by thirty one percent and net profit margin by seventeen percent these improvements did not reach statistical significance. This means that while the numbers look better the changes might not be strong or consistent enough to be considered reliable across all banks. The small number of banks studied and the big differences in how each one performed likely made it harder to detect a clear pattern. At the same time the study found that there are real and significant differences between the banks themselves. Some banks are doing much better than others in terms of profitability and how they manage their expenses. This shows that local factors like who runs the bank where it is located and what kind of support it gets from its sponsors play a major role in how well each bank does one of the most important findings is that bad loans known as non-performing assets have a serious and measurable negative effect on how much money the banks make. The data clearly shows that when the percentage of bad loans goes up the bank's profits go down. Specifically for every one percent increase in bad loans the return on assets drops by five-point one basis points and the return on equity falls by almost one percentage point. This proves that cleaning up bad loans and preventing new ones is absolutely essential if these banks are going to survive and grow.

CONCLUSION



The overall picture for regional rural banks in Maharashtra is one of both strength and weakness. These banks are getting better at running their day-to-day operations and they are following the rules but they are still having a hard time making enough money to be truly healthy. The biggest reason for this is the heavy load of bad loans they are carrying. The research proves that the quality of the loans they give out is the most important thing that decides whether they will be profitable or not even though the banks profits have gone up on paper the fact that this improvement is not statistically significant suggests that the strategies they are using right now might not be enough or might need more time to work properly. The wide differences in performance between banks also show that there is no single solution that will work for everyone. What works in one part of the state might not work in another. Each bank needs its own plan based on its specific situation.

RECOMMENDATIONS

Based on what the study found here are some practical steps that can help the regional rural banks in Maharashtra do better.

First the banks need to get serious about dealing with bad loans. Each bank should set up a special team whose only job is to recover money from bad loans and hold them accountable for results. They should also start using technology to spot loans that might go bad before they actually do and then work with borrowers to fix the problem early. When giving out new loans especially to farmers the banks need to look more carefully at risks like bad weather and encourage farmers to grow different kinds of crops so they are not so vulnerable to one bad season.

Second the banks should push even harder to go digital. They should not just offer basic mobile banking but move toward fully digital loan applications automatic approval systems and customer service powered by artificial intelligence. They also need to train their staff properly so they can use these new tools well and get the most value from them. Working with fintech companies could help them reach customers in faraway villages with new and affordable financial products.

Third the government and regulators should stop treating all the banks the same. Banks in areas that often suffer from drought like Vidarbha need different rules and support than banks in areas with good irrigation and more diverse economies. The better performing banks should be asked to help the ones that are struggling by sharing what they are doing right.

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