

# A Study on Impact of Non-Performing Assets and Its Financial Stability with Special Reference to Public Sector Banks in Vadalur

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## Abstract

This study examines the impact of Non-Performing Assets (NPAs) on the financial stability of the banks available in the Vadalur region using the CAMELS rating framework. The analysis spans was analyzed for the periods from 2020–2024 through the bank's balance sheet and covers capital adequacy, asset quality, management efficiency, earnings, liquidity, and sensitivity to market risk. Data was collected from both primary (survey) and secondary sources (financial reports). Findings reveal a significant reduction in NPAs over the period of time from 2020 through the stringent action taken by the bank sector and overall improvement in bans financial performance was evolved with the analysis report. The study suggests strengthening internal controls and continuous monitoring to mitigate future risks.

**Keywords:** Non Performing Asset, Financial Performance, Camels Rating Scale.

## 1.1 Introduction

Non-Performing Assets (NPA) are loans or advances that cease to generate income for the bank, usually due to default by borrowers. They directly affect the profitability, liquidity, and creditworthiness of banks and pose a serious threat to the overall financial system. Public sector banks in India, like State bank of India, Indian Bank, Indian Overseas Bank etc have been significantly impacted by the burden of NPAs. The growing volume of bad loans has weakened the bank's capital structure and eroded investor confidence. This study focuses on analyzing the trend, causes, and consequences of NPAs in banks in Vadalur and evaluates how they affect the bank's financial stability.

## 1.2 Objectives

- To examine to causes and consequences of NPA.
- To assessing the measures taken by banks in Vadalur to manage and reduce NPA.
- To evaluate the Bank's financial performance using CAMELS rating system.

## 2.1 Research Methodology

Research Methodology refers to the systematic approach or framework and used by researchers to conduct a study or investigation.

Data collection Method: Data collection method refers to the technique or procedures used to gather information for research purposes. There are two sources of data namely Primary and secondary data.

Research Design: Descriptive and Analytical

Data Sources: Primary (150 respondents survey) & Secondary (Annual Reports, RBI data)

Tools Used: CAMELS Rating, Chi-square test, Percentage analysis

## Data Analysis and Intrepretation

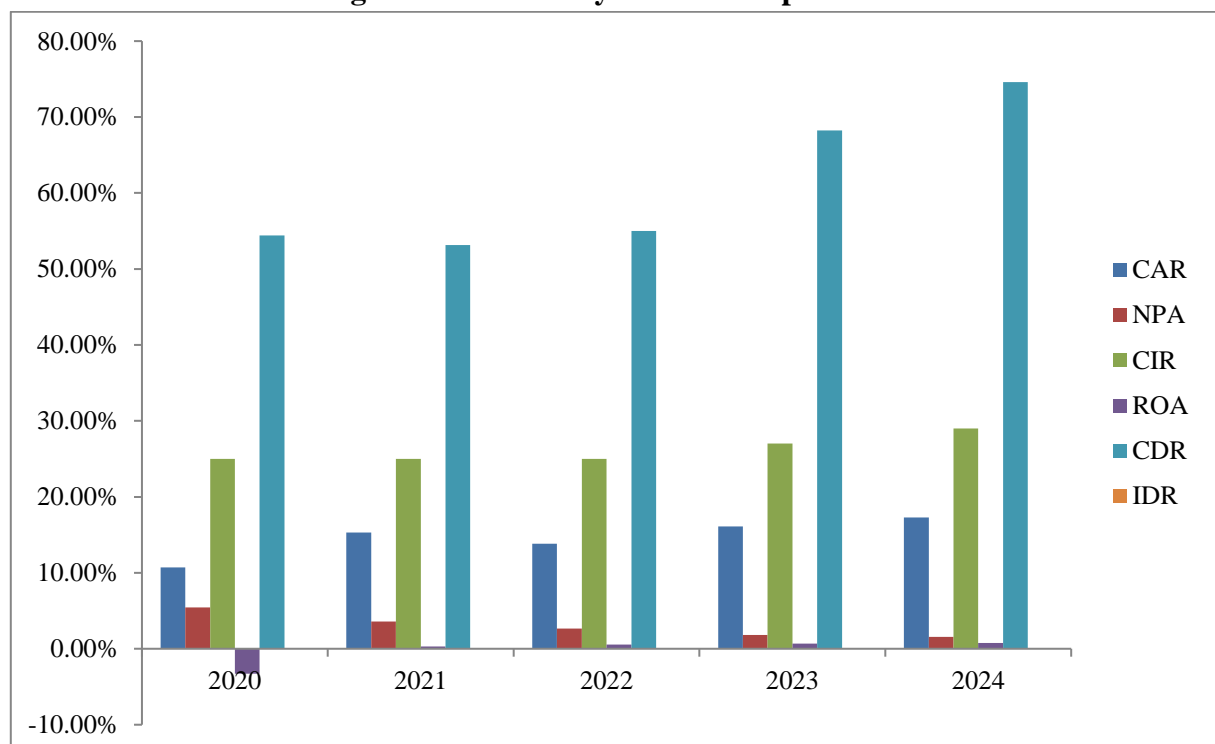
### 3.1 CAMELS Rating System

**Table 1: Data Analysis and Intrepretation**

Particulars	Mar 2020	Mar 2021	Mar 2022	Mar 2023	Mar 2024
<b>Capital Adequacy Ratio</b>					
Capital Adequacy	10.72%	15.32%	13.83%	16.10%	17.28%
<b>Asset Quality</b>					
Net NPA	5.44 %	3.58 %	2.65 %	1.83 %	1.57%
<b>Management Capabilities</b>					
Cost of Income Ratio	25%	25%	25%	27%	29%
<b>Earnings</b>					
Return on Assets	-3.27%	0.30%	0.57%	0.67%	0.75%
Return on Equity	-52.78%	4.91%	7.43%	8.31%	9.50%
<b>Liquidity</b>					
CDR	54.42%	53.15%	55.02%	68.25%	74.61%
IDR	35.62%	39.74%	37.45%	36.10%	34.85%
<b>Sensitivity</b>					
Investment Portfolio	79,416.08	95,494.22	98,179.31	94,170.41	99,632.08

The above data is pictured in the next graph.

**Figure 1: Data Analysis and Intrepretation**



### 3.1.1 Final CAMELS Rating calculation

Final Rating = (Capital Adequacy + Asset Quality + Management + Earnings + Liquidity + Sensitivity)/6

Final Rating = (1+1+2+4+1+2)/6

= 11/6

Final Rating = 1.83

Final Rating in CAMELS model = 2 (GOOD)

**Final Inference:** Bank should maintain strong capital buffers and further strengthen asset quality through better credit appraisal. It current status reflects a cautiously improving financial position, with a decline in NPAs and stronger operational performance. Yet, consistent monitoring and reforms are essential to ensure continued stability and growth.

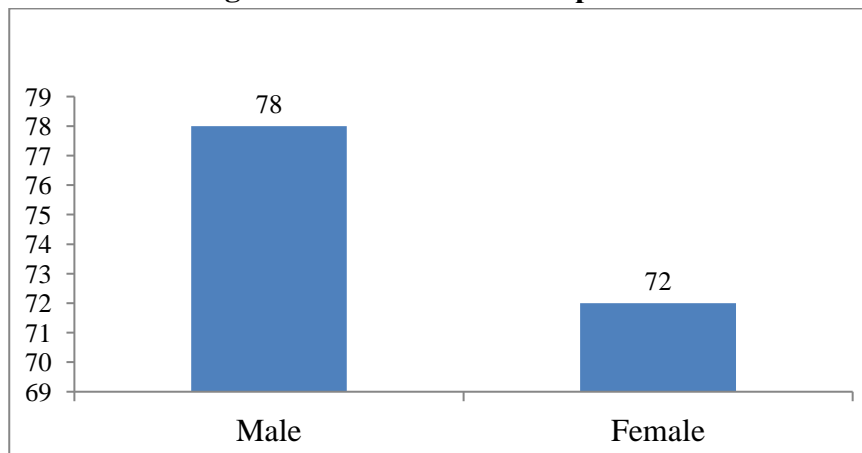
### 3.2 Percentage Analysis

Gender of the Respondent

**Table 2: Gender of the Respondent**

Particulars	Frequency	Percentage
Male	78	52
Female	72	48
Total	150	100

**Figure 2: Gender of the Respondent**



### Inference

From the above table it is inferred that, 52% of the respondents are Male and 48% of the respondents are Female.

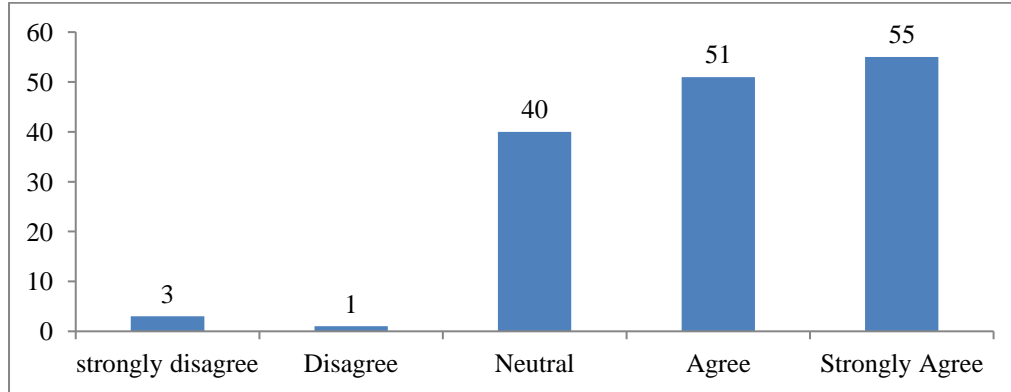
### Political and legal influences adversely affect loan repayment

**Table 3: Political and legal influences adversely affect loan repayment**

Particulars	Frequency	Percentage
Strongly Agree	55	36.7
Agree	51	34.0
Neutral	40	26.7
Disagree	1	0.7
Strongly Disagree	3	2.0

Total	150	100
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**Figure 3: Political and legal influences adversely affect loan repayment**



### Inference

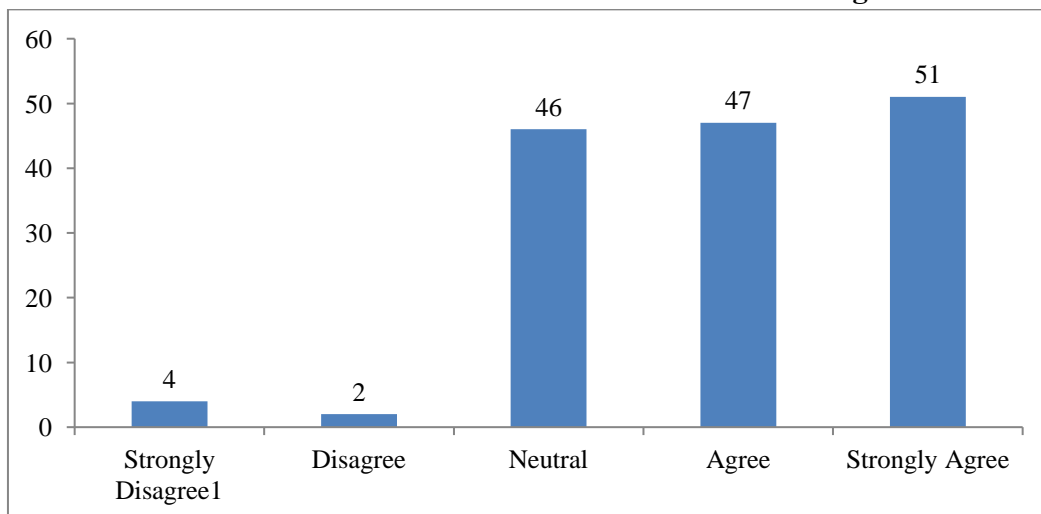
From the above table it is inferred that, 55% of respondents strongly agree, 51% agree, 40% are neutral, 1% disagree and 3% strongly disagree that Political and legal influences adversely affect loan repayment.

### NPAs reduce investor confidence in the banking sector.

**Table 4: NPAs reduce investor confidence in the banking sector.**

Particulars	Frequency	Percentage
Strongly Agree	51	34.0
Agree	47	31.3
Neutral	46	30.7
Disagree	2	1.3
Strongly Disagree	4	2.7
Total	150	100

**Table 4: NPAs reduce investor confidence in the banking sector.**



### Inference

From the above table it is inferred that, 51% of respondents strongly agree, 47% agree, 46% are neutral, 2% disagree and 4% strongly disagree that NPAs reduce investor confidence in the banking sector.

### 3.3 Chi Square Test

A chi-square test is a statistical test used to compare observed results with expected results. The purpose of this test is to determine if a difference between observed data and expected data is due to chance, or if it is due to a relationship between the variables.

**Null Hypothesis:** There is no association between the Political and legal influences affect loan repayment and NPAs reduce investor confidence in the banking sector.

**Alternative Hypothesis:** There is a association between the Political and legal influences affect loan repayment and NPAs reduce investor confidence in the banking sector.

**Table 5: Summary of Chi Square**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Political and legal influences affect loan repayment and NPAs reduce investor confidence in the banking.	150	100.0%	0	0.0%	150	100.%

**Table 6: Test Statistics**

	Value	df	Asymptotic Significance (2- sided)
<b>Pearson chi-square</b>	29.321	16	0.022
<b>Likelihood</b>	25.408	16	0.063
<b>Linear-by-Linear Association</b>	0.275	1	0.600
<b>N of Valid Cases</b>	150		

### Inference

The Pearson Chi-Square value is 29.312 with a p-value (Asymptotic Significance) of 0.022, which is less than 0.05. This indicates that there is a statistically significant association between political and legal influences affecting loan repayment and NPAs reducing investor confidence in the banking sector. Therefore, we reject the null hypothesis.

### 4.1 Suggestions

- I suggest to improving profitability by strengthening income streams and reducing operational costs to enhance ROA and ROE.
- I recommend using AI tool to detect default risks at an early stage.
- I suggest introducing concession for early loan repayment and settlement, as this can help boost recovery rates and reduce NPA levels.

## 4.2 Conclusion

This study shows that Non-Performing Assets (NPAs) have a strong impact on the financial stability of Indian Overseas Bank. Using the CAMELS rating system, it is found that while the bank has improved in areas like capital adequacy, management, and liquidity. IOB has taken several steps to reduce NPAs, such as better loan approval systems, faster recovery methods like SARFAESI, OTS, right to set off, Debt recovery Tribunals and use of technology to track bad loans. These efforts have helped in reducing bad loans. Indian Overseas Bank is working actively to control NPAs, but it must continue focusing on strong risk management and recovery strategies to remain financially stable.

## References

1. Rastogi, Shailesh, Arpita Sharma, Geetanjali Pinto, and Venkata Mrudula Bhimavarapu. "A literature review of risk, regulation, and profitability of banks using a scientometric study." *Future Business Journal* 8, no. 1 (2022): 28.
2. Sharma, Pooja, Vikas Sharma, Kshitiz Jangir, Munish Gupta, and Nitin Pathak. "Unfolding the emerging trends in non-performing assets with special reference to the energy sector in banking industry." *Renewable Energy Optimization, Planning and Control: Proceedings of ICRTE 2022* (2023): 411-422.
3. Singh, Vivek Rajbahadur. "A Study of Non-Performing Assets of Commercial Banks and it's recovery in India." *Annual Research Journal of SCMS, Pune* 4, no. 1 (2016): 110-125.
4. Alshebmi, Ali Saleh, Mustafa Hassan Mohammad Adam, A. M. Mustafa, and M. T. D. O. E. Abdelmaksoud. "Assessing the non-performing loans and their effect on banks profitability: Empirical evidence from the Saudi Arabia banking sector." *International Journal of Innovation, Creativity and Change* 11, no. 8 (2020): 69-93.
5. Rastogi, Shailesh, Rajani Gupte, and R. Meenakshi. "A holistic perspective on bank performance using regulation, profitability, and risk-taking with a view on ownership concentration." *Journal of Risk and Financial Management* 14, no. 3 (2021): 111.
6. Kanoujiya, Jagjeevan, Venkata Mrudula Bhimavarapu, and Shailesh Rastogi. "Banks in India: a balancing act between profitability, regulation and NPA." *Vision* 27, no. 5 (2023): 650-660.
7. Joseph, Ashly Lynn, and M. Prakash. "A study on analyzing the trend of NPA level in private sector banks and public sector banks." *International Journal of Scientific and Research Publications* 4, no. 7 (2014): 1-9.
8. Siddique, Asima, Omar Masood, Kiran Javaria, and Dinh Tran Ngoc Huy. "A comparative study of performance of commercial banks in ASIAN developing and developed countries." *Insights into Regional Development* 2, no. 2 (2020): 580-591.
9. Kuknor, Sunaina, and Shailesh Rastogi. "Determinants of profitability in Indian banks: a panel data analysis." *International Journal of Modern Agriculture* 10, no. 2 (2021): 978-986.
10. Arora, Nitin, Nidhi Grover Arora, and Kritika Kanwar. "Non-performing assets and technical efficiency of Indian banks: a meta-frontier analysis." *Benchmarking: An International Journal* 25, no. 7 (2018): 2105-2125.