

IMPACT OF NONPERFORMING LOANS OF BANKS IN RAJASTHAN

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Abstract: Nonperforming loans refer to risks that do not generate bank income. This study aims to analyse impacts of nonperforming loans on banking transactions in Rajasthan, India. The main aim of this study is to appraise the impact of nonperforming loans on banks in Rajasthan. H_0 is null hypothesis that state nonperforming loans pose no significant effect on bank profitability. On contrary, H_1 is an alternative hypothesis that state nonperforming loans create an adverse negative impact on the profitability of the banks. Banks are exposed to a number of risks that involve credit risks from nonperforming loans. Legal tussles are common for banks with higher portfolios for transactions. In this scenario, bank regulators should impose additional restrictions to monitor loans. Researcher has conducted a survey and analysed the observations through a descriptive as well as an inferential statistical approach. NPLs have regressive impact on a bank's growth and progress rate that in turn degrades the profitability of the banks. The value of P is seen to be insignificant as the significance level of 0.05. This has resulted in the discard of null hypothesis and acceptance of alternative hypothesis. Thus, after studying the data, it can be concluded that nonperforming loans affects productivity of banks.

Key Words: Nonperforming Loans, Banks, Productivity, Credit, Insolvency and Profitability.

1. INTRODUCTION:

Nonperforming loans (NPL) refer to risk assets that fail to generate income for the bank. Initially, loans are considered as nonperforming in case there exists a certain amount of principal or interest is left unpaid for a period of 90 days or more. Classification and contingency of loans entail a thorough overview of the due revenues. The overall cash-flow of the borrower influences their ability to repay the loan. The present study aims to analyse the effect of nonperforming loans on the banking transactions in Rajasthan, India.

2. LITERATURE REVIEW:

Introduction: Banks are exposed to a number of risks the involve credit risks from nonperforming loans. Credit stagnates when loans are irrecoverable and render a drastic effect on the banking transactions. During the monetary crises of the late 1980s, a number of banks in India collapsed owing to NPLsⁱ. The present literature discusses the impact of these NPLs on bank profitability and productivity.

Sign of organisational failure: An increase in the number of organisational backlogs in the loan department can significantly hinder the growth of a bank. This indicates portfolio of nonperforming loans is signs of pending failure to the profitability of the bankⁱⁱ. According to the survey of World Bank, insolvent banks account for approximately 20% of financial assets and 23.8% depositsⁱⁱⁱ. Between the immediate 10 years of post-independence Indian economy, almost half of banks are reported to be exposed to financial distress^{iv}. In this case, about 28 banks are liquidated, owing to the portfolio of nonperforming loans.

Work pressure on staff: The crisis of banking sector in the recent year has been chiefly promoted by the executives working in the failed banks. A major portion of the staff is allegedly engaged in the process of lending for acquisition of bank shares. In case of NPLs, legal tussles are common for banks with higher portfolios for transactions^v. Collapse of banks is categorised under the Insolvency and Bankruptcy Code (2013). Thus, extensive pressure of work to make elevated profits often give cause managers to overlook credit standards prior to sanction the loan.

Issue of ultimatum: A number of banks in Rajasthan are given an ultimatum to reduce soaring numbers of nonperforming loans to less than 10% of respective pending loans^{vi}. This has curtailed the over-issue of NPLs that often attributed to an absence of efficient supervision and weaker legal infrastructure^{vii}. In addition to this, Indian government must impose stricter regulations to prevent lending money to uncertified customers^{viii}. Credit risk is the primary basis that influences the performance and quality of the bank.

Credit management protocols: Loans are related to banks that are not objectively linked to normal criteria of risk-acceptance. This creates a large portion of NPLs to be a result of insider lending by employees^{ix}. In this scenario, bank regulators should impose additional restrictions to monitor loans. Hence, an efficient credit risk management can lower the risk exposure of a bank to insolvency by NPLs^x. In accordance to the scenario of Rajasthan, banks operate primarily as deposit accumulations^{xi}. However, banks have now matured into an intermediary role of fund managers. This is how the bank assumes credit risk through its organisational transactions.

3. MATERIALS:

The dissertation aims to predict the effect of NPL on the profitability of banks through the following hypotheses. H0 is null hypothesis while H1 is an alternative hypothesis.

H0: Nonperforming loans pose no significant impact on bank profitability

H1: Nonperforming loans creates an adverse impact on profitability of the banks

4. METHOD:

Information for the present study is collected from 25 people. The researcher has implemented a primary quantitative study to collect relevant data. This sample population is selected from employee pool of 5 banks operating in Rajasthan. The names of the employees and the banks are withheld under the Personal Data (Protection) Act, 2013. The researcher has conducted a survey and analysed the observations through a descriptive as well as an inferential statistical approach. Descriptive statistics have described the genre of the collected information. In comparison, inferential statistics aid the researcher to deduce one of the two suggested hypotheses. 5% significance level is used to analysis the collected data from the sample population as it decreases probabilities of errors. (Refer to Appendix A)

5. DISCUSSION:

Evidence from the present research studies the possible effects of NPL on the productivity of a bank. The value of P is seen to be insignificant as the significance level of 0.05. This has resulted the researcher to discard the null hypothesis and accept alternative hypothesis. Rate of NPLs negatively influences bank profitability and renders its organisational processes stagnant. NPLs create an adverse impact on the growth rate of a bank. As a result of this, it degrades the profitability of the banks. The alternative hypothesis is accepted in the present context that confirms the negative impact of NPL on organisational structure and transaction of a bank.

i) Bank managers and directors should extensively re-analyse service policies, especially responsibilities for credit risks. This aids banks to promote safe and profitable transactions. However, NPL accumulation by banks in Rajasthan and inadequate loan recovery approaches are attributable to incompetency of bank officials.

ii) Risk assets usually act as irrecoverable and nonperforming that lead to losses. Ratio of NPLs to shareholders' funds deteriorated from 74% to 98% in the past decade. This state a majority of banks in Rajasthan are reporting losses owing to find limiting or erasing activities from their stakeholders.

iii) Banks should endeavour to intervene to influence both intrinsic and extrinsic lending protocols. A majority of the failed banks in Rajasthan are victims of compromise and disregard of ethical lending principles.

6. ANALYSIS:

The portfolio of a nonperforming loan indicates the level of net portfolio and the genre of bank's decisions for money lending. This study is constrained by the lack of fiscal grant as well as current records. Primary records on nonperforming loans cannot be accessed owing to their classification under sensitive data. Multiple reasons have been discarded to demonstrate the deterioration in portfolio quality of bank loans, owing to data scarcity. However, the researcher has tried to work past the limitations, and prohibited scopes of dilution of the academic nature of the present research.

7. FINDINGS:

The primary objective of the study is to analyse the effect of nonperforming loans on banks in Rajasthan. The secondary objective of the study is given below.

- To discuss the banking scenario with respect to local and national commerce in Rajasthan and India, respectively
- To understand the grounds in which NPL is established
- To enumerate the significance of net interest margin on the prevalence of NPL
- To recognise the impact of NPL on bank profitability

8. RESULT:

Descriptive statistics:

Categories	Classification	Number of participants	Percentage %
Age	25 to 30 years	02	8
	30 to 35 years	12	48
	35 to 40 years	08	32
	40 years or more	03	12
Sex	Male	15	60
	Female	10	40

Position in the companies	Managers	10	40
	Loan recovery officers	15	60
Total		25	100

Table 1: Respondent description
 (Source: Given by Researcher)

The participants are classified in categories based on their age, gender and working positions in the banks. 8% participant is between 25 to 35 years while 48% of respondents belong to the age group of 30-35 years. 32% of the volunteers belong to an age between 35-40 years. The remaining 12% age over 40 years. 60% of the total sample is male, whereas the remaining 40% is female. Similarly, 40% of the sample populace work in the loan recovery department. Total number of participants that are chosen in this study are 2

Number of Respondents	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	frequency
A. Effect of rural clientele	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	22
B. Loan recovery strategies	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23
C Impact on net revenues	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	21
D. Organisational training of loan recovery personnel	0	1	1	1	0	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1	1	0	1	0	1	17
E. Reduction in transaction rates	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	22
F. Influence on future banking transactions	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	0	1	1	0	1	0	1	0	1	1	18
G. Effective monitoring and control	1	0	1	1	0	1	0	1	1	1	1	0	1	0	1	0	0	1	1	1	1	0	1	1	1	17
H. Need for stricter government regulations	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	0	1	1	0	1	1	20

Table 2: Frequency table
 (Source: Given by Researcher)

Hypothesis testing:

Test for null hypothesis (H0) is done by Chi-squared (χ^2) test. Null hypothesis is accepted in case NPLs do not create any cognisable impact on banks in Rajasthan. The formula for this calculation is given below.

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

In here,

χ^2 = Chi-square

E = expected frequency

O = observed frequency

Observed (O)	Expected (E)	O-E	(O-E)²	$\frac{(O-E)^2}{E}$
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6	8	-2	4	0.5
7	8	-1	1	0.125
8	8	0	0	0
6	8	-2	4	0.5
5	8	-3	9	1.125
8	8	0	0	0
4	8	-4	16	2
6	8	-2	4	0.5
7	8	-1	1	0.125
8	8	0	0	0
7	8	-1	1	0.125
5	8	-3	9	1.125
8	8	0	0	0
7	8	-1	1	0.125
7	8	-1	1	0.125
3	8	-5	25	3.125
5	8	-3	9	1.125
8	8	0	0	0
7	8	-1	1	0.125
7	8	-1	1	0.125
5	8	-3	9	1.125
8	8	0	0	0
4	8	-4	16	2
6	8	-2	4	0.5
8	8	0	0	0
				14.5

Table 3: Calculations for chi squared test
 (Source: Given by Researcher)

From the above table, $\chi^2 = 14.286$

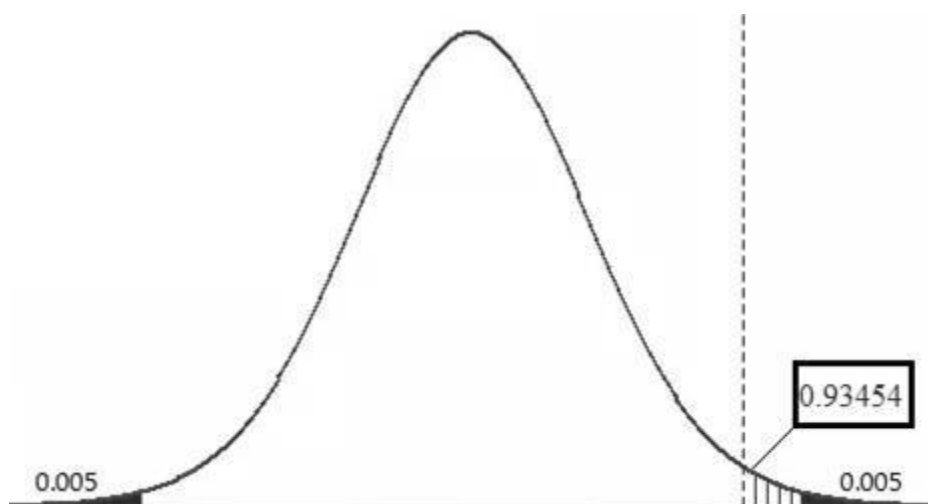


Figure 1: Chi-squared graph
 (Source: Given by Researcher)

Number of participants (n) = 20
 Degree of freedom (n-1) = 20-1= 19
 P Value = 0.93454

9. CONCLUSION:

Thus, after studying and analysing the above data, it can be concluded that nonperforming loans create a series of regressive impact on service quality and productivity of banks. In some cases these losses are incurred in a large rate that can drive the bank to terminal failures and insolvency. The alternative hypothesis is thus accepted and is justified by the instances of portfolios of nonperforming loans. These portfolios often create an adverse impact on

transactional profitability and reputation of the affected banks. In order to reduce the risk exposures, it can be recommended to the banks to exercise stricter regulations prior to sanctioning the loan.

REFERENCES:

Journal Papers:

- A. Dimitrios, L. Helen and T. Mike, “Determinants of non-performing loans: Evidence from Euro-area countries.” in *Finance research letters*, Vol. 18, 2016, pp.116-119.
1. E.M.N.N. Ekanayake and A.A. Azeez, “Determinants of non-performing loans in licensed commercial banks.” in *Asian Economic and Financial Review*, Vol. 5, 2015, p.868.
2. G. Singh and S. Gupta, “An Impact of Mergers and Acquisitions on Productivity and Profitability of Consolidation Banking Sector in India.” in *International Journal of Research in Management & Technology*, Vol. 4, 2015, pp. 77-93.
3. K. Raghav, “Management of Non Performing Assets Challenge to public Sector Banks in India with special Reference to Central Bank of India.” In *Indian Journal of Banking*, Vol. 4, 2016, pp.342-369.
4. P. Alam, “Emerging Issues of Urban Co-Operative Banks in India.” in *Splint International Journal of Professionals*, Vol. 3, 2016, p.29.
5. S. Joshi and V. Rao, “Who Should Be at the Top of Bottom-Up Development? A Case-Study of the National Rural Livelihoods Mission in Rajasthan, India.” in *The Journal of Development Studies*, Vol. 2, 2017, pp.1-20.
6. V.R. Singh, “A Study of Non-Performing Assets of Commercial Banks and it’s recovery in India.” in *Annual Research Journal of Symbiosis Centre for Management Studies*, Vol. 4, 2016, pp.110-125.

Books:

1. J. Bessis, *Risk management in banking*. New Jersey: John Wiley & Sons, 2015.
2. P.B. Steckler, *The Bowker annual of library and book trade information*. New York City: RR Bowker Company, 2017.

Online Articles:

1. J. Sarkar and S. Sarkar, “Bank ownership, board characteristics and performance: Evidence from commercial banks in India.” in *International Journal of Financial Studies*, Vol. 6, 2018, p.17. [Online]. Available: <https://www.mdpi.com/2227-7072/6/1/17/htm> [Accessed January 31, 2018]
2. J.M. Arnold, B. Javorcik, M. Lipscomb and A. Mattoo, “Services reform and manufacturing performance: Evidence from India.” in *The Economic Journal*, Vol. 126, 2016, pp.1-39. [Online]. Available: <http://onlinelibrary.wiley.com/doi/10.1111/eoj.12206/full> [Accessed January 31, 2018]
3. O. Badunenko and S.C. Kumbhakar, “Economies of scale, technical change and persistent and time-varying cost efficiency in Indian banking: Do ownership, regulation and heterogeneity matter?” in *European Journal of Operational Research*, Vol. 260, 2017, pp.789-803. [Online]. Available: [https://researchportal.port.ac.uk/portal/en/publications/economies-of-scale-technical-change-and-persistent-and-timevarying-cost-efficiency-in-indian-banking-do-ownership-regulation-and-heterogeneity-matter\(206e897e-87c1-4ec9-9edc-adf5ab11605b\)/export.html](https://researchportal.port.ac.uk/portal/en/publications/economies-of-scale-technical-change-and-persistent-and-timevarying-cost-efficiency-in-indian-banking-do-ownership-regulation-and-heterogeneity-matter(206e897e-87c1-4ec9-9edc-adf5ab11605b)/export.html) [Accessed January 31, 2018]

Appendices

Appendix A: Survey Questionnaire

1. Do you think that most non-performing loans originate from the rural clientele?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

2. Does the management take specific loan recovery strategies prior to sanctioning the loans?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

3. According to you, are the net revenues generated are affected by NPLs?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

4. Do you think organisational training of loan recovery personnel can reduce chances of NPLs?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

5. Do you think NPL reduces the transaction rates of the bank?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

6. Are NPLs capable of influencing future banking transactions with other customers?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

7. Is effective monitoring capable to control the number of NPLs suffered by a bank?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

8. Do you think the Indian government should exercise stricter regulations to prevent bank insolvency from NPLs?

Options	Total respondent	Response
Yes (1)	20	
No (0)	20	

ⁱ S. Joshi and V. Rao, “Who Should Be at the Top of Bottom-Up Development? A Case-Study of the National Rural Livelihoods Mission in Rajasthan, India.” in *The Journal of Development Studies*, Vol. 2, 2017, pp.1-20.

ⁱⁱ J. Bessis, *Risk management in banking*. New Jersey: John Wiley & Sons, 2015.

ⁱⁱⁱ P.B. Steckler, *The Bowker annual of library and book trade information*. New York City: RR Bowker Company, 2017.

^{iv} A. Dimitrios, L. Helen and T. Mike, “Determinants of non-performing loans: Evidence from Euro-area countries.” in *Finance research letters*, Vol. 18, 2016, pp.116-119.

^v P. Alam, “Emerging Issues of Urban Co-Operative Banks in India.” in *Splint International Journal of Professionals*, Vol. 3, 2016, p.29.

^{vi} O. Badunenko and S.C. Kumbhakar, “Economies of scale, technical change and persistent and time-varying cost efficiency in Indian banking: Do ownership, regulation and heterogeneity matter?” in *European Journal of Operational Research*, Vol. 260, 2017, pp.789-803. [Online]. Available: [https://researchportal.port.ac.uk/portal/en/publications/economies-of-scale-technical-change-and-persistent-and-timevarying-cost-efficiency-in-indian-banking-do-ownership-regulation-and-heterogeneity-matter\(206e897e-87c1-4ec9-9edc-adf5ab11605b\)/export.html](https://researchportal.port.ac.uk/portal/en/publications/economies-of-scale-technical-change-and-persistent-and-timevarying-cost-efficiency-in-indian-banking-do-ownership-regulation-and-heterogeneity-matter(206e897e-87c1-4ec9-9edc-adf5ab11605b)/export.html) [Accessed January 31, 2018]

^{vii} S. Joshi and V. Rao, “Who Should Be at the Top of Bottom-Up Development? A Case-Study of the National Rural Livelihoods Mission in Rajasthan, India.” in *The Journal of Development Studies*, Vol. 2, 2017, pp.1-20.

^{viii} E.M.N.N. Ekanayake and A.A. Azeez, “Determinants of non-performing loans in licensed commercial banks.” in *Asian Economic and Financial Review*, Vol. 5, 2015, p.868.

^{ix} J. Sarkar and S. Sarkar, “Bank ownership, board characteristics and performance: Evidence from commercial banks in India.” in *International Journal of Financial Studies*, Vol. 6, 2018, p.17. [Online]. Available: <https://www.mdpi.com/2227-7072/6/1/17/html> [Accessed January 31, 2018]

^x J.M. Arnold, B. Javorcik, M. Lipscomb and A. Mattoo, “Services reform and manufacturing performance: Evidence from India.” in *The Economic Journal*, Vol. 126, 2016, pp.1-39. [Online]. Available: <http://onlinelibrary.wiley.com/doi/10.1111/eoj.12206/full> [Accessed January 31, 2018]

^{xi} K. Raghav, “Management of Non Performing Assets Challenge to public Sector Banks in India with special Reference to Central Bank of India.” In *Indian Journal of Banking*, Vol. 4, 2016, pp.342-369.