THE IMPACT OF BANK SPECIFIC VARIABLES ON NON-PERFORMING ASSETS IN AXIS BANK LIMITED

B. Belci Jone
II M.Com,
Idhaya College for Women,
Kumbakonam.

P. Madhubala
II M.Com,
Idhaya College for Women,
Kumbakonam.

Introduction

The non-performing assets (NPAs) of the State Bank of India are examined in this study with respect to bank-specific traits. integrating descriptive statistics, regression analysis, and correlation analysis. The study examines a range of factors, such as net non-performing assets, return on assets, net interest margin, capitalization, income diversification, bank size, and lending to priority industries. As a consequence of the findings, the bank can create effective risk management strategies that improve awareness of NPA elements.

Non-Performing Assets

A brief Introduction Loans or advances that are considered as non-performing assets (NPAs), sometimes referred to as bad loans or impaired assets, no longer generate interest revenue or have a high likelihood of being repaid. The emergence of NPAs has significant effects on the soundness and stability of banks and other financial institutions. When borrowers don't pay back their principal or interest on time, NPAs develop and the asset quality of the loan portfolios held by banks declines.

For the banking industry, NPAs provide a number of difficulties. By lowering profitability and depleting the capital foundation of financial institutions, it reduces their capacity to offer credit and promote economic growth and development. NPAs may cause the entire financial system to grow increasingly unstable by raising the banks' risk of default, liquidity risk, and operational risk.

Non-performing assets (NPAs), frequently referred to as bad debts or damaged assets, are loans or advances whose capacity to be repaid has been questioned or whose ability to generate interest revenue has ceased. The introduction of NPAs has significant effects on the stability and financial health

of banks and other financial institutions. NPAs develop as a result of late interest or principle payments made by borrowers, which lowers the asset quality of banks' loan portfolios. NPAs present a number of difficulties for the banking industry. It decreases banks' ability to offer credit and promote economic growth by decreasing profitability and diminishing their capital base. Additionally, NPAs raise banks' operational, liquidity, and credit risks, which may cause the entire financial system to become unstable.

The introduction of NPAs necessitates a thorough understanding of the underlying causes as well as effective strategies for their identification, measurement, and resolution. It requires regulatory interventions, risk management practices, and loan recovery mechanisms to be in place. The impact of NPAs on the banking sector emphasises the importance of research and analysis to develop policies and frameworks that address these challenges and promote financial stability.

Design of the Study

Statement of the Problem

The statement of the problem aims to investigate the impact of various bank-specific variables on non-performing assets (NPAs) in the Indian banking sector. The variables considered in this study are return on assets (ROA), net interest margin (NIM), capitalization, income diversification, bank size, and priority sector lending. NPAs are a crucial concern as they indicate the health of banks and can have significant implications for financial stability. By examining these variables, the study seeks to provide insights into the factors influencing NPAs in the Indian banking sector, enabling policymakers and stakeholders to formulate effective strategies to mitigate NPA levels and enhance overall banking performance.

Objectives of the Study

The main objectives of the study are as follows:

- To analyse the normality of bank-specific variables and non-performing assets.
- To analyse the relationship between bank-specific variables and non-performing assets.
- To analyse the effect of bank-specific variables on non-performing assets.

Hypotheses of the Study

- **NH1:** There is no normality in the bank-specific variables and non-performing assets.
- **NH2:** There is no significant relationship between bank-specific variables and non-performing assets.
- **NH3:** There is no significant impact of bank-specific variables on the non-performing asset.

Methodology of the Study

Sample Selection

The sample considered for the study is the State Bank of India. The determinants of net non-performing assets were analysed by considering variables such as return on assets, net interest margin, capitalization, income diversification, bank size, and priority sector lending.

Study Period

The study covers a period of eight years, from 2015 to 2022. This study period is optimal as it covers the pandemic and recovery periods.

Source of data

The study mainly relies on secondary data. The data were collected from the RBI's official website (the Database of the Indian Economy) and from basic statistical tables relating to the State Bank of India.

Tools Used for the Study

- Descriptive Statistics
- Correlation
- Regression

Limitations of the study

- The availability and quality of data on bank-specific variables and NPAs may vary across banks and time periods. Incomplete or unreliable data could limit the accuracy and representativeness of the study's results.

- The study might not include all relevant variables that could affect NPAs. There could be unobserved or omitted variables that have a significant impact on NPAs but are not accounted for in the analysis, leading to biased results.

Review of Literature

A review of the literature presents the reviews of earlier researchers at different points in time. The design of the study presents the research design, such as the statement of the problem, objectives, hypotheses, and methodology of the study.

Dagur (2022), in their study entitled **"Non-Performing Assets (NPA) and Their Menace in the COVID-19 Period,"** aims to determine the causes of non-performing assets in Indian public sector banks as well as the monitoring and credit appraisal systems in place to prevent their occurrence. It also looks at the level of COVID-19's impact on NPA and how it can be managed with the help of the Reserve Bank of India's appropriate policies. Data and information were gathered for this study, which spans the years 2019 to 2021, from a variety of secondary sources, including journals, papers, the Reserve Bank of India's annual publishing report, and other readily accessible indexes. However, borrowers were given some relief measures, such as a moratorium on loan repayment, a halt to asset classification, and liquidity granted to them through an emergency credit line, which will enable them to repay. The capital adequacy ratio of the scheduled commercial banks increased from 14.7% to 16% in March 2021 as a result of banks raising equity in various ways.

Bhatia and Dahiya (2022), in their study entitled **"A Comparative Analysis of NPA in the Priority Sector of Public Sector Banks and Private Sector Banks in India,"** aim to examine NPA trends in the priority and non-priority sectors in public and private sector banks and determine whether or not public and private sector banks are capable of meeting the target of lending to the priority sector set by the Axis Bank. For the purposes of the analysis, secondary data for the five-year period from 2013 to 2017 was gathered from the RBI website.

Vibhute et al. (2021), in their study entitled **"Study on Non-Performing Assets of Public Sector Banks,"** analyse critically the trend in the movement of non-performing assets held by public sector banks in India from 2000–2001 to 2011–2012, enabling an assessment of the efficiency of NPA management in the post-millennium period. Non-performing assets are not solely a consequence of

loans and advances; they are also impacted by other bank performance metrics and macroeconomic factors. This study explained the macroeconomic variables and bank performance's moderating and mediating effects on the incidence of NPA in addition to the trend in the movement of NPA.

Koju et al. (2018), in "Macroeconomic and Bank-specific Determinants of Non-Performing Loans: Evidence from the Nepalese Sanking System," use both static and dynamic panel estimating methodologies to assess the macroeconomic and bank-specific causes of non-performing loans (NPL) in the Nepalese banking sector. In order to determine the effects of banking management and economic indicators on NPL, the study takes into account 30 commercial banks in Nepal over the years 2003–2015 and employs 5 macroeconomic variables in addition to 7 bank-specific variables. The results demonstrate that NPLs have a negative link with the GDP growth rate, capital adequacy, and inflation rate and a positive relationship with the export to import ratio, inefficiency, and asset size. According to the empirical study's findings, low economic development is the main factor contributing to Nepal's high nonperforming loans (NPLs), and competent management and financial policies are necessary for a stable financial situation.

Table No. 1

Results of Descriptive Statistics for Axis Bank Ltd for the period of 8 years from 2015 to 2022

Particulars	Mean	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability
NNPA	3.7744	0.3625	-0.6792	2.3723	0.7464	0.6885
ROA	0.8813	0.6637	0.2934	1.7283	0.6539	0.7211
NIM	3.0962	0.1913	0.3915	1.7377	0.7355	0.6923
Captl	0.0731	0.0165	0.5674	2.2768	0.6037	0.7395
IncDiv	1.7983	0.2356	-1.2622	3.8259	2.3516	0.3086
Sz	5.8681	0.1390	-0.0326	1.7989	0.4823	0.7857
PSL	5.6904	0.1585	0.1669	1.6053	0.6856	0.7098

Source: Data collected from RBI, computed using E views7

NNPA = Net Non-Performing Assets, **ROA** = Return on Assets, **NIM** = Net Interest Margin, **Captl** = Capitalization, **IncDiv** = Income Diversification, **Sz** = Bank Size, **PSL** = Priority Sector Lending

Table 3.1. shows the results of Descriptive Statistics of the sample variables relating to Axis Bank Limited during the study period from the financial year 2015 to 2022. The mean values were positive for all the variables such as Net Non-Performing Assets, Return on asset, Net interest margin,

Capitalization, Income diversification, Bank size and priority sector lending. Bank size record the highest mean value of 5.868148 and Capitalization recorded the lowest mean value of 0.073128. The standard deviation, which measures the variation in the data set, demonstrated high deviations between observations for the variable, advances. The measure of skewness, which indicates the shape of the data distribution revealed positively skewed towards right except Net Non-Performing Assets, Income Diversification and Bank Sizewhich were negatively skewed towards left. Kurtosis values were less than three for all the variables except Income Diversification which indicated Leptokurtic distribution. The Jarque-Bera value was less than five for all the variables and the probability values were greater than 0.05 which indicated non normality of the distribution. Hence the Null Hypothesis, "**NH1: There is no significant normality in the select variables**" is accepted for Axis Bank Ltd.

Table No. 2

Results of Descriptive Statistics for Axis Bank Ltd for the period of 8 years from 2015 to 2022

Particulars	Mean	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability
NNPA	3.7744	0.3625	-0.6792	2.3723	0.7464	0.6885
ROA	0.8813	0.6637	0.2934	1.7283	0.6539	0.7211
NIM	3.0962	0.1913	0.3915	1.7377	0.7355	0.6923
Captl	0.0731	0.0165	0.5674	2.2768	0.6037	0.7395
IncDiv	1.7983	0.2356	-1.2622	3.8259	2.3516	0.3086
Sz	5.8681	0.1390	-0.0326	1.7989	0.4823	0.7857
PSL	5.6904	0.1585	0.1669	1.6053	0.6856	0.7098

Source: Data collected from RBI, computed using E views7

NNPA = Net Non-Performing Assets, **ROA** = Return on Assets, **NIM** = Net Interest Margin, **Captl** = Capitalization, **IncDiv** = Income Diversification, **Sz** = Bank Size, **PSL** = Priority Sector Lending

Table 3.2 shows the results of Descriptive Statistics of the sample variables relating to Axis Bank Limited during the study period from the financial year 2015 to 2022. The mean values were positive for all the variables such as Net Non-Performing Assets, Return on asset, Net interest margin, Capitalization, Income diversification, Bank size and priority sector lending. Bank size record the highest mean value of 5.868148 and Capitalization recorded the lowest mean value of 0.073128. The standard deviation, which measures the variation in the data set, demonstrated high deviations between observations for the variable, advances. The measure of skewness, which indicates the shape of the data distribution revealed positively skewed towards right except Net Non-Performing Assets, Income

Diversification and Bank Sizewhich were negatively skewed towards left. Kurtosis values were less than three for all the variables except Income Diversification which indicated Leptokurtic distribution. The Jarque-Bera value was less than five for all the variables and the probability values were greater than 0.05 which indicated non normality of the distribution. Hence the Null Hypothesis, "**NH1: There is no significant normality in the select variables**" is accepted for Axis Bank Ltd.

Table No. 3

Model Summary Result for the Determinants of Axis Bank Ltd for the Period of Eighth years from 2015 to 2022

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.990[a]	.980	.857	.1369665	1.700

Source: Collected from RBI, Statistical Tables relating to banks in India and Computed using SPSS 22.

Table – 3.3.1 represents the results of regression analysis for Axis Bank Ltd. It can be observed from the Table that R was (0.990), and R Square values was (0.980) indicated that 98% of changes in NNPA is explained by the determinants considered under this study.

Table No. 4

ANOVA Results for the Regression Analysis Axis Bank Ltd for the Period of Eighth years from 2015 to 2022

Particulars	Sum of Squares	df	Mean Square	F	Sig.
Regression	.901	6	.150	8.005	.264[b]
Residual	.019	1	.019		
Total	.920	7			

Source: Collected from RBI, Statistical Tables relating to banks in India and Computed using SPSS 22.

Table 3.3.2 reveals the results of Analysis of Variance for Net Non-performing assets as dependent and Return on asset, Net interest margin, Capitalization, Income diversification, Bank size and priority sector lending as independent variables. The F-Statistic value was found to be 8.005. The 'p' value was greater than 0.05. This implies that the regression model is insignificant.

Table No. 5

Coefficients Results for the Regression Analysis Axis Bank Ltd for the Period of Eight years from 2015 to 2022

Particulars	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	27.872	19.839		1.405	.394
Return on Assets	-.305	.225	-.558	-1.356	.405
Net Interest Margin	-.221	.983	-.117	-.225	.859
Capitalization	-33.421	23.255	-1.524	-1.437	.387
Income Diversification	-.124	.385	-.080	-.321	.802
Bank size	-3.254	5.732	-1.248	-.568	.671
Priority Sector Lending	-.244	3.468	-.107	-.070	.955
a. Dependent Variable: NNPA					

Source: Collected from RBI, Statistical Tables relating to banks in India and Computed using SPSS 22.

Table 3.3.3 shows the coefficient values and the level of significance. The result confirmed that the variables such as Return on asset, Net interest margin, Capitalization, Income diversification, Bank size and priority sector lending positively affects Net Non-Performing Assets, but the impact is insignificant, since the p-values were greater than 0.05. Hence the Null Hypothesis "**NH3: There is no impact of specific determinants on Non-Performing Assets**" is accepted for Axis Bank Ltd.

Findings

- The descriptive statistics analysis reveals that State Bank of India's variables have positive means and varying levels of dispersion. Skewness is mostly right-skewed, except for a few variables. Kurtosis values suggest platykurtic distribution. The Jarque-Bera test confirms non-normality. There is no significant normality in the select variables" is accepted for **Axis Bank Ltd**

- For the **Axis Bank Ltd**, there was a significant negative correlation (-0.936) between net non-performing assets and net interest margin at the 0.01 level. Income diversification and return on assets also had significant correlations at the 0.05 level. Bank size showed an insignificant

relationship. Capitalization and priority sector lending exhibited a highly correlated and significant relationship. Therefore, the null hypothesis was accepted.

Suggestions

- Increase awareness and outreach programmes to educate borrowers, particularly in rural and underserved areas, about the benefits and availability of priority sector loans. This can be done through financial literacy campaigns, workshops, and partnerships with local organisations.
- Implement rigorous credit assessment processes to evaluate the creditworthiness of borrowers accurately. This includes conducting thorough due diligence, analysing financial statements, assessing cash flows, and verifying collateral value. Adopt effective risk management practices to identify and mitigate potential risks associated with lending.

Conclusion

The study made an attempt to analyse the trend of priority sector lending for various groups by the **Axis Bank Ltd** The data pertaining to the period of eight years from 2015 to 2022 was analysed using descriptive, correlational, and linear regression analyses. The greater importance of particular non-performing assets was identified by carrying out the correlation analysis between net non-performing assets and sector-wise priority sector lending. The different positive and negative correlations were recorded for various net non-performing assets for the sample banks, with both significant and insignificant relationships.

References

- Koju, L., Koju, R., & Wang, S. (2018). Macroeconomic and bank-specific determinants of non-performing loans: Evidence from Nepalese banking system. Journal of Central Banking Theory and Practice, 7(3), 111-138.
- Bhatia, A., & Dahiya, J. (2022). A Comparative Analysis of NPA in Priority Sector of Public Sector Banks and Private Sector Banks in India. Contemporary Issues in Banking, Insurance and Financial Services, 130.
- Vibhute, N. S., Jewargi, D. C. B., & Haralayya, D. B. (2021). Study on Non-Performing Assets of Public Sector Banks. Iconic Research and Engineering Journals, 4, 52-61
- Dagur, S. S. Non-Performing Assets (NPA) And Its Menace in Covid-19 Period: Facet of Indian Public Sector Banks.