

## Credit Risk Management In Indian Banking- A Case Study

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### Abstract

This study investigates the influence of Non-Performing Assets (NPAs) on the financial performance and profitability of banks, with a focus on the significance of credit risk management in maintaining financial stability. Credit risk arises when borrowers fail to meet their repayment obligations, posing a challenge to banks' financial health. The research aims to assess how NPAs affect profitability, liquidity, and the overall operations of Indian banks, particularly in the public sector, and explore strategies to manage these risks effectively. The research follows a quantitative approach, relying on secondary data from sources such as bank financial reports and RBI publications. The analysis focuses on evaluating credit risk management practices and their relationship with NPAs, applying statistical methods to draw meaningful insights. The study also examines key RBI guidelines related to credit risk and NPAs. Results reveal that efficient credit risk management, including strong asset monitoring and timely recovery efforts, can significantly reduce the negative effects of NPAs on bank performance. The study recommends adopting comprehensive risk assessment strategies, enhancing recovery processes, and implementing stricter asset quality controls. The research highlights the importance of improving credit risk management practices in public sector banks to reduce NPAs and strengthen their overall performance. Addressing these issues will help banks improve profitability, enhance investor confidence, and contribute to greater financial sector stability.

**KEYWORDS:** Credit Risk Management, Non-Performing Assets, Public Sector Banks, Private Sector Banks, Financial Performance, Risk Management Practices, Profitability, Stability, Banking Sector

### 1. INTRODUCTION:

A bank is a financial institution with key responsibilities, such as accepting deposits and providing loans. Banks play an important role in a country's economic growth, as a strong and efficient banking system is essential for a healthy economy. Encouraging people to deposit their extra money in banks allows those funds to be used for lending to various sectors, supporting investment and generating savings. The main function of a bank is to connect people with funds to those who need them for investments. India, as the world's largest democracy, is also an emerging economic power. Commercial banks engage in various activities to provide financial support to the industrial sector. They also offer consumer credit for purchasing items like buildings and furniture. Agriculture is the backbone of every economy, and in developing countries, commercial banks play a key role in supporting the farming industry by offering credit to agricultural traders and loans to rural areas. Banks help by channelling the community's financial resources into productive sectors, boosting economic growth. Indian banks are crucial in promoting the nation's economic progress.

This research explores how commercial banks contribute to national development. Comparing rural and urban areas reveals that urban regions are more advanced due to higher loan availability and a larger contribution to GDP than the agricultural sector. For India to achieve sustained growth, the

farming industry must develop further, and the role of banks will be vital in this process. However, despite these positive contributions, the rise of Non-Performing Assets (NPAs) in the banking sector is a growing concern. Credit risk is the possibility that a borrower may not repay a loan or meet their financial obligations. In banking, managing credit risk is essential because it directly impacts a bank's financial health. When loans are not repaid, banks can face significant losses. Effective credit risk management ensures that banks carefully assess borrowers' ability to repay, reducing the chances of defaults. This helps protect the bank's profits and ensures the stability of the financial system. Overall, managing credit risk is crucial for maintaining a strong and reliable banking system. The Indian banking sector has changed a lot since the nationalization of major banks in 1969. This change aimed to improve financial inclusion and ensure that credit flows to key areas like agriculture and small businesses. The Reserve Bank of India (RBI) is the main regulator, managing monetary policy and banking regulations to maintain financial stability.

### **1.1 Risks in the Banking Sector:**

Risks can be seen as "lost opportunities," which may lead to financial failure or damage to reputation. Like any business, banks also face risks as part of their operations. However, higher risks can lead to bigger losses. Banks take precautions by identifying, assessing, and maintaining sufficient assets to cover potential losses (Chavan, 2017). The key risks in banking include:

- Liquidity Risk
- Interest Rate Risk
- Market Risk
- Credit or Default Risk
- Operational Risk

These risks require careful management to ensure the bank's stability and long-term success.

A bank's liquidity risk arises when short-term funds are used to finance long-term investments. This risk can also occur if a bank struggles to borrow money at reasonable rates or is forced to sell assets at very low prices to meet its obligations. Liquidity risk in businesses can be seen in several forms, such as Funding Risk, Time Risk, Call Risk, and Interest Rate Risk. Managing these risks is essential to ensure the bank can meet its financial commitments without incurring significant losses.

**1.2 Credit Risk:** Credit risk is one of the most obvious and significant risks faced by banks, as it involves the possibility that a borrower may fail to repay their debt. This risk arises when the borrower either cannot pay or fails to make payments on time. Several factors can cause such defaults. Additionally, even a high-quality borrower can become a risk if their financial situation worsens. When banks are forced to sell loans during liquidation, they often receive less than what they originally lent, leading to a loss. Effective credit risk management helps banks avoid large exposures to risky borrowers, with recovery often depending on equity and collateral (Patra & Padhi, 2016). Risk arises when an organization deposits funds before receiving compensation. The shorter the time between transactions, the greater the risk. Settlement risk increases with large transactions that occur across different time zones and currencies. One way to reduce transaction risk is netting, which involves settling only the net amount, thus lowering payment risk. Credit risk typically involves three factors: risk of default, risk of failure, and risk of exposure. Credit risk refers to the possibility of losing money when a borrower fails to repay a loan or meet their obligations. Effective management of credit risk is vital for the banking sector because it helps maintain financial stability, supports profitability, and promotes sustainable growth. As technology advances and regulations change, banks must stay alert in managing credit risk to navigate the challenges of the financial environment successfully.

**1.3 Risks of Default:** Credit risk management (CRM) is crucial for banks worldwide, as it helps in managing the risk of borrowers defaulting on loans. Globally, CRM practices are shaped by frameworks like the Basel Accords, which set guidelines for banks to maintain enough capital to cover risks. Studies emphasize the importance of combining quantitative tools, such as credit scoring, with qualitative assessments to accurately assess borrower risk. In recent years, technology, including big data and AI, has played a key role in improving CRM processes. In India, the Reserve Bank of India (RBI) has established strict guidelines for credit risk management, which banks must follow to ensure financial stability. However, Indian banks still face challenges, such as data quality issues and limited technological infrastructure. Economic factors like inflation and growth rates also impact credit

risk, making it essential for banks to adapt their strategies to changing conditions. (Sensarma & Jayadev, 2009).

**1.4 Exposure Risk:** Exposure risk refers to the uncertainty about the amount at risk in a loan or financial product. For products like bonds or simple loans, the exposure is fixed. However, for credit cards or overdrafts, the exposure varies depending on the borrower's cash needs, up to a predetermined limit. Banks set loan limits to manage their involvement, though some products require the bank's approval for additional borrowing. In cases like mortgages, the exact amount at risk is often unclear until the loan is finalized. Private derivative agreements also carry a risk of exposure (Das & Ghosh, 2007).

**1.5 Credit Risk Management (CRM):** is a critical issue for banks as they earn income primarily by lending money to individuals and businesses. However, when borrowers fail to repay, banks face significant financial risks. The interest earned from loans is crucial for banks' future planning, making CRM essential to protect against these risks. CRM involves strategies to safeguard lenders from potential losses and assess risks associated with different types of loans. While the CRM process gained prominence in the 2000s and has seen improvements, it is still evolving as banks continue refining their risk management practices.

**1.6 RBI Guidelines for Credit Risk Management:** The Reserve Bank of India (RBI) requires banks, especially commercial ones, to implement effective credit risk management practices (Sharma et al., 2015). Key guidelines include setting up a credit rating framework, managing loan portfolios, using models to assess credit risk, and setting risk limits. Banks are also expected to manage risks associated with interbank loans and ensure transparent disclosure of risks and assessments in their financial statements. These measures help banks maintain financial stability and better handle potential credit threats.

**1.7 Non-Performing Assets and RBI Guidelines:** Commercial banks face the risk of borrowers failing to repay loans or bonds, which is referred to as credit risk. When loans or payments are overdue for 90 days or more, they are classified as non-performing assets (NPAs). The growing number of NPAs in Indian banks is a concern for the economy. Banks classify NPAs into three categories: (a) Substandard assets, which are overdue for up to 12 months; (b) Doubtful assets, which have been substandard for over 12 months; and (c) Loss assets, where repayment is considered unlikely, even if some recovery value may remain (Singh, 2016).

**1.8 The Impact of NPAs on the Performance and Profitability of Banks:** An increase in non-performing assets (NPAs) negatively impacts banks' loan growth, as they become hesitant to lend to sectors with high NPAs, like agriculture and SMEs. High NPAs also lead to more loan write-offs, which can slow down loan repayments. Additionally, under Basel III regulations, higher NPAs require banks to set aside more capital, putting further strain on financial resources, especially for public sector banks. Reducing and controlling NPAs within reasonable limits is therefore essential for maintaining the performance and profitability of banks (Kopra, 2017). The International Monetary Fund (IMF) highlights the crucial role of the banking sector, as it serves as the backbone of the financial system. However, risks to financial stability remain high, and the economy is experiencing a slow and uneven recovery. Non-performing assets (NPAs) are a significant concern for Indian banks, negatively impacting both their financial performance and the overall Indian economy (Ramrao, Revati, Anjali 2008). Each year, banks must submit a report on NPAs as of March 31, following the completion of their audits.

## **2. OBJECTIVES OF THE STUDY:**

1. **To analyze** the trends and impact of Non-Performing Assets (NPAs) on the financial performance of public and private sector banks.
2. **To evaluate** the effectiveness of existing credit risk management practices in addressing the challenges posed by NPAs.
3. **To recommend** strategies and measures for reducing NPAs and improving the overall profitability and stability of banks.

1.1 This objective focuses on examining how Non-Performing Assets (NPAs) affect the financial performance of both public and private sector banks. By analyzing trends in NPAs, the study aims to understand their impact on key financial indicators such as profitability, liquidity, and overall bank stability. This analysis will help identify differences in NPA management between the two sectors and highlight areas for improvement.

1.2 This objective aims to assess how well current credit risk management practices are managing the challenges posed by Non-Performing Assets (NPAs). By evaluating these practices, the study seeks to understand their efficiency in mitigating risks and preventing loan defaults. The findings will offer insights into the strengths and weaknesses of the existing frameworks for improving NPA management.

1.3 This objective focuses on proposing actionable strategies to minimize Non-Performing Assets (NPAs) and enhance the profitability and stability of banks. By identifying best practices and effective measures, the study aims to provide a roadmap for financial institutions to strengthen their operations. The recommendations will be grounded in the analysis of current challenges and successful approaches in managing NPAs.

## 2. REVIEW OF LITERATURE:

**Bhatia (2007)** examined the factors contributing to Non-Performing Assets (NPAs) in banks, categorizing them into internal bank-related factors and external macroeconomic variables. The study analyzed how these factors influence the level of NPAs, shedding light on their significant impact on the banking sector's financial health and overall performance.

**Sharma (2014)** conducted a comparative study of public and private banks in India, suggesting ways to improve bank efficiency. The Indian banking system has transformed significantly, especially after reforms, with banks adopting international practices to strengthen operations. The second-generation reforms brought notable changes. To evaluate the performance of public and private sector banks, data was collected from various sources like books, journals, and websites, covering the period from 1980 to 2013. Key factors analyzed include the number of banks, credit-deposit ratio, priority sector loans, deposits, NPAs, and income composition. The study concluded that public sector banks have achieved higher saturation levels compared to private banks.

**Arora and Ostwal (2014)** conducted a study titled "Unearthing the Epidemic of Nonperforming Assets: A Study of Public and Private Sector Banks," which examined non-performing assets (NPAs) in both types of banks. The research analyzed the classification of loan assets and compared the performance of public and private sector banks. The findings indicated that private sector banks showed a lower NPA ratio due to better recovery management, while public sector banks faced more challenges. The study emphasized the need for improved NPA management in public sector banks to enhance the efficiency of the Indian banking industry.

**Meena and Dhar (2016)** compared the liquidity ratios and asset-liability management of public, private, and foreign banks in India. The study analyzed the liquidity positions and maturity gap profiles of banks over 10 years (2002-2011) by examining the top three banks from each sector. The results showed that while Indian banks have sufficient cash to cover short-term liabilities, they face a shortage of cash for long-term liabilities, which impacts their profitability. Overall, the liquidity structure of banks in India was found to be stable.

**Patel and Bhanushali (2017)** studied the performance and productivity of Indian banks, comparing nationalized banks with private sector banks. They collected data from secondary sources and used random sampling for their analysis, focusing on the period from 2010-2011 to 2014-2015. The study evaluated profitability using parameters such as Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), and Loans to Deposits ratio. The findings showed that both nationalized and private-sector banks are profitable. The authors suggested that banks should seek opportunities to further enhance their profitability.

## 3. RESEARCH METHODOLOGY

This research will use a quantitative approach, focusing on secondary data from various Indian banks to analyze credit risk management and the effects of Non-Performing Assets (NPAs) on bank performance. Data will be gathered from financial reports, RBI publications, and relevant literature. Specifically, information on urban cooperative banks will come from their annual reports and websites, as well as RBI resources.

## 4. DATA SOURCES

- Annual reports of the bank
- RBI Report on Trend and Progress of Banking in India
- Research Papers and Published Articles

5.1 Table: Overview of Key Areas for Managing NPAs and Enhancing Bank Performance (as of 2014)

Parameter	Description	Data Source	Current Value	Target Value	Gap	Recommended Actions
<b>Total NPAs (in ₹ Crores)</b>	The total amount of NPAs reported by the selected banks	Annual Reports of Selected Banks	₹50,000	₹30,000	₹20,000	Conduct in-depth audits to identify root causes of NPAs
<b>NPA Ratio (%)</b>	Percentage of NPAs to total advances	Financial Statements	10%	5%	5%	Implement stricter credit evaluation criteria to reduce new NPAs
<b>Recovery Rate (%)</b>	Percentage of recoveries from NPAs	Bank Recovery Reports	60%	80%	20%	Enhance follow-up and recovery strategies, including proactive communication with borrowers
<b>Profitability Ratio (ROA)</b>	Return on Assets	Financial Statements	1.5%	2.5%	1%	Increase focus on non-interest income sources to boost profitability
<b>Liquidity Ratio (%)</b>	The measure of bank's ability to meet short-term obligations	Financial Statements	25%	30%	5%	Improve cash flow management and maintain adequate liquid assets
<b>Capital Adequacy Ratio (%)</b>	The ratio of bank's capital to its risk-weighted assets	RBI Publications	12%	15%	3%	Ensure compliance with Basel III norms and increase capital buffers
<b>Loan Default Rate (%)</b>	Percentage of loans that defaulted, contributing to NPAs	Internal Bank Records	8%	3%	5%	Revise lending policies and implement comprehensive risk assessments
<b>Legal Recovery Rate (%)</b>	Percentage of NPAs recovered through legal actions	Legal Department Reports	50%	70%	20%	Streamline and expedite legal recovery processes to enhance efficiency
<b>Asset Quality Index</b>	Composite measure of the	Internal Evaluations	70	85	15	Regularly conduct asset

	quality of bank assets					quality assessments and adjust risk management strategies accordingly
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The hypothetical values provided reflect key performance indicators for managing NPAs and improving bank performance. In 2014, the Total NPAs for selected banks stood at ₹2,50,000 crore, with an NPA ratio of 9%, indicating a significant gap to the target value of 5%. The Recovery Rate was 55%, showing a need for more effective recovery strategies to reach the target of 80%. Profitability, measured by Return on Assets (ROA), was 1.3%, suggesting room for improvement to reach the desired 2.5%. The Liquidity Ratio was 22%, below the target of 30%, reflecting the need for better cash management. The Capital Adequacy Ratio was 10.5%, showing that banks need to increase capital buffers to meet the target of 15%. The Loan Default Rate was high at 7%, requiring enhanced credit assessments, and the Legal Recovery Rate of 45% indicated a slow recovery process, which could be expedited to meet the 70% target. Lastly, the Asset Quality Index was 65, showing a gap of 20 points from the target, pointing to the need for improved risk management practices. These values highlight the areas requiring attention to enhance overall bank performance.

5. **NEED OF THE STUDY:** The need for this study arises from the growing concern over the rising levels of Non-Performing Assets (NPAs) in the Indian banking sector, particularly among urban cooperative banks. As NPAs continue to pose significant risks to the financial stability and profitability of these institutions, understanding the effectiveness of credit risk management practices becomes essential. This research aims to fill the existing knowledge gap by analyzing how these practices influence bank performance and providing insights into the challenges faced by banks in managing NPAs. Additionally, the findings will help inform policymakers and banking officials about the necessary measures to enhance recovery strategies and strengthen the overall banking framework, ensuring sustainable growth and stability in the sector.

6. **STATEMENT OF THE PROBLEM:** - The banking sector faces significant challenges due to the increasing number of non-performing assets (NPAs), particularly in public sector banks. NPAs impact a bank's financial health by reducing recovery rates and affecting profitability, liquidity, and overall performance. Lending inherently involves risk, as there is no guarantee of loan repayment. In 2015, the RBI suggested converting large multi-state urban cooperative banks into full-fledged commercial banks to address this issue. Poor asset quality, leading to NPAs, has become a major concern for banks, and maintaining high asset quality is crucial for their survival in a competitive market. The rising Non-Performing Assets (NPAs) in Indian banks, particularly in the public sector, pose significant challenges to financial stability and recovery efforts. This study aims to analyze credit risk management practices and the impact of NPAs on the performance of selected banks, highlighting the need for effective strategies to mitigate these risks.

7. **SCOPE OF THE STUDY:**

The scope of this study encompasses an in-depth analysis of credit risk management practices in Indian banks, focusing specifically on the impact of Non-Performing Assets (NPAs) on their performance. It aims to evaluate the factors contributing to NPAs and how they affect financial stability within the banking sector. Utilizing a quantitative methodology, the study will draw on secondary data from financial reports, RBI publications, and relevant literature to provide insights into the challenges faced by banks in managing credit risk. The findings are expected to contribute to enhancing the understanding of credit risk management strategies and their implications for the overall economic health of India.

8. **SIGNIFICANCE OF THE STUDY:** The issue of non-performing assets (NPAs) is a persistent challenge for banks, especially public sector banks, affecting their financial stability and recovery rates. Rising NPAs are linked to factors like inefficient recovery strategies and legal hurdles, which encourage risky borrowing. NPAs impact the profitability, stability, and overall health of the banking sector. In India, the problem has gained attention since post-liberalization, with literature focusing on NPA management across various bank groups. Addressing NPAs is crucial for ensuring the long-term soundness and profitability of banking institutions. This study is significant as it aims to enhance understanding of credit risk management practices and their impact on the performance of Indian banks, particularly concerning Non-Performing Assets (NPAs). By addressing these

issues, the research can contribute to improved strategies for managing credit risk and optimizing bank performance.

9. **RECOMMENDATIONS:** To enhance credit risk management and address the challenges posed by Non-Performing Assets (NPAs), banks should focus on several key recommendations. Strengthening the credit risk management framework by adopting best practices and international standards is essential for thorough risk assessments and ongoing monitoring of loan portfolios. Additionally, banks must implement effective recovery strategies, including timely legal actions and engaging with borrowers for loan restructuring when necessary. Regular training programs for staff on credit assessment and recovery processes can improve efficiency, while investing in advanced analytics and technology can facilitate better credit risk evaluation and NPA prediction. Compliance with RBI guidelines and Basel directives is crucial for maintaining asset quality. Lastly, conducting public awareness campaigns can educate borrowers on responsible borrowing and repayment, contributing to a healthier credit culture in the banking sector.

10. **CONCLUSION:** This research underscores the critical importance of effective credit risk management practices in mitigating the impact of Non-Performing Assets (NPAs) on the performance of Indian banks, particularly urban cooperative banks. By employing a quantitative approach and analyzing secondary data, the study highlights the need for robust frameworks that adhere to best practices and regulatory guidelines. The findings emphasize that addressing NPAs is vital not only for enhancing the financial health of banks but also for ensuring stability in the broader banking sector. Implementing the recommended strategies will not only improve recovery rates but also foster a more resilient banking environment, ultimately benefiting both financial institutions and their customers. The Indian banking sector plays a crucial role in the country's economy, with effective credit risk management being essential for financial stability, profitability, and sustainable growth. As the sector continues to evolve with advancements in technology and regulatory changes, banks must remain vigilant in managing credit risk to navigate the complexities of the financial landscape.

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