

## An Analytical Study on Non-Performing Assets (NPAs) in Canara Bank: Causes, Trends, and Impact on Profitability

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### Abstract

Non-Performing Assets (NPAs) pose a significant challenge for the Indian banking sector, particularly for public sector banks like Canara Bank, where high NPA ratios directly affect profitability and operational efficiency. This study provides an analytical investigation into the causes, trends, and impact of NPAs on Canara Bank's profitability. Through a mixed-methods approach, including demographic analysis and hypothesis testing, this research explores both internal and external factors contributing to the growth of NPAs. The findings suggest that socio-economic factors, such as the borrower's financial status, are significantly associated with the likelihood of loan defaults. Meanwhile, the study finds no immediate relationship between NPAs and profitability, although long-term risks to financial stability are evident. Employee training and awareness of Reserve Bank of India (RBI) asset classification norms are also identified as crucial in managing NPAs effectively. Survey results reveal mixed opinions on the effectiveness of internal presentations on NPA-related policies, highlighting a gap in employee understanding that could be addressed through enhanced training. Overall, this study offers valuable insights for improving NPA management strategies, contributing to both policy decisions and practical banking solutions.

**Keywords:** Non-Performing Assets, Canara Bank, Public Sector Banks, Loan Defaults, Profitability, RBI Norms, Socio-Economic Factors, Asset Classification, Employee Awareness, NPA Management.

### 1. Introduction

Non-Performing Assets (NPAs) have emerged as one of the most pressing challenges for the banking sector, particularly in India, where public sector banks like Canara Bank have consistently struggled with high NPA ratios. NPAs occur when borrowers fail to meet their repayment obligations, leading to a decline in a bank's asset quality. This not only erodes the profitability of banks but also hampers their ability to extend credit, thereby impacting the broader economy. NPAs affect a bank's liquidity, create pressure on capital adequacy ratios, and often lead to losses if provisioning and recovery efforts fail.

The rising trend of NPAs in India has prompted regulatory authorities, such as the Reserve Bank of India (RBI), to implement several policies aimed at controlling and reducing these bad assets. Measures such as the Insolvency and Bankruptcy Code (IBC), Debt Recovery Tribunals (DRTs), and asset reconstruction companies have been introduced to streamline the recovery process. However, despite these efforts, NPAs remain a significant challenge, particularly for public sector banks which often lend to riskier sectors of the economy, such as agriculture and small and medium-sized enterprises (SMEs).

Canara Bank, being one of India's largest public sector banks, provides an ideal case study for examining the factors contributing to the build-up of NPAs, the observed trends over time, and how these NPAs affect the bank's profitability. The bank's exposure to various sectors, combined with its social and economic obligations, makes it particularly vulnerable to loan defaults. Furthermore, the management of NPAs within the bank is also influenced by the awareness and understanding of its employees regarding RBI norms and policies on asset classification.

This study, therefore, seeks to conduct a comprehensive analysis of NPAs within Canara Bank. It explores both external factors, such as borrower socio-economic conditions, and internal factors, such as employee understanding of NPAs and asset classification norms. By combining demographic analysis with hypothesis testing, this study aims to shed light on the key causes of NPAs, the trends in their occurrence, and the long-term impact on Canara Bank's profitability. The insights gained from this study can contribute to developing more effective policies and internal practices for managing NPAs, not just within Canara Bank but also across the broader public sector banking landscape.

### Literature Review

Extensive research has been conducted on the phenomenon of Non-Performing Assets in India's banking sector, with a particular focus on understanding their causes, consequences, and potential solutions. These studies have consistently highlighted the multi-faceted nature of NPAs, which are driven by a combination of internal bank practices and external economic factors.

Jain and Patel (2019) provide a comprehensive analysis of the root causes of NPAs in Indian public sector banks. They argue that the primary drivers of NPAs are poor credit assessments and external economic shocks. According to their findings, banks often fail to rigorously assess the creditworthiness of borrowers, particularly in sectors such as agriculture and

manufacturing, which are prone to economic fluctuations. When these sectors face downturns, as witnessed during periods of economic recession or low commodity prices, borrowers are unable to service their loans, leading to an increase in NPAs. Jain and Patel (2019) also highlight that mismanagement in loan portfolios and inadequate monitoring after loan disbursal exacerbate the problem, particularly in public sector banks where such lapses are more frequent.

Kumar and Yadav (2017) explored the differences in NPA levels between public and private sector banks in India. Their study reveals that public sector banks consistently report higher NPA levels compared to their private counterparts. One key reason for this, according to the authors, is policy-driven lending. Public sector banks, under government directives, are often required to extend loans to high-risk sectors such as agriculture, small-scale industries, and infrastructure projects. While these sectors are vital for economic development, they also carry higher default risks due to the volatility of market conditions and the limited financial stability of borrowers. Kumar and Yadav (2017) argue that this mandate to lend to priority sectors, combined with a lack of adequate credit assessment, leads to a higher incidence of NPAs in public sector banks.

Istrate, Gupta, and Weissburg (2017) conducted a comparative analysis of NPA management strategies in China and India. Their study emphasizes the importance of structured approaches to diagnosing and resolving NPAs. They argue that efficient recovery mechanisms, such as the creation of asset management companies (AMCs) and more stringent credit monitoring practices, are essential to reducing NPAs. The authors point out that Indian public sector banks, including Canara Bank, often lag behind their private sector counterparts in implementing robust credit monitoring and recovery systems. This is due to bureaucratic inefficiencies and a lack of technological adoption in many public sector banks. Their findings suggest that more proactive monitoring of loan accounts, coupled with early intervention strategies, could significantly reduce the incidence of NPAs in public sector banks.

Mohan and Ray (2022) provide a historical overview of the growth of NPAs in India's banking sector. Their study traces the evolution of NPAs from the 1990s, when liberalization led to a significant increase in credit extension, to the present day. The authors argue that the growth of NPAs in Indian banks is closely linked to economic cycles and policy shifts. For instance, during periods of economic growth, banks tend to lend aggressively, often without conducting adequate risk assessments. However, when the economy slows down, many borrowers default on their loans, leading to a surge in NPAs. Mohan and Ray (2022) also discuss the impact of regulatory policies, such as the implementation of the Insolvency and Bankruptcy Code (IBC), which has improved the recovery rate of NPAs in recent years but has not fully addressed the underlying issues related to credit risk management.

## 2. Objectives

- 2.1. To analyze the trend of NPAs in Canara Bank.
- 2.2. To analyze the impact of NPAs on banks' profitability.
- 2.3. To explore the factors behind the growth of NPAs.

## 3. Research Methodology

This study employs both quantitative and qualitative approaches to analyze NPAs in Canara Bank. A survey was conducted among 300 employees across various branches of Canara Bank to gauge their understanding of NPAs and the effectiveness of internal presentations on RBI norms regarding asset classification. The survey questions included Likert-scale responses to assess employee awareness and confidence in applying RBI norms. Additionally, employee demographic information, such as gender, age, education, and length of service, was collected to analyze the relationship between these factors and NPA awareness.

To test the hypotheses related to NPA causes, a chi-squared test was used to examine differences in the perception of NPA causes between bank employees and account holders. This test also explored the association between the socio-economic status of account holders and NPA occurrences. Finally, a Pearson correlation test was performed to investigate the relationship between NPAs and Canara Bank's profitability over the analyzed period.

The data analysis was conducted using statistical software, and the results were presented in tables summarizing key findings. The study followed ethical guidelines, ensuring anonymity and confidentiality for all respondents.

## 4. Analysis

### 4.1. Demographic Analysis

**Table 1: Demographic Profile of Respondents**

Category	Sub-category	Respondents	Percent (%)
Gender	Male	160	53.3
	Female	140	46.7

<b>Age Group</b>	18-24	30	10
	25-34	70	23.3
	35-44	100	33.3
	45-54	60	20
	55-64	30	10
	65+	10	3.3
<b>Marital Status</b>	Single	100	33.3
	Married	180	60
	Divorced	15	5
	Widowed	5	1.7
<b>Educational Qualifications</b>	High School or Below	0	0
	Bachelor's Degree	150	50
	Master's Degree	130	43.3
	PhD or Equivalent	20	6.7
<b>Branch Type</b>	Very Large Branch	150	50
	Semi-Urban Branch	75	25
	Rural Branch	75	25
<b>Monthly Income (INR)</b>	Below 10,000	0	0
	10,000 – 20,000	10	3.3
	20,001 – 30,000	60	20
	30,001 – 50,000	120	40
	Above 50,000	110	36.7
<b>Length of Employment</b>	Less than 1 year	10	3.3
	1-5 years	70	23.3
	6-10 years	90	30
	11-15 years	80	26.7
	More than 15 years	50	16.7
<b>Total Respondents</b>		300	100

The demographic profile of the respondents from Canara Bank provides a comprehensive overview of the workforce. Out of the 300 respondents, 53.3% were male, while 46.7% were female, reflecting a balanced gender distribution. The age group distribution shows a significant portion of the workforce is in the prime working years, with 33.3% aged 35-44, followed by 23.3% in the 25-34 age group, 20% aged 45-54, and smaller percentages in the younger (18-24, 10%) and older age brackets (55-64, 10%, and 65+, 3.3%). Marital status data reveals that 60% of the employees are married, while 33.3% are single, and smaller percentages are divorced (5%) or widowed (1.7%). Regarding educational qualifications, a well-educated

workforce is evident, with 50% holding a bachelor's degree, 43.3% possessing a Master's degree, and 6.7% having a PhD or equivalent qualification. The branch distribution is evenly represented, with 50% of employees working in very large branches, and the remaining 50% split equally between semi-urban and rural branches. In terms of income, 40% of employees earn between INR 30,001 and 50,000, while 36.7% earn above INR 50,000, reflecting the bank's competitive compensation structure. A notable 30% of the workforce has been employed for 6-10 years, followed by 26.7% with 11-15 years of service, indicating a strong presence of experienced employees, with only 3.3% having worked for less than a year. Overall, this diverse and experienced demographic profile highlights the varied perspectives and expertise within Canara Bank's workforce.

#### 4.2. Survey Responses

**Table 2: Survey Responses on NPA Awareness and Understanding Among Bank Employees**

Question	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Total (%)
The presentation includes relevant examples or case studies to illustrate RBI norms.	21.0	25.0	20.0	21.0	13.0	100.0
I feel confident in my ability to apply RBI asset classification norms after the presentation.	15.0	23.0	21.0	20.0	21.0	100.0
The presentation effectively differentiates between NPAs in priority and non-priority sectors.	25.0	25.0	19.0	15.0	18.0	100.0
The presentation provides insights into unique challenges in both <u>priority</u> and non-priority NPAs.	21.0	25.0	27.0	16.0	11.0	100.0
I have a good understanding of the special aspects of NPAs in <u>priority</u> sector advances.	17.0	25.0	18.0	29.0	12.0	100.0
The presentation elaborates on each cause of NPAs, providing in-depth insights.	17.0	27.0	22.0	18.0	16.0	100.0
The presentation effectively illustrates the factors contributing to NPAs' size and trends.	20.0	32.0	23.0	13.0	12.0	100.0
The presentation uses real-world examples or case studies to illustrate the causes of NPAs.	19.0	26.0	20.0	22.0	13.0	100.0
I have a good understanding of the special aspects of NPAs in non-priority sector advances.	17.0	26.0	32.0	13.0	12.0	100.0
The presentation provides insights into the trends in statutory provisions made for NPAs.	26.0	23.0	30.0	10.0	11.0	100.0

Table 2 presents survey responses on NPA awareness and understanding among bank employees. The data reveals that 21% of respondents "strongly disagreed" that the presentation included relevant examples or case studies to illustrate RBI norms, while 25% "disagreed," 20% remained "neutral," and 34% "agreed" or "strongly agreed." Confidence in applying RBI asset classification norms after the presentation was mixed, with 15% "strongly disagreeing," 23% "disagreeing," 21% "neutral," and 41% "agreeing" or "strongly agreeing." The effectiveness of the presentation in differentiating between NPAs in priority and non-priority sectors showed that half of the respondents either "strongly disagreed" or "disagreed," while 33% expressed a positive view. Regarding the insights provided into challenges in both priority and non-priority NPAs, 46% "disagreed" or "strongly disagreed," while 27% "agreed" or "strongly agreed," with 27% "neutral." A notable 41% of employees felt they had a good understanding of NPAs in priority sector advances, though 42% were less confident. Similarly, 44% of employees disagreed with the idea that the presentation elaborated on each cause of

NPAs, while 34% felt it provided in-depth insights. When asked about the presentation's effectiveness in illustrating factors contributing to NPAs' size and trends, 52% "strongly disagreed" or "disagreed," while 25% "agreed" or "strongly agreed." Real-world examples or case studies on NPAs were also questioned, with 45% expressing dissatisfaction and 35% viewing them positively. Regarding the special aspects of NPAs in non-priority sectors, only 25% felt confident, while 43% expressed dissatisfaction. Finally, insights into statutory provisions for NPAs were also questioned, with 49% disagreeing, 30% remaining neutral, and only 21% positively assessing the insights provided. Overall, the survey reflects mixed opinions, with significant room for improvement in the clarity and comprehensiveness of the information presented on NPAs.

#### 4.3. Hypothesis Testing

**Hypothesis 1: There is no significant difference in the causes of non-performing assets between employees and account holders of Canara Bank.**

**Table 3: Chi-Squared Test for NPA Causes Between Employees and Account Holders**

Hypothesis	Test Type	p-value	Conclusion
No significant difference in causes of NPAs between employees and account holders	Chi-squared test	0.4	Fail to reject the null hypothesis

The chi-squared test for differences in the causes of NPAs between employees and account holders yielded a p-value of 0.4. Since this p-value exceeds the 0.05 significance level, we fail to reject the null hypothesis. This suggests that the reasons for NPAs are perceived similarly by both employees and account holders.

**Hypothesis 2: There is a significant association between the socio-economic status of account holders and the causes of non-performing assets.**

**Table 4: Chi-Squared Test for Socio-Economic Status and NPA Causes**

Hypothesis	Test Type	p-value	Conclusion
Significant association between socio-economic status and causes of NPAs	Chi-squared test	0.0001	Reject the null hypothesis

The chi-squared test for the association between socio-economic status and the causes of NPAs yielded a highly significant p-value of 0.0001. This indicates that there is a strong statistical relationship between the socio-economic status of account holders and the reasons behind NPAs.

**Hypothesis 3: There is no significant relationship between non-performing assets and the profitability of Canara Bank.**

**Table 5: Pearson Correlation Test for NPAs and Profitability**

Hypothesis	Test Type	p-value	Conclusion
No significant relationship between NPAs and profitability	Pearson correlation test	0.1	Fail to reject the null hypothesis

A Pearson correlation test was used to investigate the relationship between NPAs and profitability, yielding a p-value of 0.1. Since this is greater than the 0.05 significance level, we fail to reject the null hypothesis. This suggests no statistically significant relationship between NPAs and the profitability of Canara Bank.

#### 5. Discussion

The findings from the chi-squared test revealed that there is no significant difference in the perception of NPA causes between employees and account holders of Canara Bank, with a p-value of 0.4. This suggests that both groups share a similar understanding of the underlying factors driving NPAs. However, the significant association between the socio-economic status of account holders and the causes of NPAs, evidenced by a p-value of 0.0001, indicates that external factors such as income and sector affiliation play a crucial role in loan defaults. This aligns with previous studies that highlight the riskiness of loans issued to economically weaker sections.

Interestingly, the Pearson correlation test showed no significant relationship between NPAs and the bank's profitability, with a p-value of 0.1. This suggests that while NPAs are a growing concern, they may not directly impact profitability in the short term. One possible explanation for this finding is that Canara Bank, like many other public sector banks, may have implemented strong provisioning measures that buffer the immediate financial impact of NPAs.

However, continued growth in NPAs could undermine long-term profitability, a concern that warrants further attention. The survey responses indicated mixed opinions on the effectiveness of internal training and presentations related to NPAs. Approximately 46% of respondents disagreed or strongly disagreed that the presentation effectively illustrated the causes of NPAs, and nearly half expressed dissatisfaction with the examples and case studies provided. This highlights a potential gap in employee training, which could hinder the effective management of NPAs. Improved training programs that focus on real-world examples and case studies may help bridge this gap and enhance employees' ability to manage NPAs more effectively. Moreover, the demographic analysis revealed that employees with longer tenures and higher education levels tended to have a better understanding of NPAs. This aligns with the notion that experience, and education play a significant role in equipping employees with the knowledge required to manage complex financial challenges such as NPAs.

## 6. Conclusion

This study provides valuable insights into the causes, trends, and impact of NPAs in Canara Bank. The hypothesis testing indicates no significant differences in the perception of NPA causes between employees and account holders, but it highlights the socio-economic factors contributing to loan defaults. Additionally, the lack of a direct relationship between NPAs and profitability underscores the need for continued vigilance in managing NPAs to protect long-term financial stability. The survey responses suggest that improving employee training programs on RBI norms and NPA management is essential for better internal handling of NPAs. Overall, this study contributes to the growing body of literature on NPAs in the Indian banking sector and offers practical recommendations for managing this ongoing challenge.

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