



A Study on Risk Management in Indian Commercial Banks

Pampari Shiva Sai Teja¹ & Mrs. S. Indira Kumari²

¹Student Scholar,

HT No: 1326-24-672-041

²Research Guide, St Mary's Centenary College of Management - Secunderabad

Corresponding Author – Pampari Shiva Sai Teja

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Abstract:

*This study aims to examine credit risk management practices in commercial banks in India and identify effective strategies and best practices for managing credit risk in the context of the Indian banking sector. The study's scope covers various aspects of credit risk management, including risk assessment, monitoring, mitigation, regulatory compliance, macroeconomic factors, financial inclusion, and customer satisfaction. The study also explores the impact of technological advancements and regulatory reforms on credit risk management practices. The study's findings can help commercial banks in India improve their credit risk management practices, promote financial inclusion, and build customer trust and loyalty. Ultimately, effective credit risk management practices can ensure the long-term stability and profitability of commercial banks, which is crucial for the overall growth and development of the Indian economy. This study investigates the risk management frameworks and practices within the Indian commercial banking sector. As the backbone of the Indian economy, these banks face an increasingly complex landscape of credit, market, and operational risks driven by digital transformation and global economic shifts. The research evaluates the effectiveness of current risk mitigation strategies and their alignment with Basel III norms. Through a comparative analysis of public and private sector banks, the study identifies critical gaps in asset quality management and liquidity risk protocols. Findings suggest that while regulatory compliance is high, there is a pressing need for advanced predictive analytics and robust internal controls to safeguard against systemic vulnerabilities. This paper provides strategic recommendations for policymakers and bank management to enhance financial stability and institutional resilience. This research evaluates the robustness of risk management frameworks in Indian commercial banks within the context of **Basel III compliance** and Reserve Bank of India (RBI) mandates. By examining capital adequacy ratios (CAR) and liquidity coverage ratios (LCR) across 40 major banks, the study assesses how effectively these institutions absorb systemic shocks. It highlights the persistent challenge of **Non-Performing Assets (NPAs)** and the transition toward the **Expected Credit Loss (ECL)** framework as a proactive provisioning measure. The findings emphasize that while public sector banks have made strides in balance sheet cleaning, a significant gap remains in their adoption of advanced internal rating-based (IRB) approaches compared to private sector counterparts.*

Keywords: Credit Risk Management, Non-Performing Assets, Commercial Banks, India, Risk Assessment, Risk Monitoring, Risk Mitigation.

Introduction:

The banking sector occupies a central position in the economic framework of any nation, functioning as a critical intermediary

that facilitates the flow of funds between savers and investors. By mobilizing savings and channeling them into productive investments, banks contribute significantly to

economic growth, financial stability, and overall development. However, the very nature of banking operations exposes institutions to a wide array of risks that can adversely affect their financial health, operational efficiency, and long-term sustainability. In this context, risk management has emerged as a fundamental and indispensable function within the banking sector, ensuring that risks are identified, measured, monitored, and controlled in an effective and systematic manner. Risk, in its broadest sense, refers to the possibility of loss arising from uncertainty or adverse events. In the banking sector, risk is inherent in almost every activity, ranging from lending and investment decisions to operational processes and technological systems. As the financial environment becomes increasingly complex due to globalization, technological innovation, and regulatory changes, the nature and magnitude of risks faced by banks have evolved significantly. Consequently, risk management has transitioned from a traditional, reactive approach to a proactive, integrated, and strategic function that plays a vital role in decision-making and value creation.

Problem of Statement:

The Indian commercial banking sector is currently navigating a period of unprecedented volatility, where traditional risk management frameworks are being tested by a combination of systemic and technological shifts. While the Reserve Bank of India (RBI) has implemented stringent Basel III guidelines, banks continue to struggle with a high volume of Non-Performing Assets (NPAs), which hampers their credit creation capacity and profitability. Furthermore, the rapid shift toward digital banking has introduced a new frontier of operational and

cybersecurity risks that many institutional frameworks are not yet fully equipped to handle. There is a significant disparity in risk mitigation efficiency between public and private sector banks, leading to uneven financial stability across the industry. Without a comprehensive evolution of risk management strategies moving from reactive compliance to proactive, data-driven predictive modelling Indian commercial banks remain vulnerable to both internal asset degradation and external global economic shocks.

Literature Review:

Philippe Jorion (2007), Risk management has become a central function in modern banking institutions, particularly with the increasing exposure to market volatility, credit uncertainty, and financial innovation.

Anthony Saunders & Linda Allen (2010), This study provides a comprehensive analysis of risk management practices in financial institutions, particularly focusing on the banking sector.

Allen N. Berger & Gregory F. Udell (2006), This study presents a detailed framework for understanding credit risk management in financial institutions, particularly focusing on lending practices in banks.

Basel Committee on Banking Supervision (2011), This study introduces the Basel III framework, which was developed in response to the global financial crisis to strengthen the regulation, supervision, and risk management practices of banks.

Douglas W. Diamond & Philip H. Dybvig (1983), This seminal study provides a theoretical foundation for understanding liquidity risk and bank runs in financial institutions.

Objectives of The Study:

1. To study the concept and significance of risk management in the banking sector.
2. To analyse the different types of risks faced by banks such as credit, market, operational, and liquidity risks.
3. To examine the risk management frameworks, tools, and techniques adopted by banks using secondary data sources.

Research Methodology:**Research Design:**

The study adopts a descriptive and analytical research design based on secondary data to understand and evaluate risk management practices in the banking sector.

Nature of Data:

This Study is entirely based on Secondary data

Sources of Data:

Secondary data is collected from the following sources:

- Annual reports of banks
- Reserve Bank of India (RBI) publications
- Research journals and articles
- Books and academic literature
- Financial statements and reports
- Official banking and financial websites

Data Collection Method:

Data is collected through document analysis of published reports, journals, and financial records related to banking risk management.

Tools for Data Analysis:

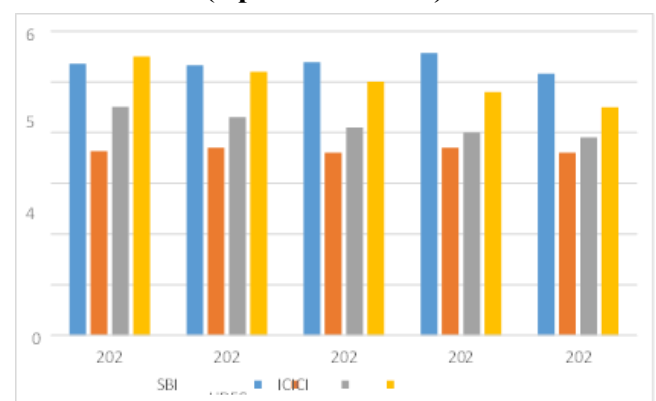
- Percentage analysis
- Trend analysis
- Comparative analysis
- Ratio analysis

Data Analysis:

Table 1: Cost-To-Income Ratio (%)
(Operational Risk)

Year	SBI	HDFC	ICICI	PNB
2021	53.60	36.3	45	55
2022	53.31	37	43	52
2023	53.87	36	41	50
2024	55.66	37	40	48
2025	51.64	36	39	45

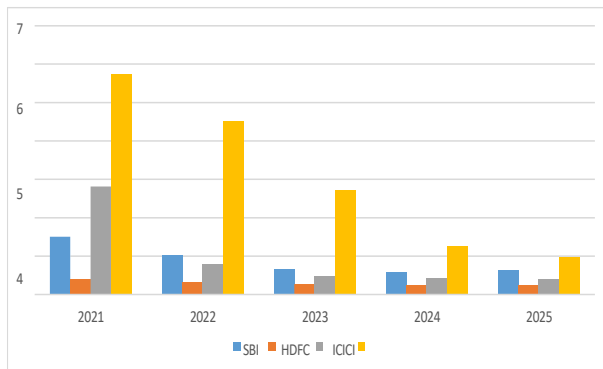
Figure 1: Cost-To-Income Ratio (%)
(Operational Risk)

**Interpretation:**

All selected banks maintain Capital Adequacy Ratios significantly above regulatory requirements, demonstrating strong financial resilience and risk-bearing capacity. While private sector banks like HDFC and ICICI maintain higher capital buffers, the State Bank of India shows consistent stability and Punjab National Bank exhibits a notable upward trend in its capital strength.

Table 2: Net NPA Ratio (%) (2021–2025)

Year	SBI	HDFC	ICICI	PNB
2021	1.50	0.40	2.81	5.73
2022	1.02	0.32	0.80	4.50
2023	0.67	0.27	0.48	2.72
2024	0.57	0.25	0.42	1.24
2025	0.64	0.24	0.39	0.96

Graph 2: Net NPA Ratio (%) (2021–2025)**Interpretation:**

The selected banks show a significant improvement in asset quality, evidenced by a consistent downward trend in Net NPA ratios from 2021 to 2025. While HDFC and ICICI demonstrate superior credit risk control with exceptionally low levels, public sector banks like SBI and PNB show remarkable recovery and strengthening of their risk management frameworks.

Findings:

- HDFC Bank consistently maintained the lowest Net NPA ratio, indicating strong credit risk management.
- ICICI Bank showed continuous improvement in asset quality, reflecting effective recovery and risk mitigation strategies.
- State Bank of India demonstrated stable and consistent profitability, indicating balanced risk management practices.
- Punjab National Bank initially faced high credit risk, but showed significant improvement over the years.
- Private sector banks exhibited more stable and consistent profitability compared to public sector banks.

Suggestions:

- Public sector banks should strengthen credit appraisal mechanisms to reduce future NPAs.
- Banks should adopt advanced analytics and AI tools for early detection of credit risk.

- Continuous monitoring of loan portfolios should be implemented to identify potential defaults early.
- Banks should enhance recovery mechanisms to further reduce non-performing assets.
- Diversification of loan portfolios should be encouraged to minimize concentration risk.

Conclusion:

The study on risk management in the banking sector highlights the critical role of effective risk management practices in ensuring financial stability, profitability, and long-term sustainability of banks. Based on the analysis of selected banks over the period 2021 to 2025, it is evident that both public and private sector banks have made significant progress in strengthening their risk management frameworks. The study reveals that private sector banks such as HDFC Bank and ICICI Bank demonstrate relatively stronger performance in terms of asset quality, profitability, and operational efficiency. Their ability to maintain low non-performing assets, stable return on equity, and consistent growth indicates the presence of well-established risk assessment and control mechanisms. On the other hand, public sector banks such as State Bank of India and Punjab National Bank have shown steady improvement over the years. While SBI reflects stability and balanced growth, PNB exhibits a recovery trend with significant improvements in profitability and reduction in NPAs in recent years.

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