



# CREDIT RISK MANAGEMENT IN INDIAN BANKING: A COMPARATIVE ANALYSIS OF PUBLIC SECTOR AND SMALL FINANCE BANKS

**Arpita Banik**

*Faculty, Department of Commerce, Savitri Girls' College, Kolkata*

Article DOI: <https://doi.org/10.36713/epra24544>

DOI No: 10.36713/epra24544

## ABSTRACT

Credit risk, defined as the likelihood of borrowers failing to meet repayment obligations, remains one of the most critical challenges confronting financial institutions worldwide. In India, the persistence of non-performing assets (NPAs), coupled with structural and regulatory pressures, has heightened the urgency of effective risk management frameworks. This chapter undertakes a comparative analysis of credit risk management practices in Public Sector Banks (PSBs) and Small Finance Banks (SFBs), drawing upon both secondary data and primary insights derived from institutional reports, Reserve Bank of India (RBI) guidelines, and banking professionals' perspectives. While PSBs benefit from government support and extensive outreach, their credit appraisal processes are often constrained by bureaucratic rigidity, political influence, and legacy issues. Conversely, SFBs demonstrate agility and innovation, leveraging digital technologies, alternative data, and localized approaches to extend credit to underserved communities, yet face vulnerabilities from capital limitations and higher exposure to unsecured loans. By adopting a descriptive framework, this study highlights variations in loan appraisal methods, monitoring mechanisms, recovery practices, and the role of technology in risk mitigation. The findings underscore the need for integrated models that balance prudence with inclusion. Policy recommendations stress the importance of capacity building, technological investment, and collaborative regulation to enhance credit risk resilience across India's banking sector.

**KEYWORDS:** Credit Risk Management, Public Sector Banks (PSBs), Small Finance Banks (SFBs), Non-Performing Assets (NPAs), Financial Inclusion, Indian Banking Sector

## INTRODUCTION

Credit risk is widely acknowledged as the most critical form of risk that banks face across the globe. In simple terms, it refers to the possibility that a borrower may fail to repay a loan in accordance with the agreed terms, leading to a financial loss for the lending institution. Unlike other forms of financial risk such as market risk or operational risk, credit risk directly strikes at the heart of banking because lending constitutes the core activity of financial intermediation. Without the ability to manage credit risk effectively, no bank—irrespective of its size or ownership—can sustain its long-term financial health or maintain the trust of depositors and investors.

In the Indian context, the significance of credit risk management has been amplified over the past three decades. Since the liberalization of the economy in 1991, the banking sector has undergone substantial transformation. Public Sector Banks (PSBs), which dominate India's financial landscape, have been compelled to adapt to competitive pressures from private and foreign banks, comply with international regulatory frameworks such as Basel II and Basel III, and respond to rising non-performing assets (NPAs). At the same time, the establishment of Small Finance Banks (SFBs) in 2015 marked a new chapter in India's financial inclusion journey. These institutions were designed to serve populations that had historically been excluded from formal banking—rural households, small entrepreneurs, and workers in the informal sector.

While both PSBs and SFBs operate under the same regulatory umbrella of the Reserve Bank of India (RBI), their approaches to managing credit risk are shaped by their distinct histories, structures, and customer bases. PSBs are large, state-owned institutions with extensive branch networks and legacy systems. Their lending portfolios often include large corporate accounts and infrastructure projects, alongside retail loans and priority-sector lending.



Conversely, SFBs are relatively new, smaller in scale, and heavily reliant on technology and innovation to reach low-income and underserved populations. Their credit portfolios are typically concentrated in microfinance, small-ticket loans, and agricultural credit, which are inherently riskier but socially vital.

The challenge of managing credit risk in India has gained urgency in light of the mounting NPA crisis. By 2018, PSBs were burdened with NPAs amounting to nearly ₹10 trillion, representing over 80 percent of the total NPAs in the banking system (Reserve Bank of India, 2019). Although measures such as the Insolvency and Bankruptcy Code (IBC) were introduced to streamline recovery, the structural issues of delayed project implementation, political interference, and weak monitoring systems continued to undermine PSB performance. On the other hand, SFBs, though relatively less exposed to large industrial loans, face unique vulnerabilities due to their high dependence on unsecured lending and concentration in sectors prone to economic shocks, such as agriculture and informal trade.

Credit risk management is not a purely technical exercise. It is a multidimensional process that combines financial analysis, regulatory compliance, organizational culture, and customer engagement. At its core, it involves a cycle of appraisal, monitoring, and recovery. In the appraisal stage, banks must evaluate the borrower's creditworthiness through income assessment, credit history, business potential, and collateral. During the monitoring stage, loan accounts are tracked to detect early warning signs of default, such as delays in repayment or deterioration in financial health. Recovery mechanisms are then activated in cases of default, ranging from restructuring to legal enforcement. Each of these stages reflects differences in how PSBs and SFBs approach credit risk, influenced by their respective capacities, objectives, and constraints.

The importance of credit risk management extends beyond the health of individual banks. It has profound implications for the stability of the financial system and the broader economy. A banking system plagued by high NPAs suffers from reduced lending capacity, as resources are locked up in unproductive assets. This, in turn, curtails investment, employment, and growth. Conversely, effective risk management enables banks to lend prudently, support productive enterprises, and foster economic development. In India, where banking remains a critical driver of development, the effectiveness of credit risk frameworks has direct social and economic consequences.

Public Sector Banks face a paradox in this regard. On one hand, they benefit from implicit government backing, which reassures depositors and investors. On the other, this assurance often leads to complacency, political interference, and bureaucratic inertia. The dual pressures of serving developmental objectives and maintaining financial discipline have created structural inefficiencies in PSBs. Their tendency to prioritize large corporate loans, which later turned into stressed assets, exemplifies the shortcomings of traditional risk assessment methods.

Small Finance Banks, in contrast, embody agility and innovation. Their lean structures, limited capital bases, and focus on financial inclusion compel them to develop novel approaches to credit appraisal and monitoring. Many SFBs use mobile applications, digital credit scoring models, and community-based lending practices to assess borrower reliability. By leveraging alternative data sources such as mobile phone usage or utility payments, they can extend credit to customers with little or no formal financial history. Yet, their very strength—flexibility and inclusion—also exposes them to vulnerabilities. Unsecured lending, sectoral concentration, and dependence on local conditions increase their exposure to defaults. Furthermore, limited financial buffers make it harder for SFBs to absorb shocks compared to their larger public-sector counterparts.

The role of the Reserve Bank of India has been pivotal in shaping the credit risk environment. Through prudential norms, capital adequacy requirements, and asset classification standards, the RBI provides a regulatory framework within which both PSBs and SFBs must operate. Its periodic reports on banking trends emphasize the need for stronger governance, advanced risk models, and improved provisioning practices (Reserve Bank of India, 2020). Nevertheless, regulation alone cannot substitute for institutional culture and managerial competence. The success of credit risk management depends equally on the willingness of banks to adopt best practices, invest in technology, and foster a risk-aware organizational ethos.

Globally, the Basel Committee on Banking Supervision has stressed the importance of comprehensive credit risk frameworks that integrate both qualitative and quantitative tools (Basel Committee, 2015). While Indian banks have aligned with many of these international standards, the implementation gap remains wide. PSBs, with their size and



outreach, are slow to adapt, while SFBs, despite their innovations, face resource constraints. Bridging this gap requires not just regulatory enforcement but also capacity building, technology transfer, and inter-bank collaboration.

This paper seeks to contribute to the ongoing discourse on credit risk management by providing a descriptive and comparative account of PSBs and SFBs in India. Unlike purely statistical studies, which focus on regression models and quantitative correlations, this analysis emphasizes narrative insights, institutional practices, and qualitative differences. The objective is to illuminate how distinct institutional designs shape credit risk management, what challenges persist, and what policy implications can be drawn for creating a more resilient and inclusive banking system.

In doing so, the paper addresses several guiding questions:

1. How do PSBs and SFBs differ in their credit appraisal, monitoring, and recovery mechanisms?
2. What role does technology play in shaping risk management practices across these institutions?
3. How do institutional culture, governance structures, and regulatory compliance influence outcomes?
4. What lessons can be drawn for policymakers and practitioners in designing robust credit risk frameworks?

By exploring these questions, the study not only adds to the academic literature but also provides practical recommendations for bankers, regulators, and policymakers. Ultimately, credit risk management in India is not merely a technical issue but a developmental imperative. Ensuring that banks lend prudently, recover effectively, and remain financially sound is essential for sustaining growth, promoting financial inclusion, and safeguarding the public's trust in the financial system.

## LITERATURE REVIEW

The study of credit risk management has attracted substantial scholarly and policy attention because of its direct impact on financial stability and economic growth. Globally, risk management in banking has been guided by both academic insights and regulatory frameworks such as the Basel Accords. In India, research has increasingly focused on the persistent challenge of non-performing assets (NPAs), the role of governance, and the implications of financial inclusion. This review synthesizes the existing literature on Public Sector Banks (PSBs), Small Finance Banks (SFBs), and comparative approaches to credit risk management.

### Credit Risk: Conceptual Foundations

Credit risk is defined as the potential loss that arises when a borrower fails to meet contractual debt obligations (Hull, 2012). Altman's (1968) pioneering work on credit scoring introduced quantitative models for predicting default, laying the foundation for modern risk assessment techniques. Subsequent research expanded these approaches through internal rating systems, value-at-risk models, and probability of default estimations (Jorion, 2007). While these models have been widely adopted in advanced economies, their applicability in emerging markets such as India is constrained by data limitations, informal lending practices, and regulatory complexities.

The Basel Committee on Banking Supervision (2015) emphasized the need for banks to adopt comprehensive risk frameworks combining capital adequacy, stress testing, and internal control mechanisms. In India, the Reserve Bank of India (RBI) has gradually aligned domestic regulations with these international standards, particularly through Basel II and Basel III adoption. However, the effectiveness of such frameworks depends on institutional capacity and the adaptability of banks to local realities.

### Credit Risk Management in Public Sector Banks

Public Sector Banks dominate India's financial landscape, accounting for nearly two-thirds of total banking assets. Their importance in channeling credit to priority sectors such as agriculture, infrastructure, and small enterprises makes them central to India's developmental agenda. However, literature frequently highlights structural inefficiencies in their credit risk management practices.

Studies by Kaur and Kapoor (2019) and Mohan (2018) argue that PSBs suffer from excessive bureaucratic processes, political interference in loan sanctioning, and an overemphasis on collateral-based lending. These factors often delay decision-making and create inefficiencies in credit allocation. The accumulation of NPAs, particularly in corporate lending, is cited as evidence of weak monitoring and inadequate due diligence.



Another critical theme in PSB research is the challenge of recovery. Legal frameworks such as the SARFAESI Act and Debt Recovery Tribunals were established to strengthen recovery processes, yet empirical studies show that litigation delays and enforcement challenges continue to hinder efficiency (Ranjan & Dhal, 2018). Furthermore, high-profile cases of corporate default, such as the failures of large infrastructure projects, highlight weaknesses in risk assessment at the appraisal stage.

On a positive note, some scholars highlight the resilience of PSBs due to implicit government backing. Choudhary (2020) observes that depositor confidence in PSBs remains strong despite NPA crises, largely because of the sovereign guarantee. This backing provides stability but may also reduce the urgency for institutional reforms, perpetuating a cycle of inefficiency.

### **Credit Risk Management in Small Finance Banks**

Small Finance Banks were introduced in 2015 with the explicit objective of promoting financial inclusion. Literature on SFBs emphasizes their innovative approaches to credit delivery, especially for underserved segments. Rao and Anand (2021) note that SFBs rely heavily on digital credit scoring, mobile banking applications, and alternative data sources to evaluate borrowers without formal credit histories. Their emphasis on microfinance-style group lending models has also proven effective in maintaining repayment discipline.

However, research also highlights vulnerabilities. According to Sharma (2022), SFBs face structural challenges including limited capital bases, higher exposure to unsecured loans, and concentration in risky sectors such as agriculture and informal enterprises. These risks are exacerbated during systemic shocks, as demonstrated during the COVID-19 pandemic, when repayment defaults surged in microfinance portfolios (Singh & Raj, 2021).

Another important strand of literature discusses the role of organizational culture in SFBs. Since these banks are relatively young and agile, they often foster a customer-centric approach. Their officers maintain close relationships with borrowers, which enhances repayment rates but can also blur the line between personal trust and professional risk assessment (Das & Mehta, 2020). This reliance on relational lending highlights both the strengths and limitations of the SFB model.

### **Comparative Studies on PSBs and SFBs**

Comparative scholarship examining PSBs and SFBs remains limited but growing. Sharma (2022) provides one of the few systematic comparisons, arguing that PSBs excel in scale and stability while SFBs are superior in agility and innovation. The contrast between documentation-heavy, bureaucratic appraisal in PSBs and technology-driven, flexible appraisal in SFBs highlights the divergent risk cultures of these institutions.

Goel (2022) adds that while SFBs leverage artificial intelligence and machine learning for credit risk modeling, PSBs remain constrained by legacy systems. However, PSBs' larger capital adequacy and implicit government backing provide them with stronger buffers against shocks. In contrast, SFBs face tighter regulatory scrutiny due to their high exposure to unsecured portfolios, requiring them to maintain higher provisioning levels relative to their size.

A broader set of comparative studies in emerging economies suggests similar patterns. For example, research on microfinance institutions in Bangladesh and Kenya shows that smaller, inclusion-focused institutions rely more on community-based lending and alternative data, while larger, state-backed banks emphasize regulatory compliance and corporate lending (Armendariz & Morduch, 2010). These insights reinforce the argument that institutional design significantly influences credit risk management practices.

### **Thematic Gaps in Existing Literature**

Despite the extensive research on NPAs and credit risk in India, several thematic gaps remain. First, most studies focus either on PSBs or on microfinance, with limited comparative work on PSBs and SFBs. Second, much of the scholarship is quantitative, emphasizing econometric analysis of NPA ratios or regression models of profitability, with relatively less attention to descriptive, narrative comparisons of institutional practices. Third, the intersection of financial inclusion and credit risk remains underexplored, particularly regarding how SFBs balance their developmental mandate with the imperative of financial sustainability.



Another gap lies in the role of technology. While there is growing literature on fintech and digital banking, few studies examine how PSBs and SFBs specifically integrate technology into their risk management frameworks. Similarly, the cultural and organizational dimensions of credit risk management—such as leadership, governance, and staff training—remain understudied. Addressing these gaps requires qualitative, descriptive analyses that illuminate institutional differences and contextual realities.

### Synthesis

The literature converges on the view that credit risk management is central to banking stability and that both PSBs and SFBs face distinct challenges. PSBs are weighed down by legacy systems, bureaucratic inertia, and exposure to large corporate defaults, while SFBs, though innovative and inclusive, are vulnerable to capital limitations and unsecured lending. Comparative scholarship remains sparse, but existing evidence suggests complementary strengths: PSBs bring stability and reach, while SFBs bring innovation and adaptability. The need of the hour is a balanced framework that combines the prudence of PSBs with the agility of SFBs, supported by regulatory guidance, technological investment, and institutional reforms.

### Methodology

The methodology adopted for this chapter is designed to provide a descriptive and comparative understanding of credit risk management practices in Public Sector Banks (PSBs) and Small Finance Banks (SFBs) in India. Instead of employing econometric models or advanced statistical tools, the study relies on a qualitative framework, emphasizing institutional practices, regulatory environments, and narrative accounts of banking operations. This approach supports the objective of highlighting differences and similarities in how these two types of banks conceptualize, assess, and manage credit risk.

The research follows a descriptive-comparative design, chosen not to establish causal relationships but to provide a holistic understanding of credit risk management practices. By situating PSBs and SFBs within their respective historical and institutional contexts, the study captures the practical realities of banking operations in India.

Data for the study is derived from two primary categories. The first includes secondary sources such as official publications of the Reserve Bank of India (RBI), annual reports of representative PSBs and SFBs, policy documents, and previous academic research. Key reports like the RBI's *Trends and Progress of Banking in India* (2019, 2020) and *Financial Stability Reports* form the foundation of the sector-wide analysis. Academic literature further contributes to the theoretical framework. The second category consists of primary insights gathered through informal, semi-structured interviews with banking professionals. These conversations provided perspectives on loan appraisal, monitoring, recovery, and the integration of technology, helping to contextualize secondary data within operational realities.

The study employs purposive sampling to select banks for comparative analysis. Among PSBs, large and systemically important institutions such as the State Bank of India (SBI) and Punjab National Bank (PNB) were included. Among SFBs, leading institutions such as AU Small Finance Bank, Ujjivan Small Finance Bank, and Equitas Small Finance Bank were chosen because of their prominence in financial inclusion and transparent reporting. While this sampling is not statistically generalizable, it offers a representative contrast between the two categories and illustrates institutional differences effectively.

The analysis is guided by a three-stage framework: appraisal, monitoring, and recovery. Appraisal refers to evaluating borrower creditworthiness. PSBs traditionally rely on documentation, collateral, and hierarchical approvals, while SFBs integrate digital credit scoring, mobile-based KYC, and alternative data. Monitoring relates to tracking repayment behavior. PSBs typically depend on periodic branch reviews and manual reporting, whereas SFBs use digital dashboards, SMS alerts, and real-time monitoring. Recovery highlights how institutions respond to defaults. PSBs depend heavily on legal frameworks such as the SARFAESI Act and Debt Recovery Tribunals, while SFBs adopt relational or community-based strategies, including group lending accountability.

Ethical considerations were observed throughout the study. Publicly available data was used responsibly, and interviewee inputs were anonymized to ensure confidentiality. No borrower-specific or proprietary information has been disclosed.



The methodology is not without limitations. The descriptive nature of the analysis means that findings are interpretive rather than predictive. The purposive sampling approach implies that results are illustrative and not universally applicable to all PSBs or SFBs. Further, the reliance on secondary data restricts the depth of longitudinal insights, particularly in the case of relatively new SFBs. Despite these limitations, triangulation of multiple data sources strengthens the credibility of the findings.

The chosen approach is justified on the grounds that it provides a nuanced understanding of institutional practices, which are often neglected in purely quantitative studies. By emphasizing narrative and contextual realities, the methodology captures the lived experiences of banks and their customers. This is particularly relevant in India, where financial inclusion goals and socio-economic diversity make credit risk management as much a cultural and developmental challenge as a financial one. Moreover, by avoiding technical jargon and econometric modelling, the study ensures accessibility for a broad audience, including policymakers, practitioners, and scholars.

In summary, the methodology combines descriptive analysis with purposive sampling and a three-stage analytical framework. It integrates secondary data with primary insights and emphasizes narrative over numerical modelling. The focus on appraisal, monitoring, and recovery grounds the analysis in real-world banking operations, offering meaningful lessons for improving the resilience and inclusiveness of credit risk management practices in India.

## METHODOLOGY

This chapter adopts a descriptive and comparative methodology to examine credit risk management practices in Public Sector Banks (PSBs) and Small Finance Banks (SFBs) in India. Instead of complex econometric models, the study emphasizes qualitative analysis, highlighting institutional practices, regulatory frameworks, and operational narratives. The approach was chosen to provide a nuanced understanding of differences and similarities in how these two categories of banks conceptualize and manage credit risk.

The research design is descriptive-comparative, focusing on illustrating patterns rather than establishing causality. By situating PSBs and SFBs within their historical and institutional contexts, the study seeks to capture the practical realities of credit appraisal, monitoring, and recovery.

Data for the analysis comes from two broad sources. Secondary data includes publications of the Reserve Bank of India (RBI), annual reports of selected PSBs and SFBs, policy documents, and academic studies. Reports such as the *Trends and Progress of Banking in India* (2019, 2020) and the *Financial Stability Report* provide crucial sector-wide insights. To complement this, primary insights were drawn from semi-structured discussions with banking professionals, offering perspectives on technological adoption, recovery practices, and monitoring mechanisms. These insights enriched the descriptive analysis without serving as a formal survey.

The banks were selected using purposive sampling. Among PSBs, large institutions like the State Bank of India (SBI) and Punjab National Bank (PNB) were chosen for their systemic importance. Among SFBs, AU Small Finance Bank, Ujjivan Small Finance Bank, and Equitas Small Finance Bank were included due to their prominence in financial inclusion and transparency. This sampling is not statistically generalizable but serves to illustrate representative contrasts between the two categories.

The analysis is structured around a three-stage framework: appraisal, monitoring, and recovery. PSBs typically depend on documentation-heavy appraisal systems, branch-level monitoring, and legal recovery mechanisms under acts such as SARFAESI. SFBs, by contrast, emphasize digital credit scoring, real-time monitoring, and community-based recovery approaches such as group lending. These differences reveal broader institutional cultures of risk management shaped by history, size, and mandate.

Ethical considerations guided the use of publicly available data, while interviews were anonymized to maintain confidentiality. Limitations of this approach include reliance on descriptive insights rather than predictive modelling, purposive sampling rather than randomization, and data constraints for relatively new SFBs. Nonetheless, the triangulation of sources strengthens the reliability of the findings.



In sum, the chosen methodology offers a balanced framework to compare PSBs and SFBs. By focusing on descriptive practices, it captures the developmental and institutional dimensions of credit risk management in India, making the findings accessible to both academics and practitioners.

### ANALYSIS AND DISCUSSION

Credit risk management in India reflects the contrasting structures and objectives of Public Sector Banks (PSBs) and Small Finance Banks (SFBs). While both operate under the Reserve Bank of India's (RBI) regulatory framework, their approaches to appraisal, monitoring, and recovery differ substantially.

PSBs rely on traditional, documentation-heavy credit appraisal systems. Loan proposals often undergo multiple levels of approval, ensuring regulatory compliance but slowing decision-making. Their focus on collateral-based lending and corporate accounts has historically exposed them to large non-performing assets (NPAs). Monitoring mechanisms are also bureaucratic, relying on periodic reviews and manual reporting. Although legally robust, recovery strategies under the SARFAESI Act and Debt Recovery Tribunals are slow, leading to delayed asset resolution. These structural rigidities, compounded by political pressures, limit responsiveness to borrower risks (Kaur & Kapoor, 2019).

SFBs, by contrast, adopt more agile and technology-driven practices. Their appraisal processes often use digital credit scoring, mobile-based KYC, and alternative data sources to assess borrowers without formal credit histories (Rao & Anand, 2021). Monitoring is supported by digital dashboards, SMS reminders, and real-time data, allowing early detection of repayment issues. Recovery strategies emphasize community-based accountability, such as group lending, which enhances repayment discipline in rural and semi-urban areas. However, their concentration in unsecured loans and informal sectors makes them vulnerable to systemic shocks, as seen during the COVID-19 pandemic (Singh & Raj, 2021).

Comparatively, PSBs benefit from scale, capital adequacy, and implicit government support, but face inefficiencies and high exposure to corporate defaults. SFBs demonstrate innovation and inclusivity but operate with limited buffers. Together, the findings highlight complementary strengths: PSBs must embrace technological agility, while SFBs must strengthen governance and capital management. An integrated approach combining prudence with inclusion would enhance resilience across India's banking system.

### CONCLUSION AND POLICY IMPLICATIONS

The comparative analysis of credit risk management in Public Sector Banks (PSBs) and Small Finance Banks (SFBs) highlights both enduring challenges and emerging opportunities in India's banking landscape. PSBs, with their vast networks and systemic importance, provide stability but remain hindered by bureaucratic rigidity, legacy non-performing assets (NPAs), and slow recovery mechanisms. Conversely, SFBs represent agility and innovation, leveraging technology and localized approaches to serve financially excluded populations, yet their concentration in unsecured and high-risk sectors exposes them to volatility.

The findings indicate that neither institutional model is sufficient in isolation. PSBs must modernize credit appraisal and monitoring practices by adopting digital tools and reducing bureaucratic delays. They should strengthen early warning systems to address defaults before they escalate. SFBs, meanwhile, need to diversify their loan portfolios and improve capital adequacy to withstand economic shocks. Building robust governance structures will help sustain their inclusion-driven mandate without compromising financial stability.

From a policy perspective, the Reserve Bank of India (RBI) should continue to provide a supportive regulatory environment that balances prudence with innovation. Policies encouraging collaboration between PSBs, SFBs, and fintech firms could foster knowledge transfer and strengthen credit risk frameworks. Expanding training and capacity-building programs for risk officers would also enhance institutional competence. Additionally, simplifying recovery frameworks and integrating alternative dispute resolution mechanisms could accelerate asset resolution.

In conclusion, effective credit risk management is not only a financial necessity but also a developmental imperative. By combining the prudence of PSBs with the inclusivity of SFBs, India's banking system can evolve into a more resilient, efficient, and equitable framework, ensuring that growth in credit availability does not compromise long-term financial health.



## REFERENCES

1. Altman, E. I. (1968). *Financial ratios, discriminant analysis, and the prediction of corporate bankruptcy*. The Journal of Finance, 23(4), 589–609. <https://doi.org/10.1111/j.1540-6261.1968.tb00843.x>
2. Armendariz, B., & Morduch, J. (2010). *The economics of microfinance (2nd ed.)*. MIT Press.
3. Basel Committee on Banking Supervision. (2015). *Guidelines: Corporate governance principles for banks*. Bank for International Settlements. <https://www.bis.org>
4. Choudhary, R. (2020). *Non-performing assets and the resilience of public sector banks in India*. Indian Journal of Finance and Banking, 4(2), 15–28. <https://doi.org/10.46281/ijfb.v4i2.765>
5. Das, S., & Mehta, A. (2020). *Organizational culture and credit risk management in small finance banks*. Journal of Banking and Finance Research, 8(1), 45–62.
6. Goel, R. (2022). *Artificial intelligence in Indian banking: Opportunities and challenges*. Journal of Financial Innovation, 14(2), 45–59.
7. Hull, J. C. (2012). *Risk management and financial institutions (3rd ed.)*. Wiley.
8. Jorion, P. (2007). *Value at risk: The new benchmark for managing financial risk (3rd ed.)*. McGraw-Hill.
9. Kaur, G., & Kapoor, R. (2019). *Non-performing assets in public sector banks: Issues and challenges*. Indian Journal of Finance, 13(4), 25–36. <https://doi.org/10.17010/ijf/2019/v13i4/141407>
10. Mohan, R. (2018). *Public sector banking in India: Challenges and prospects*. Economic and Political Weekly, 53(27), 34–42.
11. Ranjan, R., & Dhal, S. C. (2018). *Non-performing loans and terms of credit of public sector banks in India: An empirical assessment*. Reserve Bank of India Occasional Papers, 29(2), 55–88.
12. Rao, P., & Anand, S. (2021). *Technology adoption in small finance banks: A study on credit risk management*. International Journal of Banking Studies, 9(1), 101–117.
13. Reserve Bank of India. (2019). *Report on trends and progress of banking in India 2018–19*. RBI. <https://www.rbi.org.in>
14. Reserve Bank of India. (2020). *Financial stability report*. RBI. <https://www.rbi.org.in>
15. Sharma, A. (2022). *Comparative credit risk management in Indian banks: Public sector versus small finance banks*. Asian Banking Review, 11(3), 76–93.
16. Singh, P., & Raj, S. (2021). *COVID-19 and microfinance: Implications for small finance banks in India*. Journal of Development Finance, 7(2), 89–104.