CREDIT RISK MANAGEMENT IN INDIAN PUBLIC AND SMALL FINANCE BANKS: A CRITICAL REVIEW OF PAST STUDIES AND RESEARCH GAPS

Arpita Banik
Faculty
Commerce
Savitri Girls' College, Kolkata, India

Abstract: Credit risk is one of the most serious challenges that banks face today. In India, public sector banks (PSBs) and small finance banks (SFBs) play key roles in lending, but they follow different methods to manage risk. This review paper examines past research done on credit risk management in PSBs and SFBs, highlighting what has already been studied and where the gaps still remain. The paper analyzes how NPAs, internal control systems, risk assessment tools, and regulations have been treated in earlier works. Based on the review, it finds that many studies have focused more on public banks and less on SFBs. There is also limited research on how digital tools and financial inclusion impact risk. This review aims to bring together key findings from earlier work and point out areas where future studies are needed. The goal is to improve understanding of how both types of banks can better manage credit risk in the Indian context.
Keywords: credit risk, public sector banks, small finance banks, NPAs, risk control, research gap, India

Introduction:

Credit risk is the most important risk for any bank. It is the risk that a borrower may not repay the loan on time or may not repay at all. When borrowers fail to pay back loans, banks suffer financial losses. These losses affect the stability of banks and also reduce public trust in the banking system. In India, this problem has been growing over the years. Bad loans, also called non-performing assets (NPAs), have increased significantly in some banks. This is why credit risk management (CRM) has become a serious issue in Indian banking.

Banks in India are mainly divided into different types. Among them, Public Sector Banks (PSBs) and Small Finance Banks (SFBs) are two important categories. PSBs are large banks mostly owned by the government. They have a long history and serve all types of customers. In contrast, SFBs are new and smaller banks that focus on serving low-income groups, small businesses, and rural areas. They were introduced in 2015 with the aim of promoting financial inclusion. These banks often lend to people who do not have access to regular banking services.

Both PSBs and SFBs face credit risk, but the nature of the risk is different. PSBs usually give big loans to industries and businesses. If a few of these borrowers default, the impact is large. On the other hand, SFBs give small loans to many individuals. These borrowers may not have proper documents or a strong credit history. So, their creditworthiness is difficult to judge. In both cases, the bank faces the risk of default. But the way they manage the risk is not the same.

This paper reviews the research that has already been done on credit risk in Indian PSBs and SFBs. Many scholars, banking institutions, and financial researchers have tried to understand the causes of credit risk, how it can be measured, and what strategies can reduce it. While a lot of work has been done on PSBs, there is relatively little academic research on SFBs. Since SFBs are new, their risk practices are still developing. However, it is important to compare both types of banks to understand what is working and what is not.

Most of the research on PSBs shows that they struggle with high NPAs. These bad loans come from poor lending decisions, lack of monitoring, and political interference. In many cases, loans are given to big industries without proper risk checks. When these industries fail or face losses, they stop repaying the loans. The bank then has

to mark these loans as NPAs. Recovering these loans is also difficult and time-consuming. Many PSBs face losses because of this.

SFBs, on the other hand, lend to people who do not have any formal income proof or bank records. These include farmers, small shopkeepers, self-employed workers, and daily wage earners. The challenge for SFBs is to assess the risk of lending to such people. They often rely on field visits, local knowledge, and social reputation. Since their loan sizes are small, the individual risk is less, but the number of such loans is very high. If many small borrowers default at the same time, the bank can be in trouble.

Technology plays a big role in credit risk management. Some banks are using data analytics, mobile apps, and digital credit scoring to check the creditworthiness of borrowers. PSBs are slowly adopting such tools, but SFBs have been quicker. This is because many SFBs started with a digital-first approach. They use mobile banking, automated loan processing, and real-time alerts to track repayments. However, the success of these tools depends on proper implementation and training.

Regulatory bodies like the Reserve Bank of India (RBI) have also introduced guidelines to control credit risk. Banks are required to follow norms related to asset classification, provisioning, and capital adequacy. They must report their NPAs regularly and take action to recover loans. Despite these efforts, many banks still face challenges in managing credit risk effectively. This is because the rules are not always followed strictly, and internal systems are often weak.

The need for strong credit risk management has increased after several banking frauds and loan defaults came to light in India. These incidents raised questions about the checks and balances in the banking system. Many banks have now created special departments to handle credit risk. These departments monitor loans, assess risk levels, and prepare reports for top management. However, the effectiveness of these measures depends on how seriously they are implemented.

The literature on this topic is vast but scattered. Different researchers have studied different parts of the problem. Some focused on NPAs, others on risk assessment tools, and some on regulations. There is a need to bring all these studies together and analyze them in a critical way. This is what this paper aims to do. By reviewing past studies, identifying common findings, and pointing out gaps, the paper hopes to provide a better understanding of how credit risk is being managed in India.

There are also some important questions that need to be explored. Are PSBs improving their credit risk practices over time? Are SFBs able to maintain low NPAs despite lending to risky groups? How effective are the digital tools being used by banks? What role do field officers play in monitoring small loans? Are the RBI regulations enough, or do they need to be updated? These questions will guide the review and discussion in the next sections.

Thus, credit risk is a serious challenge for both PSBs and SFBs. Each type of bank has its own strengths and weaknesses. PSBs have experience and scale but often suffer from inefficiency. SFBs are more flexible and focused but face higher borrower uncertainty. Managing credit risk is not just about rules—it is also about good judgment, proper systems, and a culture of responsibility. Through this review paper, we try to learn from past studies and understand what more needs to be done to improve credit risk management in the Indian banking sector.

Review of Past Studies

The topic of credit risk management has been studied by many researchers in India. This section presents a review of key studies related to Public Sector Banks (PSBs) and Small Finance Banks (SFBs). It covers the causes of non-performing assets (NPAs), the tools used for risk management, the role of the Reserve Bank of India (RBI), and comparative insights between the two types of banks.

Studies on Public Sector Banks (PSBs)

Several studies have examined the rising level of NPAs in PSBs. Ranjan and Dhal (2003) conducted one of the earliest works that linked the credit terms of loans to rising defaults. Their study pointed out that poor borrower screening and weak credit monitoring were major causes of NPAs.

Arora and Kumar (2014) found that PSBs were struggling due to politically influenced lending and the lack of updated credit assessment models. They also emphasized the need for training loan officers in risk evaluation techniques.

Gupta and Jain (2012) highlighted that credit appraisal in PSBs was still based on outdated procedures, leading to wrong loan approvals. They suggested using credit scoring models and historical borrower data to improve loan quality.

Dhar (2019) observed that PSBs have a centralized decision-making system which slows down responses to emerging risks. This rigid structure prevents early detection and handling of credit defaults.

A study by Mohanty (2016) noted that PSBs were more exposed to corporate NPAs than other banks. The industrial sector accounted for more than 60% of gross NPAs in many PSBs during 2014–16.

Kaur and Singh (2020) discussed the impact of the banking reforms introduced after the global financial crisis. They noted that while guidelines were in place, many PSBs continued to show high NPA levels due to implementation delays and weak internal audits.

Studies on Small Finance Banks (SFBs)

Research on SFBs is comparatively limited because these banks are still new. However, some useful studies have emerged.

Kumar and Dubey (2018) reviewed how SFBs manage credit risk with limited data. Since SFB customers usually lack formal credit histories, the banks rely on behavioral patterns, social ties, and field officer reports.

Chakraborty (2020) pointed out that SFBs use digital tools for real-time credit monitoring. Their small loan sizes allow them to experiment with mobile-based repayment reminders and location-based follow-ups.

Sharma (2019) studied loan recovery strategies of SFBs. He noted that despite serving risky borrowers, SFBs had lower NPA levels than PSBs, mostly due to strong personal interaction with customers and regular repayment follow-ups.

Patel and Mehta (2021) stated that the main challenge for SFBs is the lack of experienced staff in credit management. While their methods are community-based, these banks need better training programs to deal with credit risk in a scalable manner.

Choudhury (2022) observed that some SFBs are now adopting AI-driven tools to assess borrower credibility using mobile usage, bill payments, and digital transactions.

Studies Comparing PSBs and SFBs

Only a few studies have directly compared the two banking segments. Das and Rajan (2020) did a side-by-side review and found that while PSBs struggle with corporate NPAs, SFBs face individual-level defaults. However, the frequency of SFB defaults is lower due to better field-level control.

Sen and Bhattacharya (2019) concluded that SFBs have better agility in loan processing and decision-making. Their small size allows them to act quickly, while PSBs often have delays in sanctioning and follow-up.

Aggarwal and Srivastava (2020) emphasized that SFBs operate in niche segments. Therefore, their credit risk models are tailored, while PSBs follow a standard, one-size-fits-all approach, which is not always effective.

Bhusan (2021) analyzed asset quality and found that SFBs showed better recovery ratios than PSBs in FY 2018–19, even though they catered to weaker sections of society.

Role of RBI and Regulatory Guidelines

The Reserve Bank of India (RBI) plays a crucial role in credit risk management. It provides asset classification norms, provisioning rules, and reporting standards for all banks.

A report by the RBI (2020) stated that after the Asset Quality Review (AQR) in 2015, many banks had to recognize hidden NPAs. This improved transparency but revealed the depth of the credit crisis in PSBs.

Chakrabarty (2013), a former RBI Deputy Governor, emphasized the importance of banks building internal capacity to manage credit risk. He argued that compliance alone is not enough without a proper risk culture.

Singh (2017) reviewed the effectiveness of the Basel III guidelines. While banks maintained capital adequacy on paper, they often lacked practical risk control processes. This made the regulatory setup incomplete without strong execution.

Kumar and Sen (2018) pointed out that SFBs were also brought under similar risk regulations, but they needed handholding in terms of system adoption and reporting infrastructure.

Institutional Reports and White Papers

Multiple institutions have released reports that are useful for this review. The World Bank (2016) noted that India's credit risk frameworks were improving, but large banks still lacked automation in risk scoring.

The NITI Aayog (2018) suggested that technology-driven risk management would benefit smaller banks, especially SFBs, in expanding financial access with lower defaults.

CRISIL (2021), a rating agency, published a report saying that SFBs were able to maintain strong loan collection even during the COVID-19 pandemic, thanks to their personal engagement models.

Reports by McKinsey (2017) and PwC India (2019) discussed how Indian banks are slowly moving toward data-driven decision-making. However, the pace is uneven across PSBs and SFBs.

Gaps Identified in the Literature

- Most studies are focused on PSBs, while SFBs are under-researched.
- Few comparative studies exist that measure CRM performance between the two bank types.

- Limited field research is available on the role of human agents, relationship officers, and branch-level risk practices.
- There is a lack of longitudinal studies that track CRM changes over time.
- Little attention is given to how regional factors, social identity (gender, caste), and informal income patterns influence credit risk.
- Research on how technology tools are implemented in rural areas remains insufficient.
- Most studies use secondary data; primary, field-based insights are rare.

Critical Discussion

Credit risk remains a major challenge for Indian banks. Public Sector Banks (PSBs) and Small Finance Banks (SFBs) face this challenge differently because of their structure, clientele, and risk approach. The review of earlier studies has brought out many patterns and contradictions. In this section, we look deeper into those patterns and highlight what they tell us about credit risk management in practice.

One of the main findings is that PSBs have consistently struggled with high levels of Non-Performing Assets (NPAs). Many studies have blamed poor appraisal systems, political pressure, and large exposure to corporate borrowers. These causes suggest that the problem lies not only in bad loans but also in weak internal systems. When loans are given without strong verification, the chance of default increases. Even when tools exist to assess risk, if they are not used properly, the outcome remains poor.

In contrast, SFBs have shown relatively better control over their loan portfolios, even though they lend to more vulnerable borrowers. This is an important contradiction. SFBs deal with people who do not have formal income, who may live in remote villages, and who may not even understand loan terms. Still, these borrowers tend to repay more reliably. One reason is that SFBs maintain close personal contact. Their staff visit borrowers regularly, remind them about repayments, and try to solve small issues before they become big. This human touch seems to play a big role in reducing risk.

The role of technology is another area where the two bank types differ. Many researchers mention that SFBs are faster in adopting digital tools. They use mobile apps for disbursal and repayments, send SMS alerts, and monitor loans through dashboards. PSBs, despite having more resources, are slower in this transition. This delay increases their operational risk. For example, if a loan goes unpaid and there is no digital alert system, the delay may go unnoticed for weeks.

Yet, we must also consider the quality of technology use. Just having mobile apps or dashboards does not mean that risk is managed well. Banks need to ensure that the data collected is accurate, updated, and used in decision-making. Some researchers have pointed out that in PSBs, even when tools are available, they are not used effectively due to staff resistance or lack of training. This creates a gap between what is possible and what is actually done.

Another critical issue is how regulations are applied. The Reserve Bank of India (RBI) has laid down clear rules for classifying assets, making provisions, and maintaining capital adequacy. However, compliance is not equal across banks. Studies have shown that PSBs sometimes hide NPAs through evergreening—giving a new loan to pay off an old one. Such practices delay the recognition of bad loans and make the problem worse in the long run. SFBs, being under tighter scrutiny due to their newness, have avoided such behavior to some extent. But they, too, face pressure to expand rapidly, which can lead to riskier lending in the future.

When comparing internal systems, one sees that SFBs are more decentralized. Local managers have some freedom to assess borrower credibility and approve small loans. This allows faster and more context-sensitive decisions. PSBs, however, have a more centralized structure. Loan decisions go through several levels, which causes delays and sometimes disconnects from local realities. While centralization brings uniformity, it also slows down the response time when risks appear.

Credit risk management is not only about numbers. It is also about people. Several studies highlight that field officers and loan staff play a big role in early warning systems. If a borrower starts showing signs of distress, it is often the field officer who notices it first. SFBs tend to value these roles and train their staff accordingly. PSBs, in many cases, still focus on top-down control rather than empowering ground-level staff.

Gender and social aspects are also largely missing from mainstream credit risk research. Few studies explore whether loans to women, scheduled caste groups, or tribal borrowers show different repayment behaviors. This is a serious gap. If certain groups are more reliable or face specific challenges, credit systems should adjust accordingly. Without such knowledge, risk management remains incomplete.

There is also a gap in understanding regional differences. A borrower in rural Bihar may behave very differently from one in semi-urban Maharashtra. But most banks apply the same credit rules everywhere. This one-size-fits-all

model may not work. Banks need to tailor their risk practices based on the local economic, cultural, and seasonal conditions.

A key challenge for both PSBs and SFBs is balancing inclusion with risk. SFBs are meant to serve people who have been excluded from the formal banking system. But lending to such groups carries higher risk. If SFBs become too cautious, they fail in their mission. If they lend too freely, they face default risk. The solution lies in building robust risk scoring models that consider both financial and non-financial indicators. Unfortunately, such models are still underdeveloped in India.

Another important contradiction is the gap between regulation and implementation. The RBI has made many good policies, but unless banks have the internal systems to follow them, the impact is limited. Studies show that many banks treat risk compliance as a box-ticking exercise. They fill forms and submit reports but do not act on the findings. This kind of culture makes even the best rules ineffective.

Finally, few studies track long-term outcomes. For example, after a loan becomes NPA, what happens next? Does the borrower recover and repay? Is the asset seized? How much is recovered? Such questions remain unanswered. Long-term tracking of loan outcomes would help banks refine their risk models. But this kind of data is not easily available or used.

In summary, the discussion above shows that credit risk management is not just about technology or regulations. It is about people, systems, attitudes, and follow-through. PSBs face serious challenges in decision-making, monitoring, and technology use. SFBs have done well in many areas but face risks of over-expansion and lack of experienced staff. Both types of banks can learn from each other. PSBs can adopt the agile, field-level approach of SFBs. SFBs can benefit from the structured systems and deep networks of PSBs.

Most importantly, the literature review shows that we still know too little about how credit risk is managed on the ground. More field studies, staff interviews, and borrower-level analyses are needed. Research should also focus on local realities, social factors, and long-term results. Only then can we build a full picture of what works and what needs change in Indian credit risk management.

Conclusion

Credit risk management is one of the most important functions in banking. It helps banks to stay strong, protect depositors' money, and keep the economy running smoothly. In India, this task has become even more important as the country deals with rising loan defaults, economic fluctuations, and the challenges of financial inclusion. This review paper has looked closely at how credit risk is managed in two types of Indian banks: Public Sector Banks (PSBs) and Small Finance Banks (SFBs). After reading and analyzing more than 40 previous studies, several key lessons and concerns have become clear.

First, it is evident that PSBs continue to carry a large burden of non-performing assets (NPAs). These bad loans have hurt their financial health and reduced public trust. Many studies agree that the causes are deep-rooted. Weak credit appraisal, poor loan monitoring, outdated systems, and political interference are some of the main reasons. In several cases, loans were given without proper risk checks, or follow-ups were delayed. These practices allowed small problems to grow into large defaults. While reforms and regulatory guidelines have been introduced, many PSBs still struggle to apply them effectively.

SFBs, in contrast, have shown relatively better control over credit risk, even though they lend to small and financially weak borrowers. This may seem surprising at first, but when we look closer, the reasons become clear. SFBs stay close to their customers. Their officers visit the field, understand the local economy, and deal with problems early. They use technology in a smart way—sending repayment reminders, tracking loan usage, and keeping in touch with customers. Their smaller size gives them flexibility. Most importantly, they build relationships with borrowers, which increases the chances of repayment.

That said, SFBs are not without challenges. Since they are new, many of them do not have enough experienced staff or advanced risk systems. They also face pressure to grow quickly and serve underserved markets. In such cases, the quality of lending may fall. If credit checks are rushed or skipped, the risk of default rises. As SFBs expand, they must invest in better training, technology, and internal controls to maintain loan quality.

This review also highlights the important role of regulations. The Reserve Bank of India (RBI) has created rules for all banks to follow. These include asset classification, provisioning norms, and capital requirements. These rules are helpful, but only if banks follow them properly. Many PSBs have been found to delay recognizing bad loans or to keep giving new loans to old defaulters to hide the problem. This only makes things worse. On the other hand, SFBs, being under close watch due to their new licenses, have tried to follow the rules more carefully. Still, they too need help in understanding and applying complex regulations, especially in rural and semi-urban areas.

The review of past studies also shows that many banks have not used technology to its full potential. Tools like digital credit scoring, data analytics, mobile alerts, and real-time dashboards can help banks detect risk early. But in PSBs, the adoption of these tools is slow. In some cases, the tools are present but are not used due to lack of training or resistance from staff. SFBs are ahead in this area, but even they need better integration and system upgrades to scale their operations.

One of the most important findings from this review is that people matter just as much as systems. Credit officers, branch managers, and field agents play a key role in risk control. If they are trained well, supported by the bank, and given the right tools, they can prevent many defaults. But if they are overburdened, poorly trained, or under pressure to meet targets, they may take risky decisions. This human side of credit risk is often ignored in policies and research. It deserves more attention in future studies.

There are also several areas where research is lacking. For example, very few studies have looked at how gender or caste affects loan repayment. Do women repay better than men? Are certain communities more vulnerable to loan default? How do cultural values affect the idea of debt? These questions are important for both risk control and financial inclusion, yet they remain unanswered.

Another research gap is the lack of comparative field-level studies. Most research relies on secondary data such as annual reports or government statistics. While useful, this data does not show how risk is managed at the branch level. It does not tell us how loan officers think, what tools they use, or how customers respond. We need more case studies, interviews, and field surveys to understand the real picture.

In addition, banks need to study loan outcomes over time. What happens to a borrower after taking a loan? If a person defaults once, does he or she come back to repay later? Are some types of recovery efforts more successful than others? Very few studies have tracked such long-term outcomes. This type of knowledge can help banks improve their strategies and reduce future risk.

The review also shows that both PSBs and SFBs can learn from each other. PSBs can adopt the flexibility, customer focus, and digital tools of SFBs. SFBs, in turn, can benefit from the systems, reach, and capital strength of PSBs. In fact, collaboration between the two types of banks may help improve credit delivery and reduce systemic risk. For example, PSBs could partner with SFBs for last-mile delivery, while SFBs could use the infrastructure of PSBs for wider operations.

To improve credit risk management across the sector, several steps are needed. First, banks must upgrade their risk assessment tools and use real-time data. Second, training programs must be improved so that staff at all levels understand how to identify and handle risky loans. Third, internal audits must be made stronger and more regular. Fourth, customer education should be increased to ensure that borrowers understand the terms and consequences of loans. Fifth, collaboration between banks and fintech firms should be encouraged to create innovative credit solutions.

In terms of policy, regulators should not only issue rules but also ensure they are followed. This may require more inspections, penalty systems, and performance reviews. At the same time, support should be given to smaller banks to help them build risk capacity. Policies should also promote transparency and accountability in lending.

To conclude, credit risk is not just a number on a balance sheet. It is a sign of how well a bank understands its customers, its environment, and its own limitations. The challenge is not to avoid risk completely but to manage it wisely. PSBs must modernize their systems and reduce bureaucratic delays. SFBs must strengthen their internal controls as they grow. Policymakers must support both through training, infrastructure, and fair regulation. Researchers must fill the knowledge gaps with more practical, field-based studies. Only through combined effort can the Indian banking system become safer, more inclusive, and more resilient to future shocks.

References

Aggarwal, R., & Srivastava, S. (2020). Comparative study of risk management practices in PSBs and SFBs. *International Journal of Research in Commerce, Economics & Management*, 10(6), 52–59.

Arora, N., & Kumar, R. (2014). Credit risk management in Indian public sector banks. *International Journal of Social Science and Interdisciplinary Research*, 3(6), 49–63.

Bhusan, S. (2021). Asset quality and performance of SFBs and PSBs: A comparative outlook. *Journal of Banking and Finance Review*, 13(2), 78–85.

Chakrabarty, K. C. (2013). *Credit risk management: Theory and practice* [Speech]. Reserve Bank of India. https://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=785

Chakraborty, M. (2020). Digital credit monitoring in small finance banks. *South Asian Journal of Financial Studies*, 8(4), 33–40.

Choudhury, R. (2022). AI tools for credit assessment in small finance banks. *Journal of Applied Financial Technology*, 6(1), 12–20.

CRISIL. (2021). *Credit trends in Indian SFBs*. CRISIL Research.

Das, A., & Rajan, N. (2020). Risk approaches in PSBs and SFBs: A comparative study. *Finance India*, 34(3), 444–457.

Dhar, A. (2019). NPA crisis in Indian banks: A sectoral study. *Economic and Political Weekly*, 54(17), 21–27.

Gupta, A., & Jain, R. (2012). Credit appraisal techniques in Indian public banks. *Indian Journal of Banking and Finance*, 8(2), 110–117.

Kaur, P., & Singh, H. (2020). Impact of banking reforms on PSBs. *Asian Journal of Research in Banking and Finance*, 10(1), 45–53.

Kumar, A., & Sen, R. (2018). Basel norms and credit risk management in SFBs. *Indian Banking Review*, 11(3), 60–66.

Kumar, P., & Dubey, S. (2018). Credit risk management in small finance banks: A ground-level study. *International Journal of Rural Management*, 4(2), 23–31.

McKinsey & Company. (2017). *India banking 2020: Making the decade's promise come true*. https://www.mckinsey.com

Mohanty, B. (2016). Corporate lending and NPA levels in PSBs. *Business & Economic Research*, 6(4), 80–88.

NITI Aayog. (2018). *Financial inclusion in India: Role of SFBs*. Government of India.

Patel, B., & Mehta, M. (2021). Credit recovery challenges in SFBs. *Journal of Microfinance Research*, 2(1), 41–48.

PwC India. (2019). *Risk management and compliance in Indian banking*. PricewaterhouseCoopers.

Ranjan, R., & Dhal, S. (2003). Non-performing loans and terms of credit of public sector banks in India. *Reserve Bank of India Occasional Papers*, 24(3), 81–121.

Reserve Bank of India. (2020). *Report on trend and progress of banking in India 2019–2020*. https://www.rbi.org.in

Sen, S., & Bhattacharya, D. (2019). Comparative efficiency of PSBs and SFBs. *Indian Journal of Economics and Development*, 15(2), 114–121.

Sharma, K. (2019). Loan recovery mechanisms in Indian SFBs. *The Microfinance Review*, 11(1), 50–60.

Singh, V. (2017). The effectiveness of Basel III in Indian public banks. *International Journal of Banking, Risk and Insurance*, 5(1), 26–32.

World Bank. (2016). *India's financial sector: Promoting stability and inclusion*. https://www.worldbank.org