A STUDY OF CREDIT RISK MONITORING SYSTEM OF STRESSED SMES ACCOUNTS FOR IMPROVING EFFICIENCY AND SUSTAINABILITY: A CASE STUDY OF YES BANK

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Abstract

This present study aims to investigate the Credit Risk Monitoring system for stressed SME accounts for Yes Bank, particularly the RRR initiative. Through the use of secondary data from the previous quarter, the relevance and outcomes of the initiative can be analyzed, revealing the success of the program out of the total 970 stressed accounts, of which almost 76% were recoveries, reductions, and resolutions. Through this study, the significance of monitoring, interventions, legal proceedings, and technology can be highlighted, together with the problems encountered in legal recoveries, and how the system can be further developed for the betterment of the overall financial condition of the bank through the improvement of the way the SME portfolios are managed.

Key Words-: *Credit Risk Monitoring, Stressed Assets, RRR Model (Recover, Reduce, Resolve), Yes Bank, SME Accounts, Secondary Data Analysis, Non-Performing Assets (NPAs)*

INTRODUCTION

The Credit Risk Management Systems that Banks and Financial Institutions use are tools to assess and track a borrower's financial health through credit monitoring after loan disbursement, in order to identify potential warning signs for any stress the borrower may be undergoing. The information collected by the bank provides insight into potential risk indicators such as late payments, reduced sales or revenue, and poor financial condition; allowing for the Banks to take early action (i.e. restructuring of loans) to help reduce the risk of larger losses for both the Banks and Borrowers. In this new millennium, MSMEs (Micro, Small, and Medium Enterprises) are increasingly providing banks with financial and operational support, as MSMEs represent the primary source for economic growth, innovation, and job creation. However, MSMEs are typically one of the highest-risk segments and most severely impacted segments by financial stress and credit risk. Banks' inability to act quickly on borrowers with non-performing assets has often resulted in enormous challenges and costs to recover from the resulting financial stress to the borrower; as a result of the above, we continue to see a growing number of bad loans affecting the reputation of the Banks, thus providing harm to the economy. Banks that do not effectively manage their credit risk portfolios will face negative consequences within the banking industry, especially for SME financing. Yet with technological advances in integration of AI technology in Banking institutions, there are now banks moving swiftly to create real-time monitoring systems for their credit portfolios much earlier in the loan-disbursement process. Yes Bank has created an initiative to create specific criteria to

Continually monitor and identify changes in performance related to all SME accounts only as per the established monitoring criteria. The future lies in predictive credit monitoring that integrates financial data, operational patterns, and market signals to create a 360-degree view of SME health.

The benefits of concentrating on this topic are immense, both of immediate and long-term effect. First and foremost, a good system of credit monitoring will result in the quality of the bank's assets improving, leading to profitability. Secondly, in the case of Small and Medium-Sized Enterprises, early involvement by the banks opens opportunities to restructure the debt of the companies, enabling perfect solutions before the situation of default sets in. Additionally, by diving deeply into this topic, there are chances to learn how banks can reconcile the concept of risk and opportunities. not all accounts or companies are doomed to fail; there are chances of success too. With the help of proper credit monitoring, banks can learn the distinction between the accounts that are stressed and those that are not viable by nature.

This research aims to explore how Yes Bank, through its observations and innovations, can serve as a model for improving productivity and sustainability in SME financing. By understanding the past challenges, and through **RRR (Recover, Reduce, Resolve)** initiative a focused strategy adopted by Yes Bank to manage stressed loan accounts, especially in the SME segment, embracing the future possibilities, and recognizing the immense benefits, this study hopes to contribute meaningful insights to the field of credit risk management in India.

Literature Review

This study compiled a large number of papers/articles (high-value) on credit risk monitoring/management in Banking, focusing on stressed SME accounts. All the documents were evaluated based upon their relevance, significance, and contribution to the Credit Risk Monitoring Management (credit risk) literature. The papers were placed into tables in chronological order (from 2025 (or 2012) to 2012) as to their years of publication with authors listed name in table. Dhananjay Mandlik, et al. (2024) demonstrates the need for establishing multiple sources of credit risk management (risk management) and establishes the need to adopt global standards and best practice to mitigate losses from non-performing assets. Some actions recommended by Dhananjay Mandlik, et al. to assist improve credit risk management are taking timely legal action, loan restructuring, and staff training to improve credit assessment for lending to SMEs through stressed asset management (credit assessment). Kajal Chandra Debnath, et al.(2023) establishes the necessity of strengthening Risk Management (R&M) frameworks for banks in India in accordance with the Basel regulations. It establishes that Indian banks must maintain sufficient capital to meet their requirements to absorb any adverse conditions and increase financial stability. Kiruthika, et al (2022) conducted an analysis of the financial condition of Home First Finance Company India utilizing its R&M practices. Their research found that Home First Finance Company India is financially sound with respect to liquidity, however, they indicated the need to diversify their products and to utilize more of their assets. For this purpose, retention of earnings and asset-liability management are recommended to improve profitability. Punyata Butola, et al. (2022) The research identifies key factors affecting credit risk management, enabling it to improve the profitability of Indian banks. These factors are credit to deposit ratios and operating profits. NPAs are to be reduced to increase financial stability and improve profitability. The research findings emphasize the importance of stricter credit risk management and capital adequacy ratios to avoid loss in loans and sustain bank profitability. Shengli Chen, et al. (2022) This research aims to model a credit risk evaluation model through online supply chain finance to small and medium-sized enterprises. It has found risk factors associated with different industries. For this purpose, it has recommended using different risk assessment models based on specific industry indicators. This research emphasizes different aspects and findings. Aditi Kumari, et al. (2021) This research has focused on improving asset quality and reducing NPAs of Yes Bank. For this purpose, it has recommended improving credit risk management. Asset reconstruction and net profit margin are recommended to achieve these objectives. Firstia F. Indarjo, et al. (2021) This research aims to evaluate credit restructuring models which were introduced. The report finds credit restructuring can reduce debtor strain and enable recuperation and financial backing. Economic recovery and sustainability of MSMEs are achieved through the provision of essential financial alignments to entities that have been adversely impacted by COVID-19. The research outlines the influence of credit risk control for small-scale enterprises (SSEs) and their contribution to the economic advancement of the nation. The report stipulates that access to finance and effective management of business risks are crucial for the sustainability of enterprises. Suggestions include enhancing accessibility to financial services, creating risk management

divisions, and providing supportive policy frameworks for small-scale enterprises. Vijaya Kittu Manda, et al. (2018) The research provides insight into how overall technology advancements through blockchain, and open application programming interfaces (APIs) have assisted Yes Bank in its endeavor to be recognized as a global leader in the financial services industry. By directing resources towards improving asset quality; maintaining risk monitoring; and advancing knowledge banking; Yes Bank has managed to limit losses associated with nonperforming assets (NPAs). However, the higher-than-average fluctuations of asset quality and the significant differences between what is commonly observed by other banks, have created uncertainty for investors, which has an impact on Yes Banks stock price, as well as future financial viability. Dr Ashok Kumar Panigrahi (2012). From the research, it suggests that the techniques of risk management of SMEs need to be appropriate in size, balance sheet quality, and industry complexity of the entity. It has also indicated that effective risk mitigation is important for the sustainability of the entities' competitiveness and the provision of products at competitive prices. The importance of the entity's risk management has been highlighted, and the allocation of funds to insufficient risk systems need not be prioritized.

Methodology
Methodology
The present study involved secondary data management research, specifically focusing on the assessment and classification of SME borrower accounts within the Yes Bank internal credit monitoring initiative, referred to as the RRR Project – Recover, Reduce, Resolve. Quarterly review is undertaken, wherein a new dataset is created comprising previously existing SME borrower accounts added in the previous quarters. A total of 970 SME business borrower accounts were reviewed for credit risk assessment.

Objective:
To study the stress on the SME business customer account of Yes Bank on the basis of Credit Risk Monitoring system.
As an auditor within the Credit Risk Monitoring framework, the following step-by-step account review procedure is adopted:

S.No.	Step Name	Focus Area	Objective
1	Credit Analysis Memorandum (CAM)	Background & Profile Check	Understand business model, exposure, and rating
2	Financial Statement Review (Balance Sheet & P&L)	Financial Health	Analyze profitability, liquidity, leverage
3	Hygiene Report	Compliance & Documentation	Validate KYC, overdue flags, sanctions adherence
4	Early Warning Signals (EWS)	Stress Indicators	Identify early signs of financial stress
5	Days Past Due (DPD) Tracking	Repayment Behaviour	Monitor overdue payments and SMA tagging
6	Collateral Valuation & Security Cover	Risk Mitigation	Assess collateral value vs. exposure

Overview of Problem Statement
This project aims to understand and enhance the credit risk management of strained/ stressed SME accounts at Yes Bank. The objective of this project is to assist Yes Bank in decreasing NPAs, improving profitability, and equipping the bank with the ability to provide sustainable support to SMEs.

Gap in Current Credit Risk Management Process
The identified gap for this project is that there is no monitoring system related to stressed SME accounts. Some examples of the identified gaps include:
• Limited Accuracy of Early Warning Signals – present systems do not provide early warning signs of impending stress on SME accounts. This results in delayed intervention.
• Limited Attention to Technology – Yes Bank must embrace current technologies.
• Creative Recovery Techniques – the recovery of default loans is often on a case-by-case basis, resulting in different recovery results for different cases.
• Lack of Customised Solutions – the risk management process does not address issues such as cash flow volatility or sector-specific risk that SMEs face.Analysis and Data

Interpretation
Analysis involves the careful examination of the data that has been collected. Since this study involves using secondary data like the bank's internal reports, government data, etc., the major emphasis would be on the consideration and organization of the data in a useful manner. In this study, the secondary data pertaining to accounts like "RRR" accounts, i.e., "Recover," "Reduce," and "Resolve," has been analyzed in order to determine the extent of the accounts being resolved, the accounts still being stressed, and the degree of success being achieved in the recovery process. This analysis helped in explaining the success of the credit monitoring strategies employed by Yes Bank for the last quarter.

Data Overview:
● Total Accounts in Stress (Last Quarter): 970 accounts

● Breakdown by RRR Categories:

Table Representation:

Category	Number of Accounts
Recover	109
Reduce	273
Resolve	367
Limit Closed	19
Lap	202
Total	970

Steps for Analysis and Chart Creation:

Data Table Explanation:
● The table displays the number of stressed SME accounts under different categories of the RRR initiative.
● Recover: Accounts that are being worked on to bring back to normal condition.
● Reduce: Accounts where the stress levels are being reduced through corrective measures.
● Resolve: Accounts that have been fully addressed and resolved.
● Limit Closed: Accounts where limits have been closed during the last quarter.
● Lap: LAP (Loan Against Property) is a secured loan where banks lend against a borrower's property, ensuring lower risk. Since the asset covers the loan, banks face less stress in monitoring repayment.

Chart Creation: A pie chart to visualize the relative proportion of each category.

Category	Accounts
Recover	109
Reduce	273
Resolve	367
Lap	202
Limit Closed	19
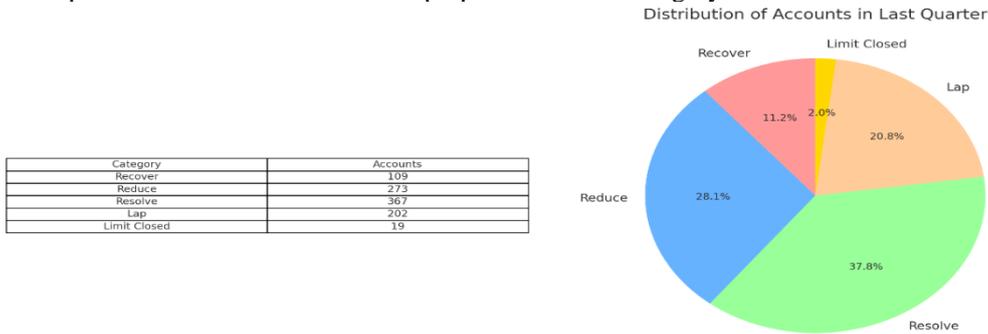
5.4 **Interpretation**
The pie chart titled "Distribution of Accounts in Last Quarter" shows the status of 970 accounts, broken down into five categories: Recover, Reduce, Resolve, Lap, and Limit Closed. Each category's share is expressed as a percentage of the total accounts.

Resolution (367 accounts; 37.8% of all accounts):
• Approximately 38% of the total number of accounts were successfully resolved.
• Interpretation: A high level of success has been achieved in resolving troubled accounts. Evaluation of the performance of the credit risk team and/or recovery strategy has resulted in a successful outcome for a majority of the accounts.

Reduction (273 accounts; 28.1%):
• Approximately 28% of the total number of accounts have the 'Reduction' status.
• Interpretation: The majority of these accounts have been positively impacted, either by an overall decrease in credit risk, or reduced exposure (outstanding balance), or by having their Risk Grade adjusted to reflect their current credit risk. This indicates that these accounts received some form of benefit and show evidence that they are improving.

LAP (202 accounts; 20.8%):
• Approximately 21% of all accounts are classified as LAP accounts.
• Interpretation: LAP accounts are considered secured loans by banks because the loan is backed by the property pledged as collateral. As a result, LAP accounts pose a relatively low risk to the bank; hence they are classified as secured loans.

Recovery (109 accounts; 11.2%):
• Approximately 11% of all accounts are classified as Recovery accounts.
o Interpretation: Credit recovery efforts have been successful for these 109 accounts; however, the recovery process is relatively slow and time-consuming and, therefore, it may take longer to generate a full recovery than it does to resolve or reduce the amount due from the borrower.

Limit Closed (19 accounts; 2.0%):
• Approximately 2% of all accounts have reached the Limit Closed status.
• Interpretation: The number of accounts classified as being fully settled, repaid, or non-used, and therefore placed in Permanent Limit Closed, is minimal compared to the total number of accounts (2% vs. 100%).

Strategic Insights
• Positive: The majority (66%) of the stories have a positive trend as they are either already resolved or improving (resolve + reduce).
•Caution: 21% accounts have lapsed, implying risk build-up if action is not taken urgently.
•Action Area: Recoveries and Limit Closures: Relatively Low - This is about 13%, an indication that there is a need to improve the recoveries and limit closures
• Priority Recommendation
o Focusing on converting "Reduce" accounts to "Resolve".
o Continue push efforts towards attaining final recoveries or closures for a clean balance sheet.

Result
In this study, secondary data was analysed from the Credit Risk Monitoring of stressed SME accounts under the RRR (Recover, Reduce, Resolve) initiative at Yes Bank for the last quarter. A total of 970 accounts were under review. The breakdown of their status is as follows:
●Accounts recovered – 109 accounts were fully recovered in the last quarter, which demonstrates that the recovery team's follow-up efforts; restructuring assistance; legal action and/or a combination of these elements have led to borrowers repaying their outstanding amounts.
●Accounts reduced – there were 273 accounts that showed partial recovery/risk reduction. For these accounts there were either partial payments made and/or settlements negotiated to decrease the outstanding amount due to the Bank. Therefore, these accounts were less stressed on the Bank's books than previously.
●Accounts resolved – 367 accounts were resolved (settlements, compromise agreements, asset sales, or legal judgment) through various means. These resolutions have aided in a cleaner balance sheet and improved the overall asset quality of the Bank.
●Legal Action Pending (LAP) – there were 202 accounts in a state of legal action; i.e., either proceedings under the SARFAESI Act; Debt Recovery Tribunal (DRT); or court cases have been initiated. Although these 202 accounts have the potential to be recovered in the future once cleared through legal channels, they are currently stuck in the legal process.
●Limit Closure cases – there were 19 accounts that closed because the approved credit limit had expired or were voluntarily closed by the customer after paying off all the money owed to the Bank.
Thus, out of 970 stressed accounts, nearly 76% were either recovered, reduced, or resolved. This highlights a significant progress in credit risk monitoring and recovery processes. It reflects the success of RRR policies implemented by Yes Bank and timely identify, monitored stressed accounts, initiating corrective actions early, and legal execution have positively impacted the portfolio quality. However, accounts under LAP and unresolved accounts still present challenges that need continuous efforts.

Suggestions
From the analysis, the following suggestions could be made on how to further enhance the credit risk management in Yes Bank, on the basis of the RRR results and present banking trends:
1. Strengthening Early Monitoring
Banks must enhance the Early Warning Signal systems. For this, various disciplines, like predictive analytics and tracking of cash flows, must be used. This can help in avoiding defaults by tracking these problems at the earliest stage itself.
2. Accelerating Legal Recovery Processes
The use of legal channels like SARFAESI, DRT, and NCLT has to be more aggressive. The banks have to fast track these through efficient coordination and utilization of these channels.
3. Special Focus on MSME Sector
Because these MSME sectors are highly vulnerable to economic shocks, specific restructuring and hand-holding initiatives might have to be taken to revive these sectors. Dedicated SME Advisory Cells would also help in better borrower engagement.
4. Customer Engagement & Counselling
Developing strong relationships with debtors may help ensure the voluntary settlement of debts. Counselling distressed debtors can help reduce the stress on a portfolio.
5. Leveraging Technology
Sophisticated technologies such as Artificial Intelligence (AI), Machine Learning (ML), and Big Data Analytics can be applied to identify default patterns and risk accounts, and assess risk electronically.
6. Strengthening Internal Recovery Teams
In this context, it is essential to identify the need for the training and strength of the internal recovery and credit monitoring groups to ensure they are equipped with the right skills in negotiation and settlement strategies for recovery to take place.
7. Policy Advocacy and Structural Reforms

Banks will have to work hand in hand with these industry associations, as well as the government, to push for demands like swift judicial clearance for NPAs, strengthening the provisions of the I&B code, and developing robust models for debt recoveries like ARCs.

8. Periodic Review and Feedback Mechanism

The RRR strategy would necessitate periodic evaluation to assess its efficacy. Knowledge gained would be used as a frame of reference for forming frameworks for future policy considerations to align with emerging market and borrowers' needs.

Conclusion

This paper focused on the process of Credit Risk Monitoring under the RRR framework of Yes Bank for Stressed SME accounts. Through the analysis of secondary data for the last quarter of the year, it was concluded that a large percentage i.e., 76%, of the total 970 stressed accounts were recovered, reduced, and/or resolved. This shows that the process for resolving the Stressed Accounts in Yes Bank is yielding satisfactory results.

The accounts breakdown revealed that 109 accounts were fully recovered, 273 accounts were partially settled, 367 accounts were settled, 202 accounts were still undergoing legal action, and 19 accounts had the limits closed. Based on the above results, it is clear how monitoring the accounts at early stages and engaging them contributed to improving the quality of the asset.

Nevertheless, the large number of cases pending in these processes is a confirmation that there are still issues, especially regarding the effectiveness of the process itself. It is in this regard that there is an emphasis on the need to improve the monitoring mechanisms, supporting processes, and the adoption of cutting-edge technology in management, e.g., predictive analytics, in addressing risks.

Nevertheless, a majority of the accounts still pending in legal procedures is reflective of the fact that there are difficulties in terms of the speed of recovery through the legal process. What needs to be done at this juncture is to continue improving upon the monitoring mechanisms and to leverage technologies like predictive analytics to manage credit risk.

Overall, it can therefore be stated that the RRR initiative has proved to be a step in the right direction with regards to mitigating credit risk for Yes Bank. Going forward, therefore, efforts to raise recovery activities, build up early warnings, offer support with regards to distressed borrowers, and further improve interventions based on laws will continue to remain crucial not only to ensure bank profitability but also to ensure that the larger economy will benefit from the increased development of its financial system.

Therefore, the study concludes that with improvements in the system, vigilance, flexibility, and innovations are to be adopted to tackle the credit risks to face the changing challenges of stressed assets in the Indian banking industry.

Reference

1. Dhananjay Mandlik, Aruna Deshpande Peshave, (2024). Credit Risk Management In Indian Banking- A Case Study, Library Progress International, ISSN 0970 1052, Vol.44 No.3,https://bpasjournals.com/library-science/index.php/journal, March 18, 2025

2. [**Kajal Chandra Debnath, Kallal Banerjee (2023).** Credit risk management in the Indian banking sector: Issues and challenges. *Anthology The Research,* 7(12). ISSN: 2456-4397. RNI No. UPBIL/2016/68067 ,https://www.researchgate.net/publication/376650715,March 20,2025]

3. [**Shengli Chen, Dong Wang, Zheng Wan (2022).** Credit risk assessment of small and medium-sized enterprises under the financial model of online supply chain. *Discrete Dynamics in Nature and Society, 2022*, Article ID 7733395, 13 pages. https://doi.org/10.1155/2022/7733395, March20,2025]

4. [**Punyata Butola, Praveen Dube, Vijay Kumar Jain (2022).** A study on the impact of credit risk management on the profitability of Indian banks. *International Journal of Management and Sustainability, 11*(3), 103-114. https://doi.org/10.18488/11.v11i3.3068,March 20,2025]

5. [Firstia Fauziah Indarjo , Moch Najib Imanullah, YudhoTaruno Muryanto (2021). The effect of bad credit of MSMEs caused by the COVID-19 pandemic. *American Journal of Humanities and Social Sciences Research (AJHSSR) e-ISSN : 2378-703X*, Volume-5, Issue-6, pp-370-376,. https://www.ajhssr.com, March 18, 2025]

6. [Aditi Kumari, Priyanshu Agarwal, Paritosh Aditya (2021). A study on performance evaluation and risk management – A case of Yes Bank. *International Research Journal of Modernization in Engineering Technology and Science*, ISSN: 2582-5208, Volume:03/Issue:09. https://www.irjmets.com, March 18, 2025]

7. [**Kayode, O. J., Popoola, M. A., & Adeyinka, A. J. (2020).** Credit risk management and entrepreneurship development in Nigeria: A case study of small and medium scale industries in Ondo State. *International Journal of Small and Medium Enterprises, 3*(1), 18. Centre for Research on Islamic Banking & Finance and Business, USA. ISSN 2576-7712, E-ISSN 2576-7720, March 19,2025][Vijaya Kittu Manda, Aruna Polisetty, (2018), Asset Quality & Risk Management Practices - An analysis on Yes Bank. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.3510944, March 18, 2025]

8. [DR. Ashok Kumar Panigrahi (2012). Risk management in micro, small, and medium enterprises (MSMEs) in India: A critical appraisal. *Asia Pacific Journal of Marketing & Management Review*, ISSN 2319-2836, Vol.1 (4),.https://www.indianresearchjournals.com, March 18, 2025]

9. [**KIRUTHIKA, Mrs. K. MALARKODI, Dr.K. RAMPRADHAP (2022).** A study on risk management in non-banking finance company of Home First Finance Company India Ltd. *International Journal for Research Trends and Innovation, 7*(5), 837. ISSN: 2456-3315. Retrieved from www.ijrti.org, March 20,2025]

10. https://bfsi.economictimes.indiatimes.com/news/banking/wrap-2024-indian-banks-gross-npa-ratio-hits-13-year-low-of-2-5-driven-by-lower-slippages/116724100?utm
11. https://www.theweek.in/wire-updates/business/2024/12/30/del47-biz-ld-rbi-bad-loans.html?utm
12. https://www.indiainfoline.com/blog/what-june-2024-rbi-financial-stability-report-says-about-indian-banks?utm
13. https://www.moneycontrol.com/financials/yesbank/ratiosVI/YB
14. https://www.financialexpress.com/business/banking-finance-yes-bank-creates-stressed-asset-management-vertical-to-resolve-npa-accounts-1951359/
15. https://www.yes.bank.in/