



# A Study On Credit Risk Management, Technical Efficiency And Financial Performance Of Indian Banking Sector

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**Abstract:** The research in a quantitative manner is all-encompassing and based on its asset size concerning the sample of public and private sector banks over the last decade. Key parameters of credit risk management including credit risk exposure, provisioning policies, and techniques of mitigation are evaluated to determine the contribution towards technological efficiency. Data Envelopment Analysis is used to check on technical efficiency, giving a robust framework on how effectively banks convert their inputs into outputs in the atmosphere of controlling credit risk.

Several indicators for measuring financial performance are used, such as return on assets, return on equity, and the ratio of non-performing assets. This analysis carries a target to reveal those relationships between practices in credit risk management, operational efficiency, and financial health.

Results suggest that banks having stringent frameworks for credit risk management exhibit higher technical efficiency, which ultimately is transmitted to better financial performance. In other words, banks managing their credit portfolio in a proactive manner and applying advanced tools for risk assessment are in a better position to reduce NPAs and increase their profitability. Critical areas in which Indian banks need improvement in credit risk management practice for enhanced technical efficiency and financial resilience include the following:

Hence, the findings of the report could serve as guidelines and strategic suggestions for the policy makers, regulators, and banking institutions on the way for improving the process of credit risk management and focusing on efficiency gains. In view of the importance of integrating credit risk management and focusing on efficiency gains, this study contributes to the steps being taken to strengthen the Indian banking sector for future financial challenges so that sustainable growth and stability remain the cornerstones of the economy

**Index Terms** - CREDIT RISK MANAGEMENT, TECHNICAL EFFICIENCY AND FINANCIAL PERFORMANCE.

[Banking be one of the oldest financial institutors and it as ages as human civilization. The origin be traced in ancient times. Banking system take up an essential role in the economic development of a country. institutor be indispensable in modern society. It plays a crucial role in the economic development of a country. The function of a bank be to collect deposits so much as possible from customers and mobilize it into the most preferable and profitable sector (Duffer, 2010). Bank itself be an organization engaged in any or all the various functions of banking viz. receiving, collecting, transferring, paying, lending, investing, dealing, exchanging and servicing (safe deposits, trusteeship, agency, custodianship), etc. Generally, bank mean an institutor that provides fundamental banking services as accepting deposits from the public and providing loans. It is a financial institution that accepts deposits from the public and provides loans from deposits. Banking institutor deal in money, so they be money traders. But with the passage of time, functions of bank have been increasing

and diversifying. So now, banks be not merely the traders of money only but they also create credit. In the erstwhile several years, Indian banking system has achieved some good milestone and outstanding achievements to its credit. Indian banking has spread even to the remote area of the country that shows the extensive reach of it and for inclusive Indian growth story. Banks be the major and main participants of the financial system in India. In this modern age, banking sector provide various facilities and services to their customers and thereby improves the life of the citizens. There be several popular modalities of banking. It may differ country to country. Commercial banking be one of them. Banking and financial institutions be transmission channels of monetary policy, it be important for effective monetary policy management to ensure that their financial health be sound and overall financial sector be stable. Bank play indispensable role in the development of country economy and forms the core of money market for the country. India is having many banks, and it are large sector in Indian economy. There are public banks, private, and also co-operative bank. The banking sector in Indian are playing a crucial role in the development of and helping people to save and money. The banks in India are provide various services like loan, deposit, and financial advice. They also are facilitating online banking, mobile banking, and ATM services for convenience of customer. The Indian banking sector are regulated by the Reserve Bank of India (RBI), which are control monetary policy and oversee the functioning of banks. However, there are also challenges facing the Indian banking sector, such as non-performing assets (NPA), fraudulent activities, and competition. The banks need to constantly adapt to changing economic conditions and technological advancements to stay competitive in market. Overall, the Indian banking sector are vital for economic growth and must continue to evolve with time. It is important for banks to maintain transparency, trust, and efficiency to serve the needs of customers and contribute to the progress of the country.

## REVIEW OF LITERATURE

### 1. Manish Mittal and Aruna Dhademad (2005):

Discovered that, from the perspective of shareholders, the only significant metric for assessing the performance of the banking sector is increased profitability. The banks are responsible for finding a balance between their social and business goals. They discovered that the profitability of public sector banks is lower than that of private sector banks. In terms of net profitability, foreign banks are at the top of the list. Because they provide more and more fee-based services to corporate clients or business houses, private sector banks generate higher non-interest income than public sector banks. Therefore, in order for public sector banks to compete with private sector banks, they urgently need to offer these services.

### 2. "Analysis of Profitability Performance of SBI" and Its Associates, DR.D. GURUSWAMY, (2012):

Describes the article in which an effort has been made to examine the profitability performance of SBI and its associates. The purpose of the paper is to examine SBI and its associates' profitability and to evaluate their profitability performance. The main source of data for this paper is secondary. Several statistical methods, including mean, S.D., variance, CAGR, and ANOVA, have been completed in order to obtain the open-ended results from the data gathered from secondary data. The paper's focus is limited to all SBI Group banks for the data period spanning from 1996–1997 to 2007–2008. Within our current work, in order to assess the performance.

### 3. In 2014, Ms. Shikha Gupta (2014):

A Comparative Analysis of an Empirical Study of Icici Bank's Financial Performance-The Bank collaborates closely with the ICICI Foundation on a variety of projects and industries. According to assets and market capitalization, it is the second-biggest bank in India as of 2014. Through its numerous delivery channels and specialized subsidiaries in the fields of investment banking, asset management, venture capital, and insurance, ICICI Bank emerged as a pioneer venture on the horizon of offering an expanded range of banking products and financial services for corporate and retail customers. It is critical to assess ICICI Bank's financial performance given its strategic significance to the interests of the country.

### 4. Chanchala Jain and Abhay Jaiswal (2016):

An Analysis of SBI and ICICI's Financial Performance in Comparison An analysis of SBI and ICICI banks' financial performance is the goal of the study. One of the top public sector banks in India is the State Bank of India, or SBI as it is commonly called. SBI is spread across the nation's major cities, with 14 Local Head Offices and 57 Zonal Offices. The second-biggest and most prestigious private sector bank in India is called ICICI Bank. In India, the Bank operates 6,800 ATMs and 2,533 branches. The study is analytical and

descriptive in character. The secondary nature of the data was gathered from a variety of papers these banks published online. The two's financial performances are compared.

5. Abhay Jaiswal and Chanchala Jain (2016):

A Comparative Study of the Financial Performance of SBI and ICICI The study's objective is to analyze the financial performance of SBI and ICICI banks. The State Bank of India, or SBI as it is more well known, is one of the leading public sector banks in India. SBI has 57 Zonal Offices and 14 Local Head Offices, distributed among the major cities of the country. ICICI Bank is India's second-biggest and most esteemed private sector bank. The Bank has 2,533 branches and 6,800 ATMs in India. The work has a descriptive and analytical bent. The data, which was secondary in nature, was taken from a range of online publications these banks released. The financial results of the two are contrasted.

#### **Need Of the Study:**

An individual has plenty of reasons to study "Credit Risk Management, Technical Efficiency, and Financial Performance of the Indian Banking Sector." First of all, it is necessary to know how credit risk management mechanisms alter the Indian banking system's technical efficiency. Additionally, one can identify the most efficient resource utilization and operational practice. Secondly, one should measure how the recent regulatory changes, particularly the implementation of Basel III, affect financial performance, efficiency, and improved risk management process. Thirdly, sectoral analysis can be done to find out the differences among the banks in several of other sectors regarding risk management and efficiency.

Also, we need to look at how financial services are changing, especially with new fintech ideas. It's important to see how banks in India change their ways to deal with risks and how they work, when faced with these changes. This is key to staying in the game and staying important. And since global financial markets are all linked, it's vital to study how managing risks in the long run affects how strong Indian banks are when big problems hit. This is a must to keep our money system safe. All in all, checking how banks in India deal with credit risks, how well they use tech, and how good their money game is, is key to making smart choices on laws, rules, and plans. These plans aim to help the money world grow in a way that lasts and stays strong.

#### **DATA COLLECTION METHODS:**

Primary Data:

Primary Data are those that have been personally collected or have been obtained through personal efforts. obtained through direct Observation. It refers to information that is original in character and collected for a particular objective from the Area of investigation. Primary data for the study were mostly gathered using the technique of the survey and the tool questionnaire

Secondary Data:

On the other hand, secondary data is that information which is already available in existence. Gathered and subjected to statistical analysis by another party. Here's where the secondary Data were taken from various dictionaries, registers, publications, and journals. Publications, etc. websites for the Company

POPULATION: 200

Sample size: 100 responses.

SAMPEL UNIT: MEDCHAL

QUESTIONNAIRE:

A well-structured questionnaire with straightforward questions is used to collect data. The survey includes closed-ended, Likert-scale, and multiple-choice items.

TOOLS USED: Chi square, bar graphs, Percentages.

HYPOTHESIS:

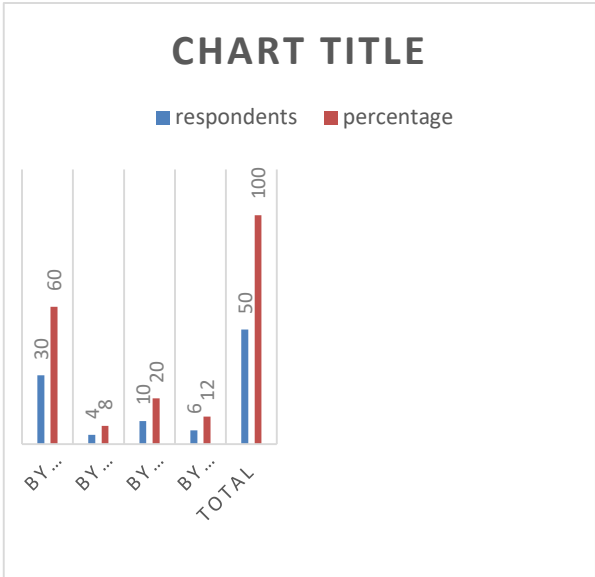
H0: The Indian banking sector does not reflect a significant relationship between credit risk management, technical efficiency, and financial performance.

H1: The Indian banking sector reflects a significant relationship between credit risk management, technical efficiency, and financial performance.



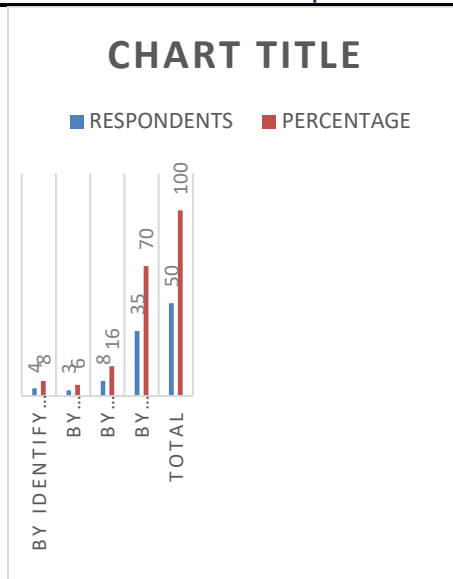
DATA ANALYSIS

How does technical efficiency contribute to financial performances	By reducing operational cost	By increasing leverage	By ,maximizing share holder value	By expanding market share	total
respondents	30	4	10	6	50
percentage	60	8	20	12	100



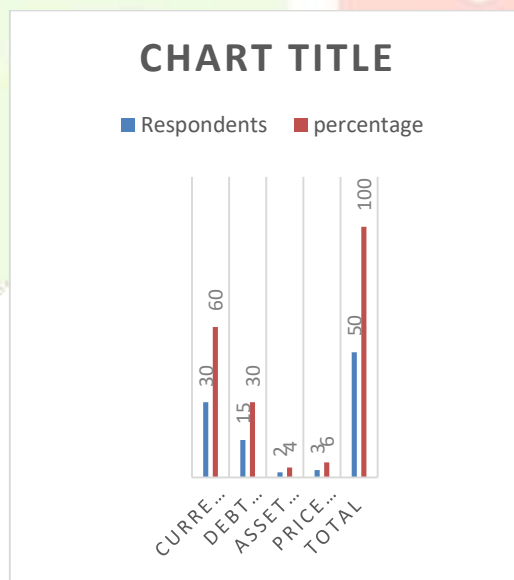
**Interpretation:** As chosen by 60% of respondents, the evidence suggests that technical efficiency primarily improves financial performance via lowering operational expenses.

How does credit monitoring contribute to effective risk managing	By identify potential credit worthy borrowers	By monitoring changes in borrowers credit profiles	By determining the optimal pricing loan strategy	By mitigating interest rate risk in credit portfolios	TOTAL
RESPONDENTS	4	3	8	35	50
PERCENTAGE	8	6	16	70	100



**INTERPRETATION:** According to the study, 70% of respondents indicated that credit monitoring mainly helps with effective risk management by reducing interest rate risk in credit portfolios.

Which financial ratio is used to evaluate a firms liquidity position	Current ratio	Debt ratio	Asset turnover ratio	Price earnings ratio	Total
Respondents	30	15	2	3	50



**INTERPRETATION:** 60% of respondents said that the current ratio is the best way to assess a company's liquidity. Liquidity isn't immediately related to other ratios like debt ratio, asset turnover, and price-earnings ratios; these ratios have various uses in financial examination.

**STATISTICAL TOOLS FOR ANALYSIS**

**H<sub>0</sub>:** There is no significant relationship between credit risk management, technical efficiency, and financial performance of the Indian banking sector.

**H<sub>1</sub>:** There is a significant relationship between credit risk management, technical efficiency, and financial performance of the Indian banking sector.

	High impact	Low Impact	Marginal Row Totals
Male	20 (19.2) [0.03]	10 (10.8) [0.06]	30
Female	12 (12.8) [0.05]	8 (7.2) [0.09]	20
Marginal Column Totals	32	18	50 (Grand Total)

The chi-square static is 0.2315. The p-value is .630428. Not significant at  $p < .05$ .

Since  $p \text{ value} < 0.05$ , so  $H_0$  rejected and accepted  $H_1$ . Hence, there is an effect of credit risk management in Indian Banking Sector.

<b>RESULTS</b>
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	High Impact	Low Impact				Row Totals
Below 20	7 (7.04) [0.00]	4 (3.96) [0.00]				11
21-35	19 (18.56) [0.01]	10 (10.44) [0.02]				29
Above 35	6 (6.40) [0.03]	4 (3.60) [0.04]				10
Column Totals	32	18				50 (Grand Total)

The chi-square statistic is 0.0991. The p-value is .951681. The result is not significant at  $p < .05$ .

**FINDINGS**

Total the 50 respondents, 60% were male—30 respondents—while 40% were female—20 respondents.

34% of the 50 respondents are married, while 66% are single.

Out of the 50 respondents, 46 percent are postgraduate degree holders while 56 percent are undergraduate degree holders.

From all 50 participants, 22% are below 20, 58% fall between 20 and 35, and 20% are above 35 years of age.

Out of a total of 50 respondents, 22% are less than 20 years, 58% are between 20 and 35 years, and 20% are over 35 years.

Only 4% of the respondents indicated that "credit monitoring" was their least preferred component, suggesting that it may not be as important as other components, such as financial forecasting, collateral assessment, and credit scoring.

According to 50% of respondents, reducing default risk is the main objective of credit risk management.

According to 50% of respondents, the leading aim of credit risk management is reducing default risk.

The statistics show that "Return on equity" is, in fact, the most frequently chosen metric by respondents, 50% of them, in rating the technological efficiency of financial institutions.

Hence, in the eyes of 60% of the respondents, technical efficiency mostly improves financial performance through a reduction in operational costs.

The study indicated that 70% of the respondents argued that credit monitoring mainly helps in proper risk management through reduction of interest rate risk in credit portfolios.

60% of the respondent mentioned the current ratio as the best tool to measure the firm's liquidity. Liquidity is not directly linked with other ratios such as debt ratio, assets turnover, and price-earnings ratios; all of these ratios have different applicability in financial analysis.

**SUGGESTIONS:**

From the findings of this study, a number of recommendations could be made on how credit risk management, technical efficiency, and financial performance can be improved in the Indian banking sector. First, more effort should be channelled towards improving the gender balance in data collection, ensuring broader inclusivity. Further analysis of more specific drivers of these variables, or possibly a longitudinal study, can be conducted to show changes over time. A comparison of the banking sector with other regions can give insights and benchmarking opportunities. The policy implications thereof should be evaluated in recommending regulatory interventions. Training programs can help in developing the skills of banking professionals. There is a need for knowledge sharing among stakeholders, and mechanisms of monitoring should be in place for emerging risks and opportunities. All these suggestions will serve to provide a roadmap for both future research studies and practical initiatives, which must be channelled towards optimizing the performance of the Indian banking sector with regard to credit risk management, technical efficiency, and financial performance.

**CONCLUSION:**

In conclusion, the current research study investigated the relationship between credit risk management, technical efficiency, and financial performance in the Indian banking sector. Based on quantitative analysis, a noticeable relationship exists between the factors, with varying degrees of significance. Evidence shows that effective credit risk management practices have a positive impact on financial performance, whereas technical efficiency shows a somewhat nuanced relationship. The study also showed a slight gender imbalance in the sample population, emphasizing the need for inclusive data collection practices.

Future research should aim at redressing the above-mentioned gender imbalance and going into the specifics of how credit risk management and technical efficiency interact with each other and ultimately affect financial performance in Indian banks. Longitudinal studies will provide insight into the evolutionary path of these relationships. Other possibilities are cross-region comparative studies, providing benchmarking opportunities and informing policy interventions toward sectoral performance enhancement.

Ultimately, fostering gender diversity, conducting further research, and implementing evidence-based policies will help the Indian banking sector increase resilience, efficiency, and performance in the face of dynamic market developments and regulatory challenges.

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