

Credit Risk Assessment in Commercial Banks

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Abstract-The research is based upon the capabilities of borrowers to repay their loans to financial institutions or banks. It involves estimating and calculating the risk that is being involved in the probability of paying back the loans or debts. Improper credit risk leads to disruption of cash flows, may reduce the bank's profitability index, increases loan losses, increase the number of non-performing loans which may lead to financial distress and also affects the quality of assets.

Keywords- Assets, Borrower, Commercial Banks, Credit Risk, Management, Risk Assessment

I. INTRODUCTION

Banks are financial institutions established for lending, issuing, exchanging, depositing, protecting, or managing money under the laws and regulations of a particular country. The dispute of credit risk management, as well as conducting quantitative assessments and credit risk assessments and credit ratings, is admissible to all banks associated with lending to legal entities and individuals. Credit risk may be that the borrower or partner fails to meet his / her obligations in terms of the acknowledged terms. Therefore, credit risk mounts from the operation of the bank or the lending of companies, individuals, and other banks or financial institutions.

The banking system plays an important role in promoting national economic development. The bank provides the necessary funding for management systems while developing the economy. They rally to save the masses of people scattered across the country, i.e. the absence of a banking state remains ineffective and unproductive. The bank borrows money from customers. India's banking system is undergoing major changes under the influence of regulation, technological advancement, and innovation. This rapidly changing environment puts banks at a variety of risks. Debt risk is the oldest and most important of all banking activities in private and public banks.

Credit risk is a popular risk that both monetary and nonmonetary firms have to cope up with. Debt risk arises when borrowers or debtors break down to meet his or her repayment obligations. Debt is described as a bond among two parties in which one party is going to provides cash or equity goods services, etc., to repay a promise to pay in the future by another.

The deformation of an economic venture is often correlated with disputes in the credit fund and is rarely the inference of depreciation of other assets. Therefore, the credit portfolio is not limited to the Bank's assets, it is critical to the success of the bank as well. The goal of a credit risk assessment is to reduce the risk of a risk-adjusted bank balance by maintaining credit risk within the overall risk of a portfolio and the risk to individual credits or transactions.

II. TRADITIONAL CREDIT RISK ASSESSMENT MODEL

The Traditional credit risks consist of three categories:

Expert Method

The expert method is the bank credit expert's judgment based on subjective experience.

Rating Method

The generic concept of how to measure is to classify a bank loan into several hierarchies and to give various rates at the rate of deposit loss; then calculate the amount lost and the amount; finally, the necessary funds for the bank to prevent the risk are available. Regulators and banks use this method to evaluate whether creditors' losses are sufficient.

Credit Scoring Method

The method of credit is to take the cost of the test item as a descriptive variable, to establish a statistical retrospective model, to compare credit points or default opportunities for the issuance of the model with the recommendation value, and to calculate the risk of the test item.

III. LITERATURE REVIEW

Credit risk is a well-known type of risk that both monetary or non-monetary firms have to cope up with. Debt risk arises when borrowers are not able to meet his or her commitment to repay a loan. In the business of banking, it is generally seen that cash-flow problems arise and that affects the banking system. (Greening & Bratanovic 2009)

Risk can be defined primarily as the degree of uncertainty about future returns. Those who participate in financial markets often face a wide range of risks because uncertainty comes in many forms. This is the reason why uncertainty is used as a source of risk classification.



Commercial banks impart a crucial role in the development of the economy, and they promote the economic conditions of the country through their mediation role and the monetary services they offer to communities and nations. The facilities of credit they provide make it easy to evaluate and expand productive investment strategies for individuals and institutional investors. (Kaaya & Pastory, 2013)

Many banks have established Credit Management Departments to deal with credit risk related to the activities of banking. However, the convenient data indicates the emergence of a number of loans that are non-performing in nature in the current year. (Kessey, 2015)

There are many types of credit risk assessments based on customer/borrower analysis to ensure the control of the risk level presented by potential customers at commercial lending banks. (Konovalova et al., 2016).

Many banks are focusing on providing the finest financial services, known as credit, to their customers to give a good increase of the country's gross domestic product (G.D.P.).(Kabir et al., 2010).

It found that credit risk management strategies and credit risk reduction measures were closely linked to loan payback, while the bumps faced by debtors did not have a relevant relationship with loan payback. Financial institutions face credit risk in a variety of financial matters other than borrowing money, including acceptance, currency trading, foreign exchange trading, financial futures, options, bonds, funds, exchange, and increased commitment and guarantees. (Boye & Kwabena, 2014)

Good organizational skills help employees make better decisions about work and especially for the organization as a whole. Management with a good team and each team having good determination encourages employees to do this work on time and to work efficiently. The same should be with the bank employees. (Tiwari & Singh, 2019)

Marketers perform various researches like analysis of market in En and customer buying behavior, their willingness to buy and pay for their product and services similarly bankers finds out every single detail of their customer to analyze the paying back risk. (Pushkar et al., 2020) Any firm that has a systematic development plan of actions, definitely going to increase the morale of the personnel working for their organization and feel the sense of being valued. (Singh & Singh, 2019)

IV. OBJECTIVE

The main objective of the paper is to provide a very good understanding of credit risk and analysis of credit risk assessment in the commercial bank of India. The objective is also to provide a very good method framework so that we can evaluate the credit risk assessment and reduce the risk.

V. METHODOLOGY

The research is extensive and descriptive, as it clarifies the link between the risks facing banks' risk management, risk analysis methods, risk extenuation measures, and debt payback. Key data were used to analyze the correlation between dependent and independent variables.

Data analysis includes detailed statistics (percentages, score points, standard deviations), as well as baseless mathematical analytical tools to build relationships between learned variables. The framework has regarded the repayment of loans as a variance that you rely on, as well as credit risk management measures, credit risk reduction measures, and constraints as an independent variable.

Formal and informal question papers are designed to obtain information on credit risk. This is because we needed to collect information from the source. In addition to obtaining information from respondents, secondary information (such as reports, statements, newsletters, and other relevant publications of the banking industry) was also collected from banks to supplement research data.

So in this what we need to do is first we will find that bank is facing the issue related to the credit risk and then we will provide a very good way to reduce the risk. This is very important for the banks because the bank can go through major losses due to default loans. Different aspects can be used to reduce the loss like by knowing all the information from the borrower. His complete information will help the bank to know him well.

PRACTICES OF CREDIT RISK ASSESSMENT

PAYING BACK OF
COMMERCIAL BANK
PERFORMANCE

MEASURES FOR CREDIT
RISK
MITIGATION

OBSTACLES

INDEPENDENT VARIABLES

DEPENDENT VARIABLE

VI. CONCEPTUAL FRAMEWORK





VII. DATA ANALYSIS

The section of the data represented below shows the collection of the sample data. Based on this the improvement will be made in the credit risk assessment field.

Table 1-Descriptive Analysis by Working Experience of the People In Bank

Variables	Frequency	Percent
Experience		
1-4 years	37	29.2
5-8years	24	18.8
Above 8 year	66	52.0
Total	127	100.0

Primary Data

Work experience is very important because it helps the officer to decide whether to give him or her a loan.

Table 2-Descriptive Analysis by Credit risk faced by the Banks

Variables	Frequency	Percent
Yes	98	77.16
No	29	22.84
Total	127	100.00

Primary Data

Credit risk is the most significant risk to a bank in terms of the data collected. Therefore, we need a good credit policy and risk assessment plan to reduce the risk.

Table 3-Descriptive Analysis by Nature of the banks' Credit policy and procedures

Variables	Frequency	Percent
Rigid	21	16.54
Flexible	66	51.96
Average	40	31.50
Total	127	100.00
	•	

Primary Data

The bank must have good credit policies and procedures so that the credit risk is significantly lower and it will help the bank to operate more efficiently.

Table 4-Descriptive Analysis by Tools used to measureCredit risk

Variables	Frequency	Percent
Internal rating	75	59.05
Through the five c's of credit	32	25.19
Through Financial Statement Ratios	20	15.76
Total	127	100.00

Primary Data

All sectors should be taken to reduce the risk of overdosing only one way will not help the bank to reduce the risk of debt. All possible steps should be evaluated before granting a loan.

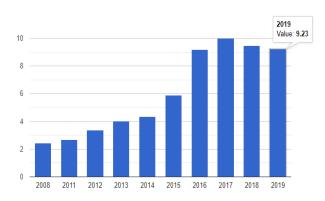


Figure 2-This graph shows the Loan data from 2008-2009.

Secondary Data (Source- RBI)

Data Loans that do not work as a percentage of all bank loans from 2008 to 2019. India's average figure during that period was 6.06 percent with a low of 2.45 percent in 2008 and 9.98 percent in 2017.

The percentage of unemployed loans in India reflects the life of the banking system. The high percentage of such loans indicates that banks have a problem with interest and interest on their loans. That could lead to a few benefits for Indian banks and, perhaps, the closure of banks.

VIII. CREDIT RISK ASSESSMENT (Method to reduce the risk)

Credit risk is the most important risk facing a bank. Therefore, reducing that risk is produced by a better approach below to reduce the risk of a major expansion.

i. Credit Investigation

Debt research refers to a loan application from a variety of perspectives to determine whether a bank should go for a loan or not.

ii. Sources of Credit Information

Details of credit are collected from Credit Agency. They collect the credit/debit details, borrowers details, credit rating, third party confirmation, Application of loans: Customer KYC form and loan application Market Report: banks can collect client information from entrepreneurs doing the same business, Account Study: Client Account Profit for One Last Year, Privacy Report, Automatic Credit List, Financial Statements, Other Sources: Media report, suppliers, tax returns, etc., RJSC investigation, etc.

iii. Modern Concepts of Credit Investigation

The modern aspect of credit investigation covers up all loan proposals and their investigation from given six points of view. These are:

Managerial aspect: faithfulness, education of the borrower, integrity, borrower experience, and management ability.

Organizational aspect: the activities will be performed under the type of organization. Or is it the only ownership or partnership or a limited private company?



Technical aspect: business premises, land and construction, types of machinery, necessities such as energy, petrol, water, the material used for building, etc.

Marketing aspect: the sales of the product to be build-up by the visible sales volume, the size of the expansion market, the potential competitive threat, etc.

Financial aspect: the full requirements of the business operations fund and how much will be required such as bank loans, business loan contributions, cash flow statement, sales forecast, balance, profit and loss account, etc.

Economic aspect: contribution to gross product (GCP), generation of employment, indirect public benefit.

iv. Preparation of Credit Report

The report of credit consists of the name & address of the client, the type of company and date of establishment of their business, the type of business they are going to start, the investment in the business, the service, the total sales, annual income, market reputation, and bank account details.

v. Selection of Borrower

Borrowers are chosen based on the following factors:

Five Cs: Character, Capacity, Capital/ Creditworthiness, Condition (Economic), Collateral.

Five Ms: Man, Money, Materials, Market, Management

Five Ps: Person, Purpose, Product, Place, Profit.

vi. Credit Risk Grading System

Credit Risk Planning is a basic way to create a credit risk assessment structure. Well-organized disaster risk management systems to improve bank safety and ethics by assisting good decision-making. The rating systems compute credit risk and classify individual credits with credit groups for the risks they pose. This allows bank managers and auditors to monitor changes and risk levels. The process also allows bank managers to control risk to maximize profits.

IX. SUMMARY OF FINDINGS

Based on the findings of a single objective it was presented that determining the outcome of the audit process on the financial performance of a designated trading bank in India is that week.

By reading, it is found that approximately 78% of Indian banks are facing credit risk problems. This is due to the lack of a sound banking system. Not only the borrower but in few cases it was found that some bank officials were also involved in this fraud because fraud cannot take place if the officials working in the bank are honest. It can be anyone from guard to the bank manager should be honest.

Banks in India do not use all means to check the credibility of the borrower. That is the reason why many people run away from the loan amount.

Many borrowers use fake documents to fool the bank and the loan and when the time comes for the recovery bank finds that the documents were fake. Sometimes the bank officials use their relationship interest with the borrower to give the loan which interns be a defaulted loan. Neither should be given under political pressure.

So before giving the loan the bank officials should not give loans to the knowns ones on their credibility this will be wrong and a loss for the bank. Without going through good research of the borrower the loan amount should not be sanctioned

X. RECOMMENDATIONS

1-The Banks should establish a very good credit risk assessment team which should be run by best practices in risk assessment with strict action to clear loan policy.

2-Staff of credit risk assessment team such as managers, credit/loan officers should work on a scale of functions from project estimation through credit disbursement, loan monitoring to loan collection so that risk can be reduced.

3-The banks should be involved in the proper credit risk assessment before giving the loans to the borrowers and should have a good loan recovery process with hard punishment for the people who do not pay the loan on time.

4-Commercial banks in India should also have very good control of their credit policy and practices. With the help of this, they will be able to reduce losses on non-performing loans in the banks.

5-The bank should have a very good grading system because after giving the loan we need to keep the borrower in different sections like excellent, good, and bad. So that this will save the time of bank because now he will need to keep good control only on the bad ones.

6-The bank officials should be very honest. In few cases, it was found that the bank officials were involved in the fraud.

7-Very good experience is required by the officials who work to approve the loan because they are the only ones who decide that whether to accept or reject the loan.

XI. CONCLUSIONS

Credit risk management is a challenge in today's market that is outlawed. Banks should develop an Early Warning System (EWS) competitive system, which includes strategic planning, competitive strategy, and management action. The reputation of the bank is very important to corporate clients. Credit risk identification is the only important determinant of the effectiveness of credit risk in Indian banks.

Based on the relevant research on commercial banks 'credit risk assessments' this paper conducts an in-depth analysis of the factors that may bring change in credit risk assessments and develops a complete credit risk assessment structure. We have found that the banks are facing the risk today. There are few banks that have merged with another bank so that they can run. The main problem with the bank is only the loss which they face which causes them to go bankrupt. So if the bank goes bankrupt the hard-earned money of the common



man will be at loss and they will suffer a lot. In few cases, the banks use different policies to recover the amount from their customer's likes by increasing the service charges. So and the end it the common people who suffer the loss. So we need to improve this in all aspect either it be a bank of the customers.

Establish a risk assessment format to minimize risk and also we have given the grading system to keep eye on the borrower. This will help to reduce the more risk.

The performance of credit risk in private banks is much higher than in state-owned banks. This comes as no surprise when you are offered the freedom to work enjoyed by the private banks, and their goal of achieving high performance. State-owned banks suffer from interference from various government agencies.

Overall if we follow the above methods the banks will reduce the loss rate to a larger extent. We also know that loan amount will be taken by the people if they need it because money is the most important thing required to start anything either business or agriculture. So it is a going process bank will give loans and people will take it and repay it in future.

REFERENCES

- [1] Oleiwi, A. T., Ali, M., Jassim, S. H., Nadhim, M. H., Gueme, G. M., & Bujang, N. (2019). The relationship between credit risk management practices and profitability in Malaysian commercial banks. *International Journal of Engineering and Advanced Technology*, 8(5), 53–59. https://doi.org/10.35940/ijeat.E1007.0585C19
- [2] Afriyie, S. O., Yusheng, K., Kaodui, L., Caesar, A. E., Akomeah, M. O., & S. (2019). Credit Risk Management System of Commercial Banks: an Analysis of the Process. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- [3] Farah, A. A. (2019). Credit Risk Management and Bank Performance Case Study Commercial Banks in Mogadishu Somalia. *International Journal of Science* and Research (IJSR), 8(2), 1008–1012. https://www.ijsr.net/archive/v8i2/ART20195101.pdf
- [4] Boye, A., & Kwabena, M. (2014). Credit Risk Management in Financial Institutions: A Case Study of Ghana Commercial Bank Limited. *Research Journal* of Finance and Accounting, 5(23), 2222–2847.
- [5] Aliu, M., Sahiti, A., & Kalimashi, A. (2019). Risk management of commercial banks in Kosovo. *International Journal of Economics and Business Administration*, 7(4), 197–212. https://doi.org/10.35808/ijeba/339
- [6] Kaaya, I., & Pastory, D. (2013). Credit Risk and Commercial Banks Performance in Tanzania: a Panel Data Analysis. *Research Journal of Finance and Accounting*, 4(16), 2222–2847.

- [7] Kabir, G., Jahan, I., Chisty, M. H., & Hasin, M. A. A. (2010). Credit Risk Assessment and Evaluation System for Industrial Project. *International Journal of Trade, Economics, and Finance, 1*(4), 331–341. https://doi.org/10.7763/ijtef.2010.v1.59
- [8] Konovalova, N., Kristovska, I., & Kudinska, M. (2016).
 Zarządzanie ryzykiem kredytowym w bankach komercyjnych. *Polish Journal of Management Studies*, 13(2), 90–100. https://doi.org/10.17512/pjms.2016.13.2.09
- [9] Kessey, K. D. (2015). Assessing credit risk management practices in the banking industry of Ghana: Processes and challenges. *Global Journal of Management and Business Research: C Finance*, 15(6), 1–11.
- [10] Li, & Zou. (2014). The Impact of credit risk management on profitability of commercial banks: A study of Europe. *Journal of Business and Economics*, 4(8), 1–93.
- [11] Karim, S. (2019). The Influence of Credit Risk Management Strategies on the Performance of Commercial Banks: A Comparative Case Study of UAE and UK Commercial Banks. 1–170. S Karim -2019 - live repository.Liverpool.ac.UK
- [12] Huang, B., Zhang, Q. P., & Hu, Y. Q. (2005). Research on credit risk management of the state-owned commercial bank. 2005 International Conference on Machine Learning and Cybernetics, ICMLC 2005, August, 4038–4043. https://doi.org/10.1109/icmlc.2005.1527644
- [13] Luo, N., Yang, J., Zhu, Y., & Zhang, Y. (2016). The Risk Management of Commercial Banks——Credit-Risk Assessment of Enterprises. *International Journal* of Economics and Finance, 8(9), 69. https://doi.org/10.5539/ijef.v8n9p69
- [14] Jonathan, N. C., & Michael, A. J. (2018). An analysis of the relationship between credit risk management and bank performance in Nigeria: A case study of Fidelity Bank Nigeria PLC. *International Journal of Research and Review*, 5(10), 202–213.
- [15] Li, Z., & Zheng, X. (2017). A Critical Study of Commercial Banks' Credit Risk Assessment and Management for SMEs: The Case of Agricultural Bank of China. *Journal of Applied Management and Investments*, 6(2), 106–117.
- [16] Sharifi, S., Haldar, A., & Rao, S. V. D. N. (2019). The relationship between credit risk management and non-performing assets of commercial banks in India. *Managerial Finance*, 45(3), 399–412. https://doi.org/10.1108/MF-06-2018-0259
- [17] Rehman, Z. U., Muhammad, N., Sarwar, B., & Raz, M. A. (2019). Impact of risk management strategies on the credit risk faced by commercial banks of Balochistan.



Financial Innovation, 5(1). https://doi.org/10.1186/s40854-019-0159-8

- [18] Konovalova, N., Kristovska, I., & Kudinska, M. (2016). Credit risk management in commercial banks. *Polish Journal of Management Studies*, 13(2), 90–100. https://doi.org/10.17512/pjms.2016.13.2.09
- [19] Islam, S. (2018). Bangladesh university of professionals. 59(October), 23–24.
- [20] Kong, D., Tiong, R. L. K., Cheah, C. Y. J., Permana, A., & Ehrlich, M. (2008). Assessment of credit risk in project finance. *Journal of Construction Engineering* and Management, 134(11), 876–884. https://doi.org/10.1061/(ASCE)0733-9364(2008)134:11(876)
- [21] Abdul Majeeb Pasha, D., & Mintesinot, B. (2017). Assessment of Credit Risk Management System in Ethiopian Banking. *International Journal of Business* and Management Invention ISSN, 6(4), 98–110. www.ijbmi.org98%7C
- [22] Bingham, N. H., & Kiesel, R. (2004). Credit Risk. 375– 408. https://doi.org/10.1007/978-1-4471-3856-3_9
- [23] Crook, J. N., Edelman, D. B., & Thomas, L. C. (2007).
 Recent developments in consumer credit risk assessment. *European Journal of Operational Research*, 183(3), 1447–1465.
 https://doi.org/10.1016/j.ejor.2006.09.100
- [24] Luo, C. (2019). A comprehensive decision support approach for credit scoring. *Industrial Management and Data Systems*, *120*(2), 280–290. https://doi.org/10.1108/IMDS-03-2019-0182
- [25] Ramlall, I., & Ramlall, I. (2018). A Framework for Financial Stability Risk Assessment in Banks. In *The Banking Sector Under Financial Stability*. https://doi.org/10.1108/978-1-78769-681-520181003
- [26] Wang, X., Shi, L., Wang, B., & Kan, M. (2019). A in Engineering method to evaluate credit risk for banks under PPP project finance. Engineering, Construction and Architectural Management, 27(2), 483–501. https://doi.org/10.1108/ECAM-06-2018-0247
- [27] Rathnayaka, R. M. K. T., Seneviratna, D. M. K. N., & Jianguo, W. (2015). Grey Systems: Theory and Application Article information: *Grey Systems: Theory and Application*, 5(2), 178–193.
- [28] Aryati, A. (2017). 기사 (Article) 와 안내문 (Information) [. *The Electronic Library*, *34*(1), 1-5.
- [29] Cao, Y., Wu, D., & Li, L. (2020). Debt risk analysis of non-financial corporates using two-tier networks. *Industrial Management and Data Systems*, 120(7), 1287–1307. https://doi.org/10.1108/IMDS-09-2019-0495

- [30] Jan, D. E. C. (1973). A suitable case for borrowing Overdraft : flexible, cheap, and simple.
- [31] Leonard, K. J. (1995). The development of credit scoring quality measures for consumer credit applications. *International Journal of Quality & Reliability Management*, 12(4), 79–85. https://doi.org/10.1108/02656719510087346
- [32] Tiwari, E., & Singh, R. (2019). A Fuzzy AHP Methodology to Analysis the Impact of Employee Motivation in Manufacturing Industry. *International Journal of Engineering and Advanced Technology*, 9(2), 1605–1608. https://doi.org/10.35940/ijeat.b2902.129219
- [33] Singh, G., & Singh, R. (2019). An Innovative Methodology for Organizational Development. *International Journal of Recent Technology and Engineering*, 8(4), 9299–9301. https://doi.org/10.35940/ijrte.d9477.118419
- [34] Pushkar, B. K., Mall, D., & Singh, R. (2020). Consumer Behaviour Criterion: A Fuzzy Approach. July. https://www.researchgate.net/profile/Rajesh_Singh75 /publication/342656717_Consumer_Behaviour_Criter ion_A_Fuzzy_Approach/links/5efec97492851c52d61 37925/Consumer-Behaviour-Criterion-A-Fuzzy-Approach.pdf
- [35] Van Greuning, H., & Brajovic Bratanovic, S. (2009). Analyzing Banking Risk (3rd Edition). In *Analyzing Banking Risk (3rd Edition)*. https://doi.org/10.1596/978-0-8213-7728-4