

Credit Risk Management in the Indian Banking Sector

A Critical Review of Literature



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Abstract

Credit risk represents the most important risk faced on account of lending to individuals, industry, trade, agriculture and other financial institutions. It manifests when a borrower or counterparty fails to meet its obligations in accordance with the agreed terms of repayment. According to the Basel Committee, credit risk is created mainly due to weakness in credit administration and risk management functions. It is specifically related to lack of proper pre-sanction appraisal and credit granting process, adverse credit concentration in a particular sector or industry or group of borrowers who may not be financially sound, ineffective loan monitoring and audit functions, delayed identification and initiation of remedial actions and inadequate credit risk management standards. The success of an Indian bank today depends on how well it manages to strike a balance between credit risk exposure and the returns expected from lending. Appropriate organizational setup, effective system of credit monitoring, risk evaluation and well defined policies go a long way in managing the credit risk effectively. Historically, leading Indian banks have been following the credit rating system for large borrower accounts since early 90's without any regulatory or statutory compulsion. Under the Basel Accord II, it has become mandatory for banks to have a credit rating system since 2004. However, it was left to the regulatory authorities to reorient the directives wherever necessary to suit their regulatory setting. The present study focuses on the past studies conducted by various academicians and researchers to know about credit risk management practices in banks.

Keywords: Credit Risk Management, Financial Management, Banking Sector, Market Risk, Credit Risk, Operational Risk.

Introduction

Risk is inevitable in any walk of life in general and financial sectors in particular. Due to globalization, banks are exposed to competition and are compelled to encounter various types of financial and non financial risk. There are three main categories of risk: Credit risk, Market risk and operational risk. Credit risk is intrinsic to banking. It, therefore, becomes necessary to manage the risk in order to minimize it. Credit risk is defined as the possibility that a bank borrower will fail to meet its obligations in accordance with agreed terms, or in other words it is defined as the risk that a firm's customer and the parties to which it has lent money will fail to make payments. Credit risk is also the most common cause of bank failures. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to long term success of any banking organization. This study will be an attempt to study the credit risk management by banks and how the various risk management strategies are effective in mitigating the risks.

Statement of Research Problem

The main functions of the banks are mobilizing of funds and lending the same to the needy. The difference between both is the interest rate which is profit for the bank. Bank will be in a safe position till the borrowers pay back the borrowings in due time. Once a bank borrower fails to meet the obligations on agreed terms, the bank suffer losses. There is always scope for the borrower to default from the commitments due to various causes. Credit risk is, therefore, inherent to the business of lending funds. The objective of credit risk management is to minimize the risk adjusted rate of return by assuming and maintaining credit exposure within acceptable parameters. The present study reviews the available literature on the credit risk management practices of the banking sector.

Need and Significance of The Research

Nowadays credit risk is a major risk for all banking institutions as it also affects their profitability. Banks are also facing liquidity crisis. This situation gets aggravated if they are not efficient enough to handle credit risk. Credit risk refers to potential financial loss as a result of borrower's inability to repay the credit availed. Most of the share of the total revenue of the bank comes from credit operation and the existence of the bank depends on quality of assets portfolio. So efficient management of credit risk is of great importance and the study of credit risk management practices in the banking sector holds a lot of relevance in the present scenario. The present study focuses on the past studies conducted by various academicians and researchers to know about credit risk management practices in banks.

Objective of The Study

To study the available literature relating to Credit Risk Management in the banking sector

Review of Literature

An in depth study of available literature on Credit Risk Management by banks have been conducted to get a clear picture of the research that has been done in the said sphere. The study has been categorized in sections pertaining to the time period. The first section relates to the study up till the year 2000. The second section is regarding the studies conducted in the ten year period from 2000 to 2010. Likewise, the third section attempts to examine the studies conducted from 2010 till date.

Review of Literature Upto 2000

The present section attempts to make a brief review of various studies conducted on credit risk management till the year 2000.

J Bessis (1998) has pointed out the fact that credit risk is perhaps the most significant of all risks in terms of size of potential losses. Credit risk can be divided into three; default risk, exposure risk, recovery risk. As extension of credit has always been at the core of banking operation, the focus of banks' risk management has been credit risk management. Credit risk management incorporates decision making process before the credit decision is made, follow up of credit commitments including all monitoring and reporting process.

Coyle (2000) defined credit risk as losses from the refusal or inability of credit customers to pay what is owed in full or on time. The main sources of credit risk are limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital, liquidity levels, directed lending, massive licensing of banks, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central bank. To minimize these risks, it was necessary for the financial system to have well capitalized banks, service to a wide range of customers, sharing of information about borrowers, stabilization of interest rates, reduction in non-performing loans, increased bank deposits and increased credit extended to borrowers. Loan defaults and non performing loans need to be reduced.

U Arora (2000) has observed that taking the benefit of inherent deficiencies in our legal system, more and more borrowers are turning to be willful defaulters. External factors such as Government loan waiver scheme has further aggravated the problem of recovery.

Taori (2000) has suggested that the surest way of containing Non Performing Assets is to prevent their occurrence by introducing proper risk management system and effective credit monitoring.

Review of Literature Upto 2000-2010

Studies on Credit Risk Management have been examined from the year 2000 till the year 2010 in this section.

Muniappan (2002) has identified that NPAs have two components; the overhang component and the incremental component. The overhang component arises due to infirmities in structural and institutional environment while the incremental component arises from factors internal to banks' management and credit culture.

Bagchi (2003) examined the credit risk management in banks, risk identification, risk measurement, risk monitoring, risk control, and risk audit as a basic consideration for credit risk management and concluded that proper credit risk architecture, policies and framework of credit risk management, credit rating system, monitoring and control contributes in the success of credit risk management system.

Raghavan R.S (2003) has discussed in detail the three main categories of risk viz. Credit Risk, Market Risk and Operational Risk. It has been discussed in the paper that credit risk consists of primarily two components viz. Quantity of risk which is the outstanding loan balance as on the date of default and the quality of risk which is the severity of loss defined by both Probability of default as reduced by the recoveries that could be made in the event of default. The instruments and tools through which credit risk management is carved out include exposure ceilings, review/renewal, risk rating model, risk based scientific pricing, portfolio management and loan review mechanism.

Rajan, Dhal (2003) have pointed out that due to accumulation of NPAs in banks, they not only lose their income but incur heavy expenditure to maintain such poor quality assets in their books. Increase in NPAs directly affect the profitability and even the existence of banks.

Das, Ghosh (2003) have suggested that banks should devise appropriate lending terms taking into account the cost of credit, cost of funds, maturity of loans and credit orientation among other factors so as to lower defaults amongst borrowers.

Muninarayanappa, Nirmala (2004) have highlighted the objectives and factors that determine the directions of banks' policies on credit risk management. According to them, the success of credit risk management requires maintenance of proper credit risk environment, credit strategy and policies.

Rekha (2005) carried out the study to examine non performing assets, credit risk

management practices, Basel II and risk based supervision between public and private sector banks. The period of study was 1994 to 2003. She opined that 70 % of the risk is from credit risk , remaining 30% is from market risk and operational risk. She suggested that better portfolio equilibrium, establishing risk management information system, redesigning the internal rating system and early warning signals can be the better risk management methods.

Nachane et al (2006) analysed the relationship between changes in risk and capital in Indian banking sector with reference to public sector banks. The study identified key variables impinging upon the capital adequacy of banks and examined evidence for a shift in bank portfolio towards greater riskiness after the introduction of Capital Adequacy Norms. The study also attempted to draw implications of new Capital Adequacy Framework proposed by the Basel Committee on Banking Supervision (BCBS) for Indian financial system and evaluated the alternative regulatory arrangement as complements to the Capital Adequacy Ratio.

Dash Chander (2006) examined the Capital Adequacy Ratio of Indian banks and presented the position of Indian banks related to Capital Adequacy Ratio as per Basel accord. It was concluded that banks had to raise additional capital to meet the Capital Adequacy Ratio as per Basel II requirements.

Arunkumar R , Kotreshwar G (2006) have stated in their paper that better credit portfolio diversification reduces the concentration of credit risk as empirically evidenced by direct relationship between concentration credit risk profile and NPAs of public sector banks

Bodha B S, Verma R(2009) studied the implementation of the Credit Risk Management Framework by commercial banks in India. A primary survey was conducted and the results showed that the authority for approval of Credit Risk vests with 'Board of Directors' in case of 94.4%of the public sector and 62.5% of private sector banks. The authority in the remaining banks is with the 'Credit Policy Committee'. For credit risk management, most of the banks are found performing several activities like industry study, periodic credit calls, periodic plant visits, developing MIS, risk scoring and annual review of accounts. It was also found in the study that banks in India are abstaining from the use of derivatives products as risk hedging tools.

Njanike (2009) highlighted the obstacles in credit risk management system by bank such as lack of resources, disintegration of systems across departments, inconsistencies in risk taking approaches, data management, and stringent regulatory requirements.

Eveline Ngwa (2010) attempted to understand the risks that bank managers in the Umea region of Sweden perceived they are exposed to in the process of credit lending . The study based on both primary and secondary data cited credit risk as the most important and its proper management was essential. The study found that the implementation of credit risk management starts right from the time a

company wishes to take credit and deposits its application through when it receives the credit and continues till its repayment. As such all relevant information about the customers should be taken into consideration.

Goyal A (2010) highlighted the importance of risk management process and throws light on challenges and opportunities regarding implementation of Basel II in Indian Banking Industry. The banking industry is exposed to different risks such as forex volatility risk, variable interest rate risk, market play risk, operational risks, credit risk etc. which can adversely affect its profitability and financial health.

Review of Literature 2010 & Onwards

This section covers the reviews of available literature from the year 2010 till date.

Alam, Masukujaman (2011) have examined in detail the risk management practices of five commercial banks operating in Bangladesh. The study found that the Board of Directors performed the responsibility of the main risk oversight, the Executive committee monitors risk and the Audit committee oversees all the activities of banking operations. Banks use the updated credit policy approved by the Board of Directors, followed by credit risk management division and credit administration division .Law and recovery team monitor the performance of the loans and Internal Control and Compliance Division directly report to the Board/ Audit committee about the overall credit risk.

Thiagarajan S et al (2011) had conducted an empirical study to predict the determinants of credit risk in the Indian commercial banking sector. The study utilized a panel data at bank level for 22 public sector banks and 15 private sector banks. The study revealed that there is an inverse relationship between GDP growth and NPA and a positive correlation between inflation and NPA. Further, the study also found that lagged nonperforming assets had a significant positive influence on the current nonperforming assets.

Josiah Aduda, Gitonga James (2011) studied the relationship between credit risk management and profitability in commercial banks in Kenya. Regression Analysis and Ratio Analysis were used in the study. Return on Equity was used as an indicator of the profitability in the regression analysis. The relationship of credit management and profitability was established in the study.

Sophia S, Stalin (2013) have assessed the application and implementation of credit risk management in Indian banks. Survey method and MANOVA Analysis is done to evaluate and identify the implementation of credit risk management. The study indicated that the implementation of CRM policy and monitoring of credit limit have a significant effect on bank. Further, implementation of credit management factors had a beneficial result in identifying a borrower's status need. Also credit risk models have a great effect on banks credit risk management policy.

Arora S (2013) attempted to identify the factors that contribute to Credit Risk analysis Indian

banks and to compare Credit Risk analysis practices followed by Indian public and private sector banks . The study based on primary data collected from employees of public and private sector banks of Indore division found that Credit Worthiness analysis and Collateral requirements are the two important factors for analyzing credit risk. The study concluded that Indian banks efficiently manage credit risks and it was also indicated that there is significant difference between the Indian public and private sector banks in analyzing credit risks.

Thirupathy Kanchu, M.Manoj Kumar (2013) have attempted to identify the risks faced by the banking sector and the process of risk management. The various techniques of risk management adopted by banks have been examined in the study. The ability to anticipate and prepare for change was held to be of utmost importance.

Dr. A.Khalil (2013) has analysed the features of credit risk management and the challenges facing the effectiveness of credit risk management of Saudi Banks. CAMEL model was used for analyzing the effectiveness of credit risk management .The low quality of assets, inadequate training, weak corporate governance, lack of credit diversification, granting of credit ceiling exceeding customer's capacity of repayment, absence of risk premium on risky loans, absence of proper analysis of customer's financial position, corruption of some credit officers were identified as the major challenges of effectiveness of credit risk management. Adoption of sophisticated credit risk mitigating techniques and strengthening the role of credit risk committee was recommended in the study.

Chitra B, Vani U (2014) have discussed in detail the credit risk management for banking. Apart from emphasizing on the constitution of a high level credit policy committee to deal with issues relating to credit policies and procedures. , three different types of future bank strategies with regard to credit risk management have also been discussed. They are The investment banking paradigm(banks as intermediaries without direct risk taking), The reinsurance paradigm (banks as risk takers buy insurance against large losses) or The asset backed finance paradigm (banks as risk managers).

Arora R, Singh A (2014) evaluated the credit risk management practices of Indian public sector banks .They developed a conceptual model of CRM systems for commercial loans of Indian public sector banks. This model was used to identify the problem areas and obstacles in CRM through comparison of large and small banks. The problem areas were identified as insufficient training, data management, inappropriate IT support, system disintegration and inconsistent rating approaches which if addressed properly can reduce the nonperforming assets of banks.

Pearl S et al (2014) have examined the degree to which banks in Ghana use risk management practices and corporate governance in managing the different risks. It was found that the risk management process of the six banks selected in their study included understanding of the risk,

identification of the risk, assessing, analyzing, monitoring and controlling of the risk.

M. Rajeswari (2014) had undertaken a study on credit risk management in scheduled banks with objective to identify the areas where there is a scope of improvement. Due training to bank managers regarding bad debts identification, reducing the credit limit on high risk customers, following up earlier with customers, communicating clearly the outcome if an account becomes bad debt were some of the recommendations made in the study.

P. J.Bhaskar (2014) has elaborately discussed the tools and techniques to manage credit risks in his study. The tools of credit risk management like Exposure Ceilings, Review/Renewal, Risk Rating model, Risk based scientific pricing, portfolio management, loan review mechanism have been discussed in detail. The paper also emphasized that the objective of risk management is not to prohibit or prevent risk taking activities, but to ensure that risks are taken in the light of full knowledge, clear purpose and understanding so that it can be measured and unacceptable losses are prevented.

P.Rathod, Vidyashree D.V (2015) suggested the need for banks to prescribe procedures for risk identification, measurement and assessment. They found in their study that the ratio of gross nonperforming advances (GNPAs)of scheduled commercial banks (SCBs) marginally increased between September 2014 and March 2015. They studied in detail the credit risk faced by all the sectors of banks particularly in 2014-2015 and measures taken by banks to recover NPAs .The study indicated that comparatively public sector banks had more nonperforming assets and had fallen in maintaining credit risk management.

Dhar Satyajit, Bakshi Avijit (2015) examined the factors that influence the variability of loan losses (NPAs) of Indian Banks in the public sector during a period of five years from 2001 to 2005. The study explored the impact of bank specific factors on NPAs of PCBs and not macroeconomic factors. The analysis was based on panel approach, which considers both the spatial and the time dimensions of observations. All the selected independent variables are key performance determinants of banks in terms of asset quality, earning capacity, management efficiency, capital adequacy and their liquidity. The results of the study indicated that banks should give adequate attention to variables such as advances to SEN, NIM and CARs to control the problems of loss issues.

Lalon M.Raad (2015) examined how CRM impacts the profitability and long term sustainability of commercial banks. The descriptive research based on secondary data of Basic Bank Ltd. Bangladesh found that CRM has a positive effect on the bank's profitability and therefore it is very important for banks and other financial institutions to manage credit risk properly.

Singh Asha (2015) studied the impact of credit risk on the performance of commercial banks in India. Multiple regression analysis was used to estimate the impact of credit risk management in

public and private sector banks. It was found that credit risk management had a positive effect on the performance of public sector banks and inverse effect on the performance of private sector banks.

Roopa K (2015) stated that effective management of credit risks is important for the long term success of any banking organization. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions.

Singh Shradha (2015) have examined solutions of risk management preferred by banks. It was pointed out that successful credit risk management included efficient data, adequate control on credit given to borrowers, supervising the transaction of loans, done in the banks and identifying and monitoring any possibility which could lead to arising of risks. It was suggested that new technologies for risk data analysis, separate module for managing the risk should be set up by the banks in order to effectively mitigate the risks.

Ohio, Isaiah (2016) examined the impact of credit risk management on Indian public and private sector banks. The study examined credit risk management in seven private and seven public banks using pooled OLS, fixed effects and random effects. The study revealed that private banks are more capitalized and more profitable than public banks. Asset quality measured using nonperforming assets with negative coefficients significantly influenced bank profitability in both cases.

MS Nagaria (2016) had undertaken an in-depth study of the various techniques involved in the risk management by banks. It has been pointed out in the study that the development of deregulation and technological innovation has increased the diversity and complexity of risk which needs to be managed professionally. The variants of credit risk are counterparty risk and country risk. The role of Reserve Bank of India has been emphasized for risk management by banks.

Prakash Prassana (2016) have examined the process of risk management, laid stress on its importance and have analyzed the contingency plans to deal with risk. Risk management process included risk identification, risk assessment and measurement, risk control, risk monitoring and risk return trade off. Risk has been understood as an opportunity as well as threat in the paper. The importance of banks having adequate capital to support all the probable risks in their business was stressed in the study.

J.B Harelimana(2017) had undertaken a case study of Unguka Bank Ltd. Within the period 2012-2016 in order to assess the role of risk management in financial performance in Ruanda institutions. The study was based on primary data collected through questionnaire method. It was found that there is a very strong relationship between risk management and financial performance. It was therefore recommended that Unguka Bank Ltd. Should emphasize more on training of personnel in risk management in order to enable them to apply accepted tools of risk management in a professional manner.

Research Gap

After a thorough study of above literature it was found that a lot of attention have been focused on the relationship of credit risk management and profitability of the banks following them. However not much studies have been conducted on the detailed practices, procedures and policies followed by banks in credit risk management. Also the management of credit risk by banks in Bhubaneswar and Cuttack cities, which are becoming important centres of business over the years, have not been studied so far.

Conclusion

From the above mentioned studies, the importance of credit risk management in banks can be well perceived. Implementation of CRM policy and monitoring of credit limit have a significant impact on banks' business. The reviews shed light on the impact of credit risk management on the profitability and sustainability of banks. The tools and techniques of credit risk management and the determinants of effectiveness of credit risk management have also been examined. A comparison of credit risk management in Indian public and private sector banks have also been undertaken. Attempts have also been made to identify the areas where there is a scope for improvement in CRM practices by banks.

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