# CREDIT RISK AND CAPITAL ADEQUACY OF INDIAN BANKS UNDER BASEL ACCORDS: NEED FOR THE HOUR

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***Abstract***

*Risk taking is an inherent element of banking but excessive risk will lead to losses and endangers the depositor's stake and shareholders wealth. Continued challenges such as credit risk, capital adequacy and profitability- reducing the contribution to shareholders and stakeholders value creation. Hence, measurement of credit risk and management is essential, because credit risk is the greatest risk which impacts overall performance of banks, wealth of the shareholders and stakeholders as well. This research paper presents, a brief overview of developments currently take place in Indian Banking Sector under Basel Accords. The researcher found that, no banks in India are adopted internal credit models to assess credit risk except few banks. Adoption of internal credit risk measurement models will bring great positive change in their "credit culture" within a bank and aids to reap competitive advantage. But the concept of "credit modelling" is still in an early phase of development in the Indian banking system. Thus, this study shed light on the implications of these developments and highlighted the significance and greater scope of internal credit risk models adoption for capital adequacy purposes and concludes that, Indian banking system in the global arena facing the gap between capital adequacy arrangements and the work to build sound credit risk measuring model is very apparent to curb the credit risk as a need for the hour.*

**Key words:** Credit Risk, Capital Adequacy, Basel Accords, Credit Modelling, Credit Discipline.

## I. Introduction

Risk taking is an inherent element of banking though excessive risk will lead to losses and endangers the depositor's stake and shareholders wealth. Continued challenges such as credit risk, capital adequacy and profitability- reduces the contribution to shareholders and stakeholders value creation. Ever increasing NPAs is an ongoing phenomenon that is found as a detriment to the modern banking arena. The formation of NPAs raises great

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concern which affects the efficiency of banking regulations, sanctioning and repayment of loans. Wilful defaults, mismanagement and misappropriation of funds, fraud, poor screening, improper borrower selection, deficiencies in credit appraisal system, faulty monitoring and follow-up system in banks are some reasons for rise in NPAs (Narayanan and Surya 2014). NPAs are identified (Ananthi 2009) as the health code index of banks, since it affects recycling of funds, credit delivery mechanism and thereby creating liquidity crisis which adversely affect profitability of banks. Dr. Raghuram Rajan, the then Governor of RBI, observed that NPA formation in Indian banks as a creation of tough global competition, credit overpricing, poor project evaluation, extensive delay in project implementation, poor performance monitoring and cost overruns prevalent in the economy (RBI Annual Report, 2016).

Hence, measurement of credit risk and management is essential for long-term success, because credit risk is the greatest risk which impacts overall performance of banks, shareholders and stakeholders wealth. For this, author uses existing literature to find what is needed for the hour to solve issues continuing in Indian banking system. The remainder of the paper is organised as follows: Section II provides a brief literature review; Section III describes objectives, data source and methodology; section IV discussions; and Section V conclusion and references.

## II. Literature Review

### i. Credit risk Measurement

Literature on management of credit risk measurement may be classified into three concepts such as NPAs recovery, capital adequacy and credit discipline.

Credit or counterparty risk is the probability that a borrower will not be able to pay interest or repay the principal according to the terms specified in a credit agreement (Greuning and Bratanovic 2009,). NPA reflects asset quality, credit risk and efficiency of a bank in allocating its resources to productive sectors (Rajan and Dhaf 2003, Greuning and Bratanovic 2009). Aggregate level of provisions for NPAs indicates the capacity of bank to accommodate credit risk effectively (Greuning and Bratanovic 2009). It is better to avoid the account become NPA than go for recovery (Shah 2016). Non-recovery of loans and interest deducts capital to create a provision of loss under risk based approach in banks which will affect the capital adequacy (Nishanth and Dhoble 2015).

### ii. Capital Adequecy

Capital adequacy is defined as the ratio of capital funds and risk weighted assets (Jayadev 2013). Current capital adequacy levels provide some comfort in Indian banking system (Mahapatra 2012). The adoption of advanced approaches to risk management will enable banks to manage their capital more efficiently and improve their profitability (Jayadev 2013). The reduction of NPAs is essential to enhance profitability of banks and comply with the capital adequacy norms as per the Basel Accord (Ghosh and Ghosh 2011). For this banks must have deeper and broader based capacity in risk management; and adequate and good quality data (Jayadev 2013).

### iii. Credit Administration

A centralised credit administration is essential for better credit discipline (Floyd and John 2003). For an effective credit administration, banks should have a sufficient track record of factors contributing to NPAs in various circumstances (RBI annual report 2016). A better credit discipline prevents deterioration of asset quality, in this regard credit information companies' (CICs) plays important role (Gandhi 2014). Bridge the information asymmetry for appropriate lending decisions is the great challenge for banks (Thampy 2010). Internal rating systems in banks promote a credit culture through appropriate data and oversight feedback mechanisms (Jayadev 2006).

## III. Objectives

1. To examine the credit risk and capital adequacy issues after Basel II adoption in Indian banks.
2. To identify the problems facing by the Indian banks to adopt internal models Basel Norms.
3. To know the government and RBI's actions to control the credit risk and capital requirement issues.

## Data and Methodology

In this study secondary data is taken from the websites of RBI, Bank for International Settlement, IIM (B) and related websites are used for the study. Descriptive method is used for the study.

## Discussions

Need for identification, measuring, monitoring and controlling of the risk arises from the probability of default that may in the process of loan repayment. Banks and financial institutions relay on the efficacy of its credit risk models. Initially, Credit Risk Management primary objective is to curb the risk within acceptable levels and thereby maintain the regulatory capital requirements at prime.

### 1. Management of Credit Risk Measurement in Indian Banks

Management of Credit risk in Indian banks are based three factors, viz., NPAs recovery, capital adequacy and credit discipline.

### 1.a. NPAs Recovery:

Non-recovery of loans through its adverse impact on profitability of banks raises serious consequences for the smooth and healthy functioning of the banking system. Banks' profitability was affected by provisioning requirements (RBI Annual Report 2016). Reduction of credit risk enhances shareholder value and creates goodwill and confidence in the market for banks (Kumar and Rao 2002). Banks has to maintain provision for NPAs on the basis of their risk weights of asset quality under Basel norms. Hence, any increase in NPA will cause to keep its assets aside as additional provisions to cover any potential losses arising from such assets, these additional provisions are deducted from the capital of the bank, and reduction in capital will further affect the capital adequacy of a bank (Nishanth and Dhoble 2015). Asset Reconstruction Companies plays a crucial role in managing NPAs by resolving capital requirements and price discovery issues for NPAs (RBI Annual Report 2016, p.30). Thus, there is a need of prudent credit appraisal mechanism to predict the probability of default earlier than it can occur and rigorous recovery legal system to avoid recovery problems.

### 1. b. Capital Adequacy

The capital adequacy is the key term used to measure the financial soundness of the banks as they reflect the capability of loss affordably of banks. It also deals with the necessity of minimizing the adverse effects of various risks thereby restoring the health of the banks by preventing future liquidity issues. In other words, capital adequacy ratio reflects the ability of a bank to meet its obligations with probable loan default. Higher Capital Adequacy Ratio (CAR) implies that bank is stronger and vis-a-vis. In Indian

scenario the CAR remained higher than the standard fixed by RBI (i.e. 9 percent) all banks in its history, except few banks. Whereas the standard fixed by Basel Committee for Banking Supervision (BCBS) was 8 per cent.

Many experts in finance and banking are doubtful about the efficacy of capital ratios to reflect true credit risk. Indian PSBs need high level of capital adequacy with high provisioning requirements due to high NPAs (Mundra 2015) Under Basel III capital norms. Incomplete data generates inadequate results (Gray 1998) in capital adequacy arrangements. Thus, the implementation of Basel III regulations which were effective from 1st April 2013 had increased the capital requirements of banks in India under risk based supervision approach causing great concern in the current India banking system.

**1.c. Credit Discipline**

Credit discipline comprises of stringent regulations to control payment promises by inducing the borrower to pay in time within the agreed terms. A good credit discipline will work as an effective control against bad loans and thereby reforming credit culture of banks to suit the requirements of time. A centralized credit administration is the key for improving the credit discipline in banks (Floyd and John 2003). For this banks must have a sufficient data back-up facility. For a sound credit administration, determinants contributing to the rise in NPAs (RBI annual report 2016) may be addressed by introducing proper credit risk management and credit discipline among lenders by reviving regulatory measures.

**2. The problems facing the Indian banks in adopting Basel Norms.**

The implementation of Basel norms among banking participants is not an easy task, since there is a long way to go for changing the institutional lending culture prevailing in India. Hindrances to change comes in the form of cost involved in technology up-gradation, skill development, time consumption and a host of other issues such as, insufficient back up of credit data and to store credit history; they lacking infrastructural, technological shortage to meet the requirements to adopt the internal rating based approached which was prescribed by BCBS (Gandhi 2014). In this context, status of Indian banks with Basel accords and challenges pertaining to the adoption of internal credit models are discussed.

**2.a. Status of adoption of Basel norms in Indian banks**

The risk based capital requirement system framework was enforced on 2nd May 2012 through a circular by RBI to implement Basel III Capital Regulations. According to the Regulatory Consistency Assessment Programme (RCAP) Report of BIS conducted in 2015, Indian banks are compliant in all 14 components of risk based capital requirement norms which was specified by the 'Minimum Basel Capital Standards'. The Indian banks started operations by adopting Basel norms under the directions of the RBI, the implementation of the regulations were limited to assessing market risk and operational risk. Regarding the assessment of credit risk the Indian banks are still practicing 'Internal Ratings Based (IRB) Approach'. Since Basel II standards are not made mandatory, participating banks had an option to follow or not to follow IRB Approach.

In order to adopt the superior rating standards prescribed under the Basel III norms, it is mandatory for participating banks to comply with Basel II. This condition is making it difficult for those banks which did not implement the entire directions prescribed by BCBS. During the year 2015, fifteen banks applied for permission to use Advanced Internal Models prescribed under Basel III, for assessing risks and capital requirements. Out of these, only seven applications were considered by RBI to review whether they are complying with Basel II norms (RCAP 2015 p.65).

**3. Steps taken by the government and RBI**

Government and RBI has introduced and enforced various measures to control and solve the issues of credit risk and capital adequacy of Indian banks. As a first initiative in this regard Credit Information Bureau of India Limited (CIBIL) was entrusted with greater powers to collect, store and disseminate credit information from all banks, according to the requirements of banks and other institutions. CIBIL formed seven new credit bureaus to tame the participating banks so as to address the consequences of poor credit history. This effort will aid banks in many ways, especially to build accuracy and timeliness of information on counterparties. Currently most of the banks have automated their credit approval and monitoring processes with the help of internet banking. This will help banks in calculating regulatory capital easily by finding exposure rate in a credit portfolio and to model the portfolio by correlating portfolio exposures.

Various other actions are taken by the government and RBI to improve efficiency of credit management mechanism are initiated by setting up: 1) Central Repository of Information on Large Credits (CRILC) to recognise the stress before the loan account turns into NPA by creating a sub-asset category viz. Special Mention Accounts (SMA), 2) Joint Lending Forum (JLF). By combined monitoring of these two agencies, authorities and departments can collect, store and disseminate credit data for banks on credit exposures of up to Rs. 5 crores and above. Other risk management strengthening practices are, 3) Corrective Action Plan (CAP), which aids banks to identify the problems early and make the legal proceedings of recovery of accounts and to restructure of accounts in a timely viable manner. 4) Indradhanush Scheme, 5) Gyan Sangam (RBI 2014). 6) Special training programme for chief risk officers are recently organized by Centre for Advanced Financial Research and Learning (CAFRAL), 7) Debt Reconstruction Tribunal (DRT), 8) SARFAESI Act, 9) Lok Adalats, 10) One Time Settlement (OTS) etc. were already placed to overcome the credit risk, capital measurement and other risks in the banking system.

## V. Conclusion

The effect of NPAs and its poor recovery negatively affects the process of credit-dispensation in the economy. It can be made possible to solve credit risk and capital adequacy issues by the adoption of sound internal credit risk measuring techniques. Implementation of internal models can be supportive to banks for extending its benefits by competitive pricing policy. It can also bring great positive change in the "credit culture" of Indian banks. Credit modelling is still in an early phase of development in the Indian banking scenario. The claim of BCBS to maintain the present F-IRBA and A-IRB approaches of credit risk assessment and management practices in all Indian banks is questionable under various circumstances. The adoption of internal models prescribed by Basel III accord to measure the credit risk requires significant cultural change to make it effective under the Indian banking environment.

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