# AN OVERVIEW OF CREDIT RISK MANAGEMENT: A STUDY WITH REFERENCE TO STATE BANK OF MYSORE AND KARNATAKA BANK LIMITED

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## Abstract

The risk in banking sector have increased due to global competition, increased deregulation, introduction of innovative products and delivery channels. The ability to guage risk and take appropriate measures leads to success of risk management. Banking is becoming complex, compounded by exploding technological capabilities expanding product offerings and deregulation of competition. The success of business depends upon the ability to take risk. Greater the risk, higher the profit and hence the business unit must strike a tradeoff between the two. The essential functions of risk management are to identify measure and more importantly monitor the profile of the bank. Risk Management system is the pro-active action in the present for the future. Managing risk is nothing but managing the change before the risk manages. While new avenues for the bank has opened up they have brought with them new risks as well, which the banks will have to handle and overcome. In three types of banking risk operational, market and credit risk, managing of credit risk is very difficult. In credit risk, Non-Performing Asset (NPA) is one of the major concerns for banks in India. NPAs reflect the performance of banks. A high level of NPAs suggests high probability of a large number of credit defaults that affect the profitability and net-worth of banks and also erodes the value of the asset. In the light of this, an analysis was carried out to highlight the NPAs position of SBI and Karnataka Bank Limited for the period of seven years from 2008-09 to 2014-15. Hence an efficient risk management system is the need of time.

Keywords: Risk Management, Credit Risk, Prudential Norms, Bad Debts, Credit Portfolios, Basel.

## THE PROLOGUE

The financial system is the lifeline of the economy. Liberalization and de-regulation process started in 1991-92 has made a sea change in the banking system. The financial sector reforms carried out so far have made the balance sheets of banks look healthier and helped them move towards achieving global benchmark in terms of prudential norms and best practice. The competitive environment in the banking sector is likely to result in individual players working out differentiated strategies based on their strengths and market niches. In the last ten years we have seen transformation in terms of consistently higher growth rates adoption of core banking solutions, transformation in the payments systems and greater integration with the global economy. In the light of the recent global financial crisis, risk measurement and management in the Indian Banking Sector is gaining importance. Banks generally face various risks such as credit risk, operational risk and liquidity risk etc. The implementation of Basel II Accord is likely to lead to a sharper focus on the risk measurement and management at the institutional level. Basel II also suggests that banks can develop their own internal risk management procedures but advices that such approach be disclosed to the regulatory body, in the light of that the present study is undertaken to analyze the credit risk. Risk management evolved from a strictly banking activity, related to the quality of loans, to a very complex set of procedures and instruments in the modern financial environment. Risk management in banking reflects the entire set of risk management process and models allowing banks to implement risk based policies and practices. In the recent past varieties of modules and risk management tools were emerged for quantifying and monitoring risks. Bank risks are of many types i.e., Financial Risks and Non-Financial Risks, under financial risk we have seen Credit risk and Market risk, on the other hand operational risk, Business risk, and Strategic risk and above risks are divided into many risks. In this study we have deliberate only on credit risk management of SBI and associates and we focuses on how the SBI and associates identify and manage the credit risk.

# REVIEW OF RESEARCH LITERATURE

Review of literature has vital relevance with any research. The review helps researcher to remove limitation of existing work or may assist to extend prevailing study, the review of literature presented below covers credit risk, NPAs, Basel II and operational risk.

Raghavan (2003) focused his study on the existence of risks in banking sector. He opined that the objective of risk management is not to prohibit or prevent risk-taking activity, but to ensure that the risks are consciously taken with full knowledge, clear purpose and understanding so that they can be measured and mitigated. He expresses that the risk

management techniques, like Risk Rating Models, i.e., Altman's Z score, Credit Matrixes, Duration Gap Analysis, Simulation, Value at Risk, to anticipate and prevent the risk taking activity are of main consideration for banks. He also suggested that the bank must make an assessment of risk profile of the transactions. The study revealed that the banks should establish a system that helps to identify problem loan ahead of time when there may be more options available for remedial measures. Therefore it should be managed under a dedicated remedial process.

**Safakli** (2007) did an extensive study of credit risk associated with the banking sector and Northern Cypress and found that the credit risk ratios were indicative of the credit risks associated with the banking sector and correlated the risk ratios with key macroeconomic indicators.

**Somanadevi** (2011), carried out the study to predict the determinants of the credit risk in the Indian Commercial banking sector by using an econometric model. The study includes data of 22 public sector banks and 15 private sector banks. The outcome of the study is the nonperforming assets which had a strong and statistically significant positive influence on the current non-performing assets. The problem of NPA is not only affecting the banks but also the whole economy, banks includes both public and private sector banks. The study predict a two year lag period between the boom in credit growth and the growth in NPA, the banking sector has to manage the NPAs in the coming years.

Muneesh Kumar (2013), the study emphasized on Construct of credit risk management index for commercial banks. The CRM index for commercial banks, as proposed here attempts to provide a quantitative measure of management practices based on predefined benchmark practices that CRM efforts should aim to develop and follow. Based on the computation of the CRM index scores for thirty-three commercial banks in India, an attempt has been made to validate the index by relating their CRM index scores with their nonperforming advances ratios.

Rekha Arunkumar (2014), the study conducted on Risk management in commercial banks. This study was focused risk is the fundamental element that drives financial behavior. Without risk, the financial system would be vastly simplified. Financial Institutions, therefore, should manage the risk efficiently to survive in this highly uncertain world. The future of banking will undoubtedly rest on risk management dynamics. Only those banks that have efficient risk management system will survive in the market in the long run. The effective management of credit risk is a critical component of comprehensive risk management essential for long-term success of a banking institution

Qian Kun(2014), the study focused on Credit risk management of commercial bank. Credit risk is a result of the loan business of commercial banks. The study aims at possibility of bank crisis due to the formation of a large number of non-performing loans and the present situation of our country, domestic commercial banks should draw lessons from risk management model of western countries, in order to prevent loan risks, by reasonable arranging the liquidity of the commercial banks' assets. Commercial bank is a kind of enterprise which pursuing maximum profit is its ultimate goal. Credit business is the core business of commercial banks, and credit assets account for quite a large proportion of total assets, therefore, the size of the credit risk of a commercial bank has a close relationship with its normal operation.

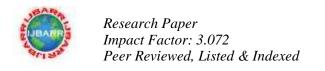
## **OBJECTIVES OF THE STUDY**

The objectives of the study are as follows:

- 1. To highlight the overview of risk management in banking sector;
- 2. To review the various study conducted in credit risk management in banking sector;
- 3. To analyze the total deposit and total advances of SBM and KBL;
- 4. To highlight the trends of Gross and Net NPAs position in SBM and KBL;
- 5. To depict the sector wise NPAs of SBM and KBL; and
- 6. To offer suggestions in the light of the study.

# RESEARCH METHODOLOGY

The present study is based on data gathered from secondary sources. The relevant secondary data were collected by making reference to the Government publications, Bulletins of the RBI, Bulletins of the Indian Banks Association, Mumbai, National Institute of Bank Management (NIBM), Pune. The Journal of Indian Institute of Banking and Finance, RBI issues like reports on Trend and Progress of Banking in India. Annual Reports of various banks, Apart from these different editions of daily newspapers such as Financial Express, Business Line and Business Standard were also used for the purpose of collection of data. The data relevant to the study was also collected from websites. In addition to above listed secondary sources, various reports of SBM and KBL were also widely used. In this study we have analyzed the credit risk management of SBM and KBL. For this study we have divide the components of credit risk management of NPAs of SBM and KBL.



The methodology used to analyze the NPAs of SBM and KBL categories:

- 1. Total Advances and Total Deposits of SBM;
- 2. Total Advances to Total Deposits of Karnataka Bank;
- 3. Gross and Net NPAs of SBM; and
- 4. Gross and Net NPAs of Karnataka Bank.

## Percentage analysis is used to analyze the data.

# 1. Total Advances and Total Deposits of SBM

Total Deposits is a term included in the balance sheet of a bank. To a common person, the word deposit most often implies the act of placing your money in the safety of a bank. When calculating the Total Deposits from a bank's perspective, various kinds of deposits are taken into consideration. These are added together to determine the Total Deposits. Money placed into a banking institution for safekeeping. Bank deposits are made to deposit accounts at a banking institution, such as savings accounts, checking accounts and money market accounts. The account holder has the right to withdraw any deposited funds, as set in the terms and conditions of the account.

Table No. 1 represents the total advances and total deposits of State Bank of Mysore. The total advance of State Bank of Mysore was found to be ₹ 280956.55 crores as against total overall total deposit of ₹ 349800.66 crores respectively. Total advances of SBM was increased from 2008-09 to 2014-15 from ₹ 25880.00 crores to ₹ 53295.64 crores. The total deposit in the year 2008-09 was ₹ 32915.77 crores and it was increased to ₹ 66063.76 crores respectively.

Table No. 1, Total Advances and Total Deposits of SBM

(₹ in Crores)

Year	<b>Total Advances</b>	(%)	<b>Total Deposits</b>	(%)
2008-09	25880.00	9.2	32915.77	9.4
2009-10	29860.00	10.6	38880.00	11.1
2010-11	34425.69	12.3	43225.47	12.4
2011-12	40652.64	14.5	50186.30	14.3
2012-13	45980.54	16.4	56969.04	16.3
2013-14	50862.15	18.1	61560.32	17.6
2014-15	53295.64	18.9	66063.76	18.9
Total	280956.66	100	349800.66	100

Source: Annual Reports of SBM.

The highest percentage of total advances was found 18.9 and the lowest percentage of total advances was in the year 2008-09 and it is 9.2. In view of total deposit, the highest total deposit was found to be in the year 2014-15 and it was 18.9 per cent. The lowest was in the year 2008-09 representing 9.4 per cent. To conclude, the total advances and deposit was found to be increasing year by year which shows a good sign of progress of bank.

# 2. Gross and Net NPAs

It is the total number of NPAs of the bank simply added. Banks would continuously assess this by evaluating their loan payments and decide the NPAs. Net NPA is simply the total bad assets minus the provision left aside. Table No. 2 highlights the grow Gross and Net NPAs of SBM. The total gross NPAs were found to be ₹ 10428.63 crores and total Net NPAs was ₹ 5921.23 respectively. The gross NPAs was increased from ₹ 367.61 cores to ₹ 2136.42 crores from 2008-09 to 2014-15. The lowest gross NPAs was in the year 2008-09 amounted to ₹ 367.61 crores. With regard to Net NPAs was increased from ₹ 129.07 crores to ₹ 1121.58 crores from 2008-09 to 2014-15. The highest NPAs were found in the year 2013-14 and the amount was ₹ 27.0 crores and the Net NPAs was 27.50 crores respectively.

# Table No. 2Gross and Net NPAs of SBM

(₹ in Crores)

Year.	Gross NPAs	(%)	Net NPAs	(%)
2008-09	367.61	3.5	129.07	2.2
2009-10	595.26	5.7	299.79	5.1
2010-11	863.74	8.3	467.88	7.9
2011-12	1502.62	14.4	768.42	12.9
2012-13	2080.63	19.9	1208.75	20.4
2013-14	2818.87	27.0	1630.27	27.5
2014-15	2136.42	20.5	1121.58	18.9
Total	10428.63	100.0	5921.23	100.0

Source: Annual Reports of SBM.

## 3. Total Advances and Deposits of Karnataka Bank Ltd.

Table No. 3 portrays the total advances and total deposits of Karnataka Bank Limited. The total advance of Karnataka Bank Limited was found to be ₹155848.24 crores as against total overall total deposit of ₹225653.37 crores respectively. Total advances of SBM was increased from 2008-09 to 2014-15 from ₹11810.22 crores to ₹31680.30 crores. The total deposit in the year 2008-09 was ₹20330.29 crores and it was increased to ₹46008.61 crores respectively. The highest percentage of total advances was found 20.3 and the lowest percentage of total advances was in the year 2008-09 and it is 7.6. In view of total deposit, the highest total deposit was found to be in the year 2014-15 and it was 20.40 per cent. The lowest was in the year 2008-09 representing 9.0 per cent. To conclude, the total advances and total deposits showed an increasing trend.

Table No. 3, Total Advances to Total Deposits of Karnataka Bank Ltd.

(₹ in Crores)

Year	<b>Total Advances</b>	(%)	<b>Total Deposits</b>	(%)
2008-09	11810.22	7.6	20330.29	9.0
2009-10	14436.36	9.3	23730.65	10.5
2010-11	17348.12	11.1	27336.45	12.1
2011-12	27020.06	17.3	31608.32	14.0
2012-13	25208.08	16.2	36056.22	15.9
2013-14	28345.10	18.2	40582.83	17.9
2014-15	31680.30	20.3	46008.61	20.4
Total	155848.24	100.0	225653.37	100.0

Source: Annual Reports of Karnataka Bank Ltd.

Table No. 4, Gross and Net NPAs of Karnataka Bank

(₹ in Crores)

Year	Gross NPAs	(%)	Net NPAs	(%)
2008-09	443.20	9.2	116.10	4.3
2009-10	549.64	11.5	188.61	6.9
2010-11	702.17	14.6	280.34	10.3
2011-12	684.72	14.3	435.20	15.9
2012-13	638.86	13.3	435.20	15.9
2013-14	835.93	17.4	538.04	19.7
2014-15	944.21	19.7	623.55	22.9
Total	4793.18	100	2725.57	100

Source: Annual Reports of KBL.

Table No. 4 highlights the Gross and Net NPAs of KBL. The total gross NPAs were found to be ₹ 4793.18 crores and total Net NPAs was ₹ 2725.57 respectively. The gross NPAs was increased from ₹ 443.20 cores to ₹ 944.21 crores from 2008-09 to 2014-15. The lowest gross NPAs was in the year 2008-09 amounted to ₹ 443.20 crores. With regard to Net NPAs was increased from ₹ 116.10 crores to ₹ 623.55 crores from 2008-09 to 2014-15. The highest Net NPAs was found in the year 2014-15 and the amount was ₹ 22.90 crores.

## FINDINGS OF THE STUDY

- In view of total deposit, the highest total deposit was found to be in the year 2014-15 and it was 18.9 per cent.
- The total gross NPAs were found to be ₹ 10428.63 crores and total Net NPAs was ₹ 5921.23 respectively.
- With regard to Net NPAs was increased from ₹129.07 crores to ₹1121.58 crores from 2008-09 to 2014-15.
- The total advance of Karnataka Bank Limited was found to be ₹155848.24 crores as against total overall total deposit of ₹225653.37 crores respectively.
- The highest percentage of total advances was found 20.3 and the lowest percentage of total advances was in the year 2008-09 and it is 7.6.
- The total gross NPAs were found to be ₹4793.18 crores and total Net NPAs was ₹2725.57 respectively.
- The highest Net NPAs was found in the year 2014-15 and the amount was ₹22.90 crores.

## SUGGESTIONS OF THE STUDY

The bank should keep on revising its credit policy which will help banks effort to correct the course of the policies.

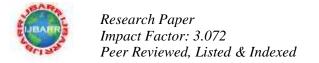
- 1. The bank officials should make modifications to the procedural guidelines for implementation of the credit policy as they may become necessary from time to time on account of organizational and situational needs.
- 2. Bank as to grant the loans to the borrower at a moderate rate of interest that will help the borrower to repay the loan amount to bank regularly and promptly.
- 3. Regular contact with borrowers and regular monitoring of the accounts is very necessary.
- 4. Risk taking systems should be developed to cover newer risks.
- 5. Existing NPAs should be taken seriously and banks should set up speedy recovery cells and task forces to deal with them.
- 6. Branches having sizable NPAs should be identified and skilled and trained personnel should be placed there.

## **CONCLUSION**

The NPA is the root cause of the global financial crisis that we observed recently. The world is still trying to recover from the after-effects of the crisis. The problem of NPA has received considerable attention after the liberalization of the financial sector in India. The NPAs have always been a big worry for the banks in India. It is just not a problem for the banks; they are bad for the economy too. The extent of NPA is comparatively higher in public sectors banks. To improve the efficiency and profitability, the NPAs have to be scheduled. Various steps have been taken by government to reduce the NPAs in both Public and Private Sector Banks in India. This has led to decline in the level of NPAs of the Indian banking sector.

## REFERENCES

- 1. Aashish Kumar Lal., (2010). Risk Management of Various Banks in Public and Private Sector, Dissertation, Skyline Business School, June 19<sup>th</sup> 2010, pp. 33-35.
- 2. Ayyappan and Ramachandran (2011). Credit Risk Determinants of Public and Private Sector Banks in India, European Journal of Economics, Issue 34, pp. 78-88.
- 3. Battacharya, H., (2001). Banking Strategy, Credit Appraisal & Lending Decisions, Oxford University Press, New Delhi.
- 4. Battacharya, H., (2001). Banking Strategy, Credit Appraisal & Lending Decisions, Oxford University Press, New Delhi.
- 5. Bratanovic, S.B., and V.H. Greuning, (2000). Analyzing Banking Risk, Working Paper the World Bank, Washington, D.C.
- 6. Gupta and Meera Mehta, "Indian banks and Basel II: An Econometric Analysis", Indian Journal of Finance, June 2011, pp.11-19.
- 7. Indian Banking Association (Various Issues).
- 8. Karnataka Bank Limited, Annual Reports (Various Issues).
- 9. Muneesh Kumar, (2013), "Construct of credit risk management index for commercial banks." Banks and Bank Systems, ISBN -7812, Volume 6, Issue 2.
- 10. Navin Kumar Choudhary., (2011). Credit Risk Management of Loan Portfolios by Indian Banks: Some Empirical Evidence, Vol. X, Issue 2, pp. 32-42.



- 11. Peter O. Davis., (2004). Credit Risk Measurement: Avoiding Unintended Results, RMA Journal, April, P. 86.
- 12. Prabhaker Verma, (2004). Risk Mitigation: Need for Training, A Monthly Journal of the Indian Banking Association, Vol. XXIV No. 6 June, pp. 30.
- 13. Qian Kun, (2014), "Credit risk management of commercial bank. Credit risk is a result of the loan business of commercial banks". Journal of Chemical and Pharmaceutical Research, CODEN (USA): JCPRC5, ISSN: 0975-7384.
- 14. Raghavan, R.S., (2002). Risk Management An Overview: A Monthly Journal of The Indian Banking Association, Vol. XXIV, Dated November, p. 13.
- 15. Rajagopal, S., (1998). Bank Risk Management A Pricing Model, The Banker, The Journal of Banking, April, pp-25
- 16. Rajaraman, I and Vashistha, G., (2002). Non-Performing Loans of Indian Public Sector Banks Some Panel Results, Economic and Political Weekly, February.
- 17. Rajesh, Sood, (2003). Risk Based Supervision A New Tool with Supervision for Managing Risks in Banks, A Monthly Journal of The Indian Banking Association, Vol. XXV, No. 9, September, pp. 5.
- 18. Rekha Arunkumar, (2014), "Risk management in commercial banks". Faculty (Finance), MBA Programme, University of Mysore, Bapuji Institute of Engineering & Technology (affiliated to Visveswaraya Technical University), Davangere.ISSN-2345.
- 19. Report on Trend and Progress of India (Various Issues).
- 20. Reserve Bank of India (Various Issues).
- 21. Safakli, O., (2007). Credit Risk Assessment for the Banking Sector of Northern Cyprus. Banks and Band Systems, 2 pp. 21-31.
- 22. Sathye, M., (2003). Efficiency of Banks in a Developing Economy: The Case of India, European Journal of Operational Research, 148, pp. 662-671.
- 23. State Bank of Mysore, Annual Reports (Various Issues).