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A Study on Risk Management in Co-operative Banks in India - A Descriptive Analysis

Sushmitha G. and N. Nagaraja***

ABSTRACT

In this modern era, banks encounter various financial crises and challenges in its operation due to volatile market conditions, technological advancement, changing customer needs, financial sector reforms and so on. The major concern of the co-operative bank is the mounting amount of Non-performing assets (NPAs). Hence banks should adopt a systematic risk management system to manage the overall risk exposure associated with banking operation. The present study attempted to analyse the various aspects of the risk management system and trends of Non-performing assets in co-operative banks in India for the period of 2011 to 2018. The data has been analysed through statistical tools such as tabulation and line graphs. The study observed that the gross NPA of urban co-operative banks decreased over the period. On the contrary, net NPA of urban co-operative banks increased for the period 2011 to 2018.

Keywords: *Risk management; Credit risk; Liquidity risk; Operational risk; Non-performing assets.*

1.0 Introduction

The banking sector significantly contributed to flourishing the economy of our country. Over the past decades, the banking sector emerged as the fastest growing sector in the world. In this modern era, banks encounter various financial crises and challenges (risks) in its operation due to volatile market conditions, technological advancement, changing customer needs, financial sector reforms and so on. This crisis has a negative impact on the financial performance and profitability of the financial institution.

**UGC-SRF Scholar, Department of Commerce, University of Mysore, Mysore, Karnataka, India. (Email: sushmitha27gopal@gmail.com)*
***Corresponding author: Professor & Chairman, Department of Commerce, University of Mysore, Mysore, Karnataka, India. (Email: nagarajanjegowda@gmail.com)*

The various kinds of risk experienced by the banks are credit risk, market risk, liquidity risk, operational risk, interest rate risk, etc. The long term survival of the bank solely depends on the ability of them to identify, analyse, assess, measure, manage and mitigate the risks encountered by the bank.

The co-operative Banking sector occupies a prominent position in the Indian banking system. Co-operative banks play an important role in caters to the financial needs of both urban as well as rural populations. Co-operative banks are the financial entity incorporated by its members, to cater to the social, economic and cultural needs of them. Even though the co-operative bank has 100 years of existence, its performance is not up to the mark compared to the commercial bank. Co-operative banks failed to show their competency due to various problems and issues attached to it, such as duality in control, managerial incompetence, stiff competition, political interference, lack of credit planning and management, lack of human resource management, absence of professional management and governance and failure in adoption of new technology so on. Another major concern of the co-operative bank is the mounting amount of non-performing assets (NPAs). The non-performing assets are those assets, which do not contribute directly to the profitability of the bank. The magnitude of NPAs has a direct impact on the profitability of the bank. Hence banks should adopt a systematic risk management system to manage the overall risk exposure associated with banking operation.

2.0 Risk and Risk Management

Risk is inherent in every walk of life. The word risk originated from the Latin word “Rescum” means risk at sea or that which cuts. In general, risk means danger, hazard, injury or loss. The chambers The Basel Committee on Banking Supervision (BCBS) defined Risk as the" probability of the unexpected happening – the probability of suffering loss”.

Risk-taking and management have become one of the important tasks performed by the bank. In this modern era, banks are exposed to various risks in its normal operating environment. These risks are classified as credit risk, market risk, operational risk, liquidity risk and Interest rate risk, etc. To ensure these risk exposures are managed properly, an effective risk management system is very much needed.

Risk management is the systematic process of identification, assessment, measurement, and treatment of risk exposures encountered by the bank in its day to day operation. The main aim of risk management is to maintain various exposures at the minimum level. The risk management system provides all the set of tools and techniques to manage the risk effectively.

3.0 Process of Risk Management

Risk identification: This is the first step towards the reduction and mitigation of the risk. The essence of risk identification consists of identifying various risk exposures associated with banking operation and examine the impact of these risk on the performance of the bank.
Risk measurement: This is one of the important steps in the risk management process. Risk measurement depends on quantitative techniques to measure the risk. There are various risk measurement models available for different types of risks, such as VAR, Stress testing, cash flow at risk, Credit scoring model, credit risk portfolio models, etc. The commonly used model is VAR.
Risk pricing: Risk-return pricing is a fundamental tool of risk management. In a risk-return setting, the borrower with weak financial position considered as high-risk category and they put a high price on them
Risk monitoring and control: The adequate system for monitoring and reporting the most important component of the Risk Management process. The risk monitoring and control process includes independent reviewing and internal and external audits. This system also assesses the changing risk profiles of the bank. The bank's internal control structure is an important requisite of this process.
Risk mitigation: This is the most crucial step in the risk management process. Risk Mitigation is a systematic process to minimise and eliminate the various risk exposures by adopting appropriate strategies.

4.0 Review of Existing Literatures

Reddy (2002) attempts to analyse the experiences of other Asian countries in the handling of NPA. It further investigates the effects of the reforms on the level of NPAs and suggests a mechanism to handle the problem of NPA. In the Indian context, the study identified the various causes of NPAs, such as legal impediment, time-consuming nature of asset disposal process, manipulation by the debtors and political interference. The study also suggested some solutions to manage the problem of NPAs like, effectiveness of ARCs, well-developed capital market, Contextual Decision making, Securitization, effective capital norms system, Realignment of performance metrics and effective legal mechanism.

Pitre (2003) points out that the main risk exposure of UCBs is not credit risk but interest rate risk. The interest rates of UCBs are not in alignment with commercial banks. In this context, the risk and asset and liability management assumed to be significant.

The study also points out that, the level of Non-performance assets increasing in the alarming state due to the general slowdown of economic activity; which will have an effect on the health of the sector.

Ramu (2008) analysed the causes of concern and brings out some of the measures which would help urban cooperative banks to co-exist in the present competitive environment. The major issues concerned with the UCBs are stiff competition, mismanagement, and failure of UCBs, political interference, poor credit management, absence of professional management and governance, absence of human resource management and lack of technology-based products. The study also suggested some measures for development and improvement of UCBs, they are, augmenting capital, shuttling of portfolios, reduction of high-cost deposits, end of dual control, removal of political interference, the system of human resource management, need for autonomy and awareness programmes for employees.

Raman (2008) assesses in detail the status of operational risk management in the Indian banking system in the context of Basel II. The result of the study indicates that the process of designing a framework for operational risk has just begun for Indian banks. The positive features are that all banks have well defined organisational structure and Board-approved policies for operational risk management. Many banks had started the operational risk loss data collection exercise for moving over to the advanced approaches though these were still in the formative stages. However, the study identified some obstacles in the implementation of the operational risk management (ORM) framework in banks they are, inadequate knowledge regarding elements/factors required for moving over to the Advanced Measurement Approach (AMA), Insufficient data, difficulties in gathering external data and modelling difficulties were cited as very significant.

Ramu (2009) attempted to analyse the asset quality of selected UCBs in Tamil Nadu. The study also traces the NPAs of financial Co-operatives in other countries. The study observed that Non Performing assets of selected banks are within the manageable level but TCUB has had to face moderately severe recovery problems. As per the CAMELs rating model, the highest weight (i.e., 25 percent) is given to asset quality components by RBI. The solution to the problem of NPAs lies in strengthening the credit management in banks over a period by removing the present deficiencies observed in the standards of credit appraisal, monitoring and improving the overall lending policies of the banks.

Saha (2010) found that the profitability and operational efficiency of selected Urban Co-operative banks in Karnataka are showing a decreasing trend. The performance of these banks, in terms of returns on assets and returns on equity, has been far from satisfactory. The study suggested some of the measures to ensure financial

stability and profitability such as sound fund deployment strategies, better and improved recovery efforts to keep NPA levels under control, budgeted policies and strict budget control, efficient and personalized customer services, and products and technology up-gradation.

Bahir (2014) examined the agricultural and non-agricultural loan recovery performance of District Central Co-operative Banks (DCCBs) in Maharashtra. From the study, it is revealed that the DCCBs in Maharashtra has achieved an increasing trend in all the indicators selected for the study except the number of branches during the period from 2001-02 to 2010-11. Share capital, reserve funds, deposits, working capital, investments indicated an increase above 100% over the period. There is a matter of concern that outstanding loans and over dues went up, is an indication of poor performance. The study also found out that the average recovery percent of non-agricultural loans are higher than the agricultural loan recovery in terms of both short term and medium-term loans. The study also suggested that DCCBs should emphasize the recovery of agricultural loans. For this purpose, the DCCBs distribute loans to those persons who can repay loans, adopt an efficient supervision system for utilization and recovery of loans and also identify wilful and non-wilful defaulters for proper measures to be taken for recovery.

Coldrelli *et al.,* (2016), in their paper "managing risk in credit cooperative banks: lesson from a case study" intend to explore how the implementation of ERM practices can help the organization to achieve both economic and social goals. In this study, the researcher found out that the ERM process helps credit Co-operative bank to manage their risk effectively and also ERM allows the bank to achieve its goals, both economic as well as social. They also suggest that ERM systems can be used as an effective tool to assist firms to protect shareholders value and also increase bottom-line profitability.

Nagaraja and Madegowda (2015), attempted to evaluate the NPA of DCCBs and UCBs in terms of Gross NPA Ratio, Net NPA Ratio, Averages, Variance, and T-test. The study shows that the extent of NPA is comparatively very high in UCBs as compared to DCCBs.

Tiwari (2015) attempted to study and analyse the major causes responsible for assets turning into non-performing. The study found out that, the strongest cause of NPA as perceived by Co-operative banks followed by Lack of close supervision of loan account, absence of effective monitoring and unavailability of audited financial statements in time.

Barki (2015) covers the bank's performances and the lending practices provided by banks to their customers. The study found that the financial performance of UCBs improved due to, quality of services, easy mode of repayment of instalment, simple

procedure, and reasonable rate of interest and quick sanction of loans. The study also suggests that the bank should adopt modern methods of banking as well as it should introduce new schemes for attracting new customers and satisfying the present ones.

Sarkar and Karak (2018) reveals the trends, causes, and impact of NPAs on the performance of the Burdwan District Central Co-operative Bank Ltd. (BDCCBL). The study observed that there exists a high positive correlation between actual values and trend values of NNPA to Total Assets. It is also observed that actual and trend values are not correlated. That signifies that the overall picture of NPA management is not satisfactory for the bank. The study also suggested various preventive measures to manage NPA, such as pre-sanctioning evaluation and Post disbursement monitoring, strict recovery efforts, strict rules against wilful defaulters and introduction of professional expertise.

5.0 Objective of the Study

- To analyse the various types of risks encountered by co-operative banks in India
- To analyses the trends of non-performing assets of co-operative banks in India.
- To suggest various measures to minimise the overall risk exposure of the bank.

6.0 Research Methodology

The study is exploratory cum descriptive in nature. The proposed study is based on secondary data. The secondary data relevant to the study will be collected from published sources like the RBI Annual Report, RBI Bulletins, books, survey reports, articles, periodicals, journals, RBI website, internet and other websites on the topic relied on.

6.1 Various types of risk in banking business

The banking business is exposed to various risks and uncertainties in its operation due to the competitive and dynamic nature of the market, it operates in. There are various risks associated with the banking industry. They are listed below.

6.1.1 Management of credit risk

The credit risk is the oldest and dominant risk among the various kinds of risks associated with the banking industry. Credit risk is the risk of financial loss arising due to the failure of the borrower to meet his commitments or contractual obligation to the bank. According to estimate credit risk exposure takes about 70% and the remaining

30% shared between other risks namely market risk and operational risk. (Arunkumar and Kotreshwar 2005). Credit risk has a greater impact on the financial performance and profitability of the bank. An effective credit risk management system is required to manage risk exposure systematically.

The process of credit risk management encompasses the followings

a) Measurement of risk
b) Quantification of risk
c) Risk pricing through scientific methods
d) Effective risk controlling system

6.1.2 Liquidity risk management

Liquidity can be defined as an ability to meet the financial commitments when it's due at a reasonable cost. Liquidity risk is the potential inability of a bank to generate sufficient cash to meet its normal operating requirement. The bank needs liquidity to meet deposit withdrawals and fund loan demands. Effective liquidity risk management helps ensure a bank's ability to meet its financial obligation or commitments as to when it's due and prevent happening of adverse situations.

The managing and measuring the liquidity risk is one of the important tasks that have to be performed by the bank, to maintain an easy and smooth day to day operating environment. The process of liquidity risk management encompasses the follows;

a) Risk identification
b) Risk measurement
    i) Flow approach
    ii) Stock approach
c) Risk monitoring

6.1.3 Operational risk management

Managing operational risk is becoming a key feature of a sound risk management system. The operational risk loss event can be caused by internal or external factors such as human failure, technical failure, internal or external frauds, managerial incompetence, natural calamities, etc.

Operational risk has been defined by the Basel Committee on Banking Supervision as the "risk of loss resulting from inadequate or failed internal processes, people and systems or external events".

Operational risk management is can be defined as "identifying, assessing, measuring, monitoring and control or mitigating the losses arising due to operational risk events by the bank." Operational risk has a greater influence on the performance of the

bank because of its inherent in the overall business process unlike credit risk and market risk which specified certain areas. Research by Operational Risk Inc. suggests that since 1980, financial institutions have lost more than U.S. Dollar 200 billion due to operational risks. In India, 1992's securities scam is the classic example of operational risk. The previous experiences of operational risk events have complied with the financial institutions to implement effective operational risk management in its operation.

The process of operational risk management encompasses as follows:

a) Risk identification
b) Assessment of operational risk
   i) Self-risk assessment
   ii) Risk mapping
   iii) Key risk indicators
c) Risk measurement
d) Operational risk control and mitigation

6.1.4 Management of non-performing assets

One of the major challenges faced by the bank is the problem of the mounting amount of Non-performing assets. Non- performing assets are those loans and advances, on which principle or Interest amount is overdue for a period of 90 days. In other words, NPAs is defined as "those assets which do not directly contribute to the profitability of the firm"

The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002, defines Non-performing Assets (NPAs) as “an asset or account of a borrower, which has been classified by a bank or financial institution as substandard, doubtful or loss asset in accordance with the direction or guidelines relating to assets classification issued by the RBI.

The concept of Non-performing Assets (NPA) was introduced in the Narasimham Committee report was tabled in Parliament on December 17th, 1991. The most important operation of the banking business is the recovery of lending money. For that purpose The Narasimham Committee on Financial Sector Reforms has recommended that the policy on income recognition by banks should conform to the international best practices which require classification of assets in two categories as below - Performing Assets (PA) The asset which provides positive return annually.

According to estimates For FY16, the district central co-operative banks (DCCBs) had stated that the total NPAs for all co-operative banks amounted to Rs 22,695 crore, which was Rs 6,277 more than NABARD's findings during audits, which has the authority to conduct an inspection of DCCBs books. NABARD, in the RTI

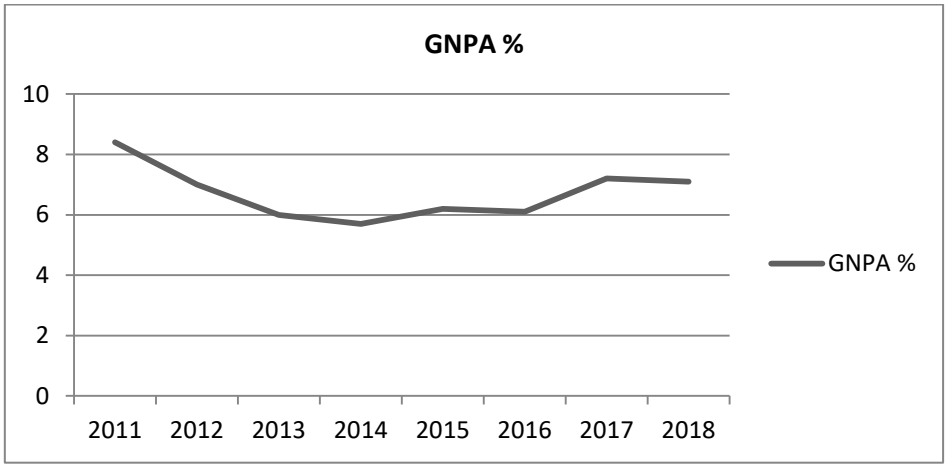
response, stated that the total NPAs accounted for Rs 16,417 crore. (Money Control). Table 1 and Figure 1 show that the trend of Gross NPAs of urban co-operative banks for the period 2011-2019. It depicts that the Gross NPA of UCBs decreased from 8.4% (2011) to 7.1% (2018) thereby implying marginal improvement in the asset quality of UCBs.

Table 1: Gross and Net NPAs in Urban Co-Operative Banks in India

Year	Gross NPA %	Net NPA %
2011	8.4	2.1
2012	7.0	2.0
2013	6.0	1.4
2014	5.7	2.2
2015	6.2	2.7
2016	6.1	2.2
2017	7.2	2.7
2018	7.1	2.7

Source: Report on Trend and Progress of Banking in India

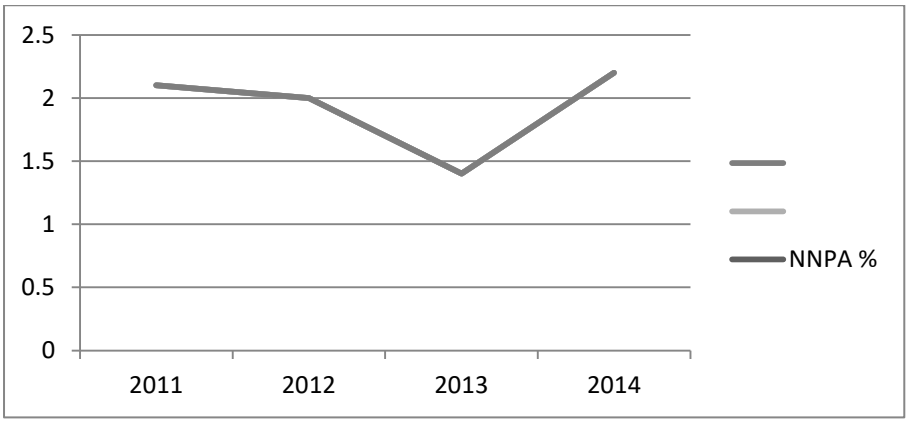
Figure 1: Gross NPAs in UCBs



Source: Report on Trend and Progress of Banking in India

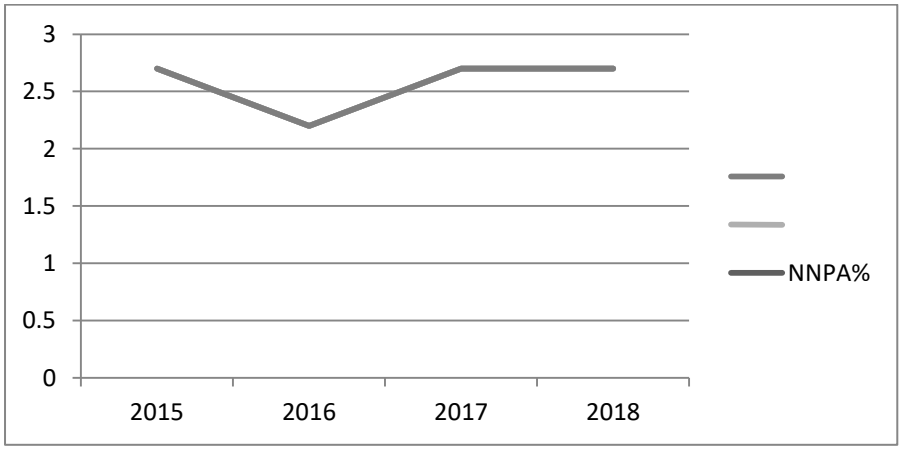
Figure 2 and Figure 3 show the net NPA level of urban co-operative banks for the period 2011-2018. It depicts that net NPA of urban co-operative banks show an increasing trend, that is, 2.1% in the year 2011 increased to 2.7% in the year 2018.

Figure 2: Net NPAs in UCBs



Source: Report on Trend and Progress of Banking in India

Figure 3: Net NPAs in UCBs



Source: Report on Trend and Progress of Banking in India

7.0 Findings of the Study

- The study shows that the gross NPA of urban Co-operative banks decreased over the period of time. The GNPA was 8.4% in the year 2011 decreased to 7.1% in 2018 (Table 1). It shows a marginal improvement in the asset quality of the Urban Co-operative banks of India.

- The study also observed that net NPA of urban co-operative banks is increased from 2011 to 18. The Net NPA increased by 2.1% in the year 2011 to 2.7% in the year 2018 (Table 1).

8.0 Suggestions

8.1 Regulatory measures

- The risk management system effective only when it is, complied with the structured risk management policies. The bank should establish policies and procedures to supervise various risk management aspects of the bank.
- The policies and procedures developed by the bank should provide a framework to, verify the models used for pricing complex products, review the risk models and identify the new risks existing in the market. The policies also spell out, quantitative prudential limits on the various segments of the banking operations.
- The effectiveness of the risk management system depends on the perquisites such as consistent quality MIS. The existence of MIS has ensured the integrity and reliability of data by strengthening the data collection machinery.
- The risk management system is complex, it requires expertise knowledge and specialised skills in the field of risk management. The bank should conduct specialised training programmes to the workforce of the bank, to educate them to identify measure and mitigate the risk associated with the bank in a scientific manner.
- The committee approach is well-practiced in worldwide. The committees like, asset-liability committee (ALCO), credit policy committee (CPC) are formed to deals with different types of market risks and credit risks. The bank could establish single or separate committees to manage market risk and credit risk effectively.

8.2 Measures to manage credit risk

- The bank should establish the Credit Risk Management Committee or Credit Policy Committee to oversee the issues relating to credit policies and procedures to identify, analyse, measure, manage and control the credit risk exposure of the bank.
- The Committee should formulate clear policies regulate, presentation of credit proposals, credit approving powers, setting up prudential limits on large credit exposures, standards for loan collateral, portfolio management, loan review mechanism, risk monitoring, and evaluation, pricing of loans, provisioning, regulatory/legal compliance, etc.

- The mitigation of credit risk is a complex task to be performed by the bank. The RBI recommended various tools and techniques to mitigate the credit risk effectively. They are:
  a) Credit approving authority
  b) Prudential limits
  c) Risk pricing
  d) Credit risk rating
  e) Loan Review Mechanism (LRM)

8.3 Measures to manage non-performing assets

The mounting amount of NPA becomes an insufferable burden to the banking sector in India. To manage NPA effectively, the bank can adopt the following measures:

a) Effective loan policy
b) Setting up of exposure norms
c) Proper evaluation of a loan proposal
d) Credit appraisal and monitoring
e) Post Loan inspections
f) Strict recovery measures
g) Inspection and credit audit
h) Debt recovery tribunal
i) Lok Adalats
j) Asset Reconstruction Company (ARC)

8.4 Measures to manage liquidity risk

- The bank should establish an effective liquidity risk management policy to deals with liquidity risk exposure of the bank. The policies should spell out funding strategies, liquidity planning under alternative scenarios, prudential limits, liquidity reporting/reviewing, etc.[1]
- The measurement of liquidity is the most difficult task to be performed by the bank. The measurement can be done through stock or cash flow approaches.
- The bank should produce a Contingency Funding Plan as per the RBI requirement to, effectively manage the liquidity crisis scenario.

8.5 Measures to manage operational risk

- The bank should produce well defined policies and procedures to manage operational risk systematically. The policy should address aspects like operational

risk arising through external market changes and new product development, internal audit/control system, etc...

- The bank should identify and assess the operational risk in an effective manner. For identification and measurement of operational risks, the following tools and techniques can be used;
  a) Self-risk assessment
  b) Risk mapping
  c) Risk indicators
- The bank should have policies and procedures to mitigate and control the operational risk. An effective internal control system is the key to sound operational risk management. The effective internal control system includes the segregation of duties, clear management reporting lines, and adequate operating procedures.

9.0 Conclusion

Risk is universal in nature. Every financial institution, especially banking institution is exposed to various kinds of risks in their operation. Risk-taking and managing become a fundamental task of today's banking industry. The success and failure of banks depend on sound risk management system adopted by them.

The risk management system comprises all the activities concerning the risk profile of the bank. The risk management system provides a structural framework to identify, assess, measure, monitor, manage and control the different risk exposures experienced by the bank. The effectiveness of sound risk management depends on the various prerequisites such as systematic risk management policy, sound management information system, modern Information technology infrastructure and computerisation and branch networking.

The mounting amount of Nonperforming assets created huge turmoil in the Indian banking system. The banking institution like Co-operative banks also experiences the problem of Nonperforming assets. The Nonperforming assets can be managed by adopting precautionary measures like sound credit policy, proper evaluation of loan proposal, post loan inspection, strict recovery measures, etc.

The regulatory institutions such as Basel and RBI issued guidelines and structural framework to manage various risk exposures systematically and efficiently. The banking institution should implement an effective risk management system per guidelines provided by RBI and Basel. The sole survival of the banking institution depends on the sound risk management system adopted by them.

Endnotes

1. Guidance Note on Market Risk Management (http://www.rbi.org.in).

Reference

Arunkumar, R. & Kotreshwar, G. (2006). Risk management in commercial banks (a case study of public and private sector banks). Indian Institute of Capital Markets 9th Capital Markets Conference Paper. Retrieved from SSRN: https://ssrn.com/abstract=877812 or http://dx.doi.org/10.2139/ssrn.877812.

Bahir, L. B. (2014). Agricultural and non-agricultural loan recovery performance of district central co-operative banks in Maharashtra. *MUDRA: Journal of Finance and Accounting*, *1*(2), 37-47.

Barki, G (2015). A study on cooperative banks in Haveri district with special reference to lending practices. *Journal of Exclusive Management Science, 4*(10), 1-10.

Coldrelli, A., Fiondella, C., Maffei, M., & Zagaria, C. (2016). Managing risk in credit cooperative banks: Lessons from a case study. *Management Accounting Research*, Volume *32*, 1-15. Retrieved from https://doi.org/10.1016/j.mar.2015.10.002

Nagaraja. R., & Madegowda, (2015). A comparative study of non-performing assets in DCCBs and UCBs. *Global Journal for Research Analysis*, *4*(5), 199-201.
Pitre, V. (2003). Urban cooperative banks: Issues and prospects. *Economic and Political Weekly*, *38*(15), 1505-1513.

Raman, U. J. (2008). Operational risk management in Indian banks in the context of Basel II: a survey of the state of preparedness and challenges in developing the framework. *Asia Pacific Journal of Finance and Banking Research*, *2*(2), 26-44.

Ramu, N. (2008). Urban cooperative banks: At crossroads. *The Indian Banker, III*(1), 14-27. Retrieved from SSRN: https://ssrn.com/abstract=2290482.

Ramu, N. (2009). Dimensions of non-performing assets in urban cooperative banks in Tamil Nadu. *Global Business Review*, *10*(2), 279-297.

Reddy, P. K. (2002). A comparative study of non-performing assets in India in the global context-similarities and dissimilarities, remedial measures. *Remedial Measures (October 2002)*, 1-18. Retrieved from http://kaahlsfiles.com/thesis/thesis%20papers/3%20Low/unpan013132.pdf

Report on Trend and Progress of Banking in India from 2011 to 2018

Saha, A. (2010). Urban cooperative banks: A case study of Karnataka, Retrieved from https://mpra.ub.uni-muenchen.de/26565/

Sarkar, S. C., & Karak, (2018). Management of non-performing assets of district central co-operative bank. *Indian Journal of Accounting*, *50*(1), 78-86.

Tiwari, C. (2015). A study on the causes of non–performing asset in selected co-operative banks in Pune. *International Journal*, *3*(6), 688-692.

Websites

http://www.rbi.org.in

https://www.moneycontrol.com

http://jgateplus.com