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# Impact of Non-Performing Assets on Profitability: A Comparative study of Public and private sector Banks

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## I. INTRODUCTION

### A. Non-Performing Assets

The main revenue source for banks is giving loans and advances. When the payments from the loans and advances either default or are late, then that is called non-Performing assets. Non-Performing assets are bad for banks or institutions.

There are different rules by different countries regarding the recording of non-Performing assets. Generally, there is a certain stipulated period, after which an asset is recorded as non-Performing. Banks are strictly regulated by governing bodies as they deal with public money, so if non-performing asset increases at an alarming rate, then it triggers the regulators to take strict action against the management of the bank.

Reserve Bank of India defines Non-Performing Assets as any advance or loan that is overdue for more than 90 days. "An asset becomes non-performing when it ceases to generate income for the bank," said RBI in a circular form 2007.

To be more attuned to international practices, RBI implemented the 90 days overdue norm for identifying NPAs has been made applicable from the year ended March 31, 2004. Depending on how long the assets have been an NPAs, there are different types of non-performing assets as well. Asset means anything that is owned. For banks, a loan is an asset because the interest we pay on these loans is one of the most significant sources of income for the bank. When customers, retail or corporates, are not able to pay the interest, the asset becomes 'non-performing' for the bank because it is not earning anything for the bank. Therefore, RBI has defined Non-Performing Assets as assets that stop generating income for them.

- 1) *Definition:* Reserve Bank of India, "an asset, including a leased asset, becomes non performing when it ceases to generate income for the bank".
  - a) A Non-performing asset (NPAs) is a loan or an advance where;
  - b) Interest and/ or instalment of principal remains overdue for a period of more than 90 days in respect of a term loan,
  - c) The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
  - d) The instalment of principal or interest there on remains overdue for two crop seasons for short duration crops,
  - e) The instalment of principal or interest thereon remains overdue for one crop season for long duration crops,
  - f) The amount of liquidity facility remains outstanding for more than 90 days, in respect of a securitization transaction undertaken in terms of the Reserve Bank of India (Securitization of Standard Assets) Directions, 2021
- 2) *Stressed Asset:* The loan is taken by the company on its assets from the bank. When the asset is not performing because they become doubtful and NPAs from doubtful become bad loans. Before the period of 90 days, they are called Stressed Assets. Stressed assets= NPAs + Restructured loans + Written Off Assets
- 3) *Definition as per Narasimham Committee:* Narasimhan Committee clearly defined that an asset may be treated as Non-performing Asset (NPAs), if interest or instalments of principal or both remain unpaid for a period of more than 180 days. However, with effect from March 2004, default status is given to a borrower account if dues not paid for a period of 90 days. According to the prudential norms, an asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank.
- 4) *Definition as per RBI Guidelines:* RBI guidelines defined that Non-Performing Assets consist of sub-standard assets, doubtful assets and loan assets. Any asset usually turns as Non-Performing Assets when it fails to yield income during a certain period. Definition according to SARFAESI Act, 2002 The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002

Non-performing Assets as an asset or account of a borrower, which has been classified by a bank or financial institution as sub-standard, doubtful or loss assets in accordance with the direction or guidelines relating to asset classification issued by the RBI.

**B. Conceptual Framework of Non-performing Assets (NPAs):**

The concept of NPAs came in India after reforms in the financial sector were introduced during 1991 by Reserve Bank of India to reflect a bank’s actual financial health as per the recommendations made by Committee on Financial System headed by Shri. M. Narasimham. When an asset could not generate any income or returns for the bank during specified period of time is known as Non-performing Asset. It is classified by financial institutions for loans and advances in books of lender in which there is no payment of interest and principal have received and are past due. If an account remains overdue for more than one month, it indicates as red signal and if it remains overdue for more than two months, it will turn into NPAs. Due to this reason, Reserve bank of India created with category of Special Mention Account (SMA) which exhibit sign of incipient stress from borrower default to pay their debt obligations within mentioned days.

SMA Category	Classification basis
SMA0	Overdue up to 30 days
SMA1	Overdue for 31 to 60 days
SMA2	Overdue for 61 to 90 days

Source: RBI Circular, press Release. 2007

As, per RBI guidelines, banks should classify their assets into Performing and Non-performing Assets. Performing assets are Standard assets and non-Performing assets are substandard asset, Doubtful asset, and Loss Asset.

Performing Assets	
Standard Asset	Normal Flow of Income and bank hold only normal risk
Non-Performing Assets	
Sub-standard Asset	Do not generate income which default from 90 days to 2 years
Doubtful Asset	Account which defaults for more than 2 years
Loss Asset	Account which identified as 100% loss.

Asset quality is considered as significant indicators for financial health. Therefore, banks should put proper mechanism for early detection of signs of distress at individual account level and in segment level like asset class, industry, geographic and size etc. (Dipesh shah 2020, Madhuri Thakur 2021, Debbarma et al. 2021)

**C. Narasimham Committee- First Report-Highlights**

Narasimham Committee clearly defined that an asset may be treated as Non performing Asset (NPAs), if interest or instalments of principal or both remain unpaid for the for a period of more than 180 days. However, with effect from March 2004, default status is given to a borrower account if dues not paid for a period of 90 days.

Definition according to Prudential Norms: According to the prudential norms, “An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank”.

Definition as per RBI Guidelines: RBI guidelines defined that NPAs consist of

- 1) Sub-standard assets,
- 2) Doubtful assets and
- 3) Loan assets.

Any asset usually turns as NPAs when it fails to yield income during a certain period. Definition according to SARFAESI Act, 2002 The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 defined “Non-performing Assets as an asset or account of a borrower, which has been classified by a bank or financial institution as sub-standard, doubtful or loss assets in accordance with the direction or guidelines relating to asset classification issued by the RBI”.

From the recommendation of Committee on Banking Sector: Reforms (CBSR) to evaluate the bank’s capability, there are some precise indicators been used by selecting seven parameters for assessing a bank’s strength and weakness focusing on three major factors which are solvency, earning capacity and profitability.

(i) Solvency	(a) Capital Adequacy Ratio (b) Coverage Ratio
(ii) Earning Capacity	(a) Return on Assets (b) Net Interest Margin
(iii) Profitability	(a) Ratio of Operating profit to average working funds (b) Ratio of cost to income (c) Ratio of staff cost to net interest income (NII) + all other income

#### D. Origin Of The Present Non-Performing Assets Crisis

The origin of the crisis lies partly in the credit boom of the years 2004-05 to 2008-09. In that period, commercial credit ('non-food credit') doubled. It was a period in which the world economy as well as the Indian economy were booming. Indian firms borrowed furiously in order to avail of the growth opportunities they saw coming. Most of the investment went into infrastructure and related areas: telecom, power, roads, aviation, steel. Businessmen were overcome with exuberance, partly rational and partly irrational. They believed, as many others did, that India had entered an era of 9% growth. Thereafter, as the Economic Survey of 2016-17 notes: Many things began to go wrong. Thanks to problems in acquiring land and getting environmental clearances, several projects got stalled. Their costs soared. At the same time, with the onset of the global financial crisis in 2007-08 and the slowdown in growth after 2011-12, revenues fell well short of forecasts. Financing costs rose as policy rates were tightened in India in response to the crisis. The depreciation of the rupee meant higher outflows for companies that had borrowed in foreign currency. This combination of adverse factors made it difficult for companies to service their loans to Indian banks.

- 1) Tightening norms made us clear in finding Exact Problem:
- 2) For every loan given out, the banks to keep aside some extra funds to cover up losses if something goes wrong with those loans. This is called provisioning.
- 3) Provisioning Coverage Ratio (PCR) refers to the funds to be set aside by the banks as fraction to the loans.
- 4) Provisioning basically means that the banks estimate that a particular borrower may not be able to pay back the loan in full and hence make a provision of the amount they could lose (as in that won't be paid back to banks).
- 5) Banks start creating provisions on a loan given when the borrower starts defaulting on his repayment instalments.
- 6) Higher Non-Performing Assets mean higher provisions on the part of banks. Provisions rose to a level where banks, especially PSBs, started making losses. Their capital got eroded as a result.
- 7) Capital from the government was slow in coming and it was barely adequate to meet regulatory norms for minimum capital.
- 8) Without adequate capital, bank credit cannot grow. Even as the numerator in the ratio of gross Non-Performing Assets /advances rose sharply, growth in the denominator fell. Both these movements caused the ratio to shoot up to a crisis level. Once Non-Performing Assets happen, it is important to effect to resolve them quickly. Otherwise, the interest on dues causes Non-Performing Assets to rise relentlessly.

#### E. Various Committee Reports On Non-Performing Assets

- 1) *Narsimham Committee – Reform I (1991)*: The development of the financial sector is a major achievement and it has contributed significantly to the increase in our savings rate, especially of the household sector. The terms of reference were to examine the existing structure of the financial system and its various components and to make recommendations for improving the efficiency and effectiveness of the system with particular reference to the economy of operations, accountability and profitability of the commercial banks and financial institutions.
- 2) *Khan Committee on Financial Reforms (1997)*: RBI had constituted a 7 member Working Group on 15th Dec. 1997 under the Chairmanship of Shri S.H. Khan, Chairman and Managing Director of IDBI, keeping in view the need for evolving an efficient and competitive financial system. The terms of reference were to review the Role, Structure and Operations of DFIs and Commercial Banks in the 56 emerging operating environment and suggest changes and to examine whether DFIs could be given increased access to short term funds and the regulatory framework needed for the purpose.
- 3) *Tarapore Committee on Capital A/c Convertibility (1997)*: The Union Finance Minister, Shri P. Chidambaram, in his Budget Speech for 1997-98 had indicated that the regulations governing foreign exchange transactions need to be modernized and replaced by a new law consistent with the objective of progressively liberalizing capital account transactions. Committee on Capital Account Convertibility under the Chairmanship of Shri S.S. Tarapore was appointed.

The terms of reference were to review the international experience in relation to Capital Account Convertibility and to indicate the preconditions for introduction of full Capital Account Convertibility and to specify the consequences and time frame in which such measures are to be taken.

- 4) *Pannir Selvam Committee on NPAs (1998)*: Banking Division constituted a 3 Member Committee under the chairmanship of Shri A.T. Pannir Selvam, Chairman, IBA and Chairman & Managing Director, Union Bank of India. The terms of reference assigned to the above Committee were Causes of NPAs, factors for slump in recovery of loans; measures to be taken for effective recovery of bank dues and reduction of NPAs and banks wise study on factors responsible for the NPAs and banks specific suggestions for recovery. 57
- 5) *Narsimham Committee-Reform II (1998)*: Reform of the Indian banking sector is now under way following the recommendations of the Committee on Financial System (CFS), which reported in 1991. The second generation of reform could be conveniently looked at in terms of 3 broad interrelated issues and actions that need to be taken to strengthen the foundation of the banking system and structural changes in the system suggested capital adequacy, asset quality, prudential norms, systems and methods in banks.
- 6) *RBI Panel on DRT's (1998)*: The RBI had set up Working Group in the month of March 1998 to review the functioning of Debt Recovery Tribunals under the Chairmanship of Shri N.V. Deshpandey. The objectives of the panel were to look into various issues and problems confronting the functioning of DRTs in expeditious recovery of banks dues and to examine the existing statutory provisions and suggest necessary amendments to the Recovery of Debts due to Banks and Financial Institutions Act, 1993 and Rules framed there under with a view to improving efficacy of legal machinery.
- 7) *Tandon Committee Report*: Tandon Committee Report (1975) The committee was set up to supervise the bank credit and to ensure proper end use of funds and asked to make recommendations for obtaining periodical forecasts from the customers of their business, production plans, their credit needs and their ultimate utilization. The same is to be conveyed to the RBI by the respective bank.

The author finds that the phenomenon of banks' sanctioned credit limits exceeding their deposits has perhaps disappeared and this phenomenon cannot be attributed to the existence and predominance of the cash credit system of bank lending. There has been an improvement in the utilisation of sanctioned credit limits. The importance of the cash credit system has not at all declined and there has not been any progress in the use of bill finance system. No noticeable and consistent decline in inventory levels has occurred, and while norms have been well implemented in respect of finished goods inventories, they have been only partially implemented in respect of raw materials inventories and receivables. The ratio of bank borrowings to inventories has tended to increase rather than decrease and the actual level of bank finance for working capital requirements has tended to exceed the maximum permissible bank borrowings under method II. Finally, the quarterly budgeting system has mostly been unimplemented by banks and their customers.

#### F. Problems Due To Non-Performing Assets

- 1) Promoter and Owners are unable to get required market return on their capital if the bank fails.
- 2) Lender to the bank i.e., depositors do not receive a market return on saving.
- 3) In this case the banks redistribute losses to other borrowers by charging higher interest rates, lower deposit rates and higher lending rates repress saving and financial market, which hamper economic growth.
- 4) Non-performing loans exemplify bad investment.
- 5) Non-performing asset may spill over the banking system and contract the money stock, which may lead to economic contraction.

#### G. Causes for Non-Performing Asset (NPAs)

- 1) Borrower
  - a) Too ambitious Project
  - b) Heavy borrowing
  - c) Poor credit collection
  - d) Poor quality management
  - e) Willful Default
  - f) Depend on Single customer
  - g) Fail to bring required Fund
  - h) Lack of Proper Planning

- 2) *Bank*
  - a) Poor credit appraisal
  - b) Non inspection of unit
  - c) Defective lending process
  - d) Lack of trained staff
  - e) System overloaded
  - f) Lack of commitment to recovery
  - g) Lack of technical support
  - h) Inefficient recovery system
- 3) *Other*
  - a) Lack of infrastructure
  - b) Lack of Government support
  - c) Government policies
  - d) Changes related to Banking amendments
  - e) Natural Calamities
  - f) Recession and variation in economic conditions.

#### *H. Impact Of Non-Performing Assets*

NPAs impact the performance and profitability of banks. The most notable impact of NPAs is change in banker 's sentiments which may hinder credit expansion to productive purpose.

Banks may incline towards more risk-free investments to avoid and reduce riskiness, which is not conducive for the growth of economy. If the level of NPAs is not controlled timely they will:

- 1) Reduce the earning capacity of assets and badly affect the ROI.
- 2) The cost of capital will go up.
- 3) The assets and liability mismatch will widen.
- 4) Higher provisioning requirement on mounting NPAs adversely affect capital adequacy ratio and banks profitability.
- 5) The Economic Value Added (EVA) by banks get upset because (EVA =Net operating profit -Cost of capital).
- 6) NPAs causes to decrease the value of share sometimes even below their book value in the capital market.
- 7) NPAs affect the risk facing ability of banks. Reduce the earning capacity of assets and badly affect the ROI.
- 8) The cost of capital will go up.
- 9) The assets and liability mismatch will widen.
- 10) Higher provisioning requirement on mounting NPAs adversely affect capital adequacy ratio and banks profitability.
- 11) NPAs causes to decrease the value of share sometimes even below their book value in the capital market.
- 12) NPAs affect the risk facing ability of banks

#### *I. Non-Performing Assets with Respect to SARFAESI Act, 2002*

Non-Performing Assets is a banking jargon for bad loans. The management of NPAs by Indian banks has improved substantially post liberalization. Various reasons can be attributed to the same, like the establishment of the Debt Recovery Tribunals (DRTs), the adoption of the Corporate Debt Restructuring (CDR) mechanism etc.

A significant event in Non-Performing Assets management is the passage of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, (SARFAESI) in 2002.

This act of SARFAESI has helped banks and financial institutions manage their NPAs better. The lenders can now auction properties (residential and commercial) after giving sufficient notice, when the borrowers fail to repay their loans.

Though the SARFAESI Act was challenged in the courts, the Supreme Court upheld the Act (Mardia Chemicals v/s ICICI Bank) in 2004 tilting the balance for the banks.

The RBI has also been encouraging banks to use the provisions of the SARFAESI Act.

The ratio of Gross as a percentage of Total Assets has fallen from 12% in 1993 to about 2.5% as on March 31, 2011.

Thus, in post liberalization, banks have reduced their NPAs. However, with the current slow-down in the Indian economy, there is a worry that NPAs will rise again.

### J. Risk Management Through Basel I & II Point Of View

Basel I was adopted by banks globally in 1988. However, it suffered from the disadvantage that it was based on a one-size approach to all banks. Therefore, a need was felt for a better methodology - the Basel II. There were three pillars of Basel II: minimum capital requirements, supervisory review, and market discipline.

The purpose of Basel II, which was initially published in June 2004, thus was to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of credit, interest, market and operational risks banks face while maintaining sufficient consistency so that this does not become a source of competitive inequality amongst internationally active banks. In this context, the Capital Adequacy Ratio (CAR) is important.

It may be noted that alternatively CAR is also called **Capital to Risk Weighted Assets ratio** (CRAR) in conformation with the BASEL II accord. CRAR is the measure of the amount of bank's capital expressed as a percentage of its weighted assets. In simple term, the bank's is the cushion of potential losses, which protects the depositors. In case of Indian banks, the CRAR has shown consistent improvement in post liberalization. It has gone up by a significant 2.3% in just four years from 12.3% in 2005-06 to 14.6% in 2009-10. This again can be attributed to the improved risk management practices and prudential RBI norms followed by Indian banks.

#### 1) Recovery Action Against Large Non-Performing Assets

Among the various channels of recovery available to banks for dealing with bad loans, the SARFAESI Act and the Debt Recovery Tribunals (DRTs) have been the most effective in terms of amount recovered. The amount recovered as percentage of amount involved was the highest under the DRTs, followed by SARFAESI Act. The RBI has directed the PSBs to examine all cases of willful default of Rs. One crore and above and file criminal cases against willful defaulters. The board of directors are requested to review NPAs accounts of one crore and above with special reference to fix staff accountability in individually.

#### 2) Sale And Purchase Of Non-Performing Assets

For providing an additional option and developing a healthy secondary market for NPAs, guidelines on sale/purchase of NPAs were issued in July 2005. The sale/purchase of NPAs covers the procedure for purchase/sale of **Non-Performing Financial assets** (NPPFA) by banks, including valuation and pricing aspects; and prudential norms relating to asset classification, provisioning, accounting of recoveries, capital adequacy and exposure norms and disclosure requirements.

#### 3) Asset Reconstruction Company (Arc)

Asset Reconstruction Companies world-wide can be classified into: (i) Government owned/supported ARC; (ii) Bank owned ARC workout units and bad bank models; (iii) Private Sector ARCs. India follows the Private sector ARC structure, where ARC may be set up by lenders, specialized investors in non-performing loans (NPLs) or corporations 31.

This empowerment encouraged the three major players in Indian banking system, namely, State Bank of India (SBI), ICICI Bank Limited (ICICI) and IDBI Bank Limited (IDBI) to come together to set-up the first ARC.

Asset Reconstruction Company India Limited (ARCIL) was incorporated as a public limited company on February 11, 2002 and obtained its certificate of commencement of business on May 7, 2003.

In pursuance of Section 3 of the Securitization Act 2002, it holds a certificate of registration dated August 29, 2003, issued by the Reserve Bank of India (RBI) and operates under powers conferred under the Securitization Act, 2002. ARCIL is also a "financial institution" within the meaning of Section 2 (h) (a) of the Recovery of Debts due to Banks and Financial Institutions Act, 1993 (the "DRT Act"). ARCIL is the first ARC in the country to commence business of resolution of non-performing assets (NPAs) upon acquisition from Indian banks and financial institutions. As the first ARC, ARCIL has played a pioneering role in setting standards for the industry in India.

## II. REVIEW OF LITERATURE

Literature maps use graphic techniques of shaping and grouping written information into categories for a research project, presentation or learning exercise.

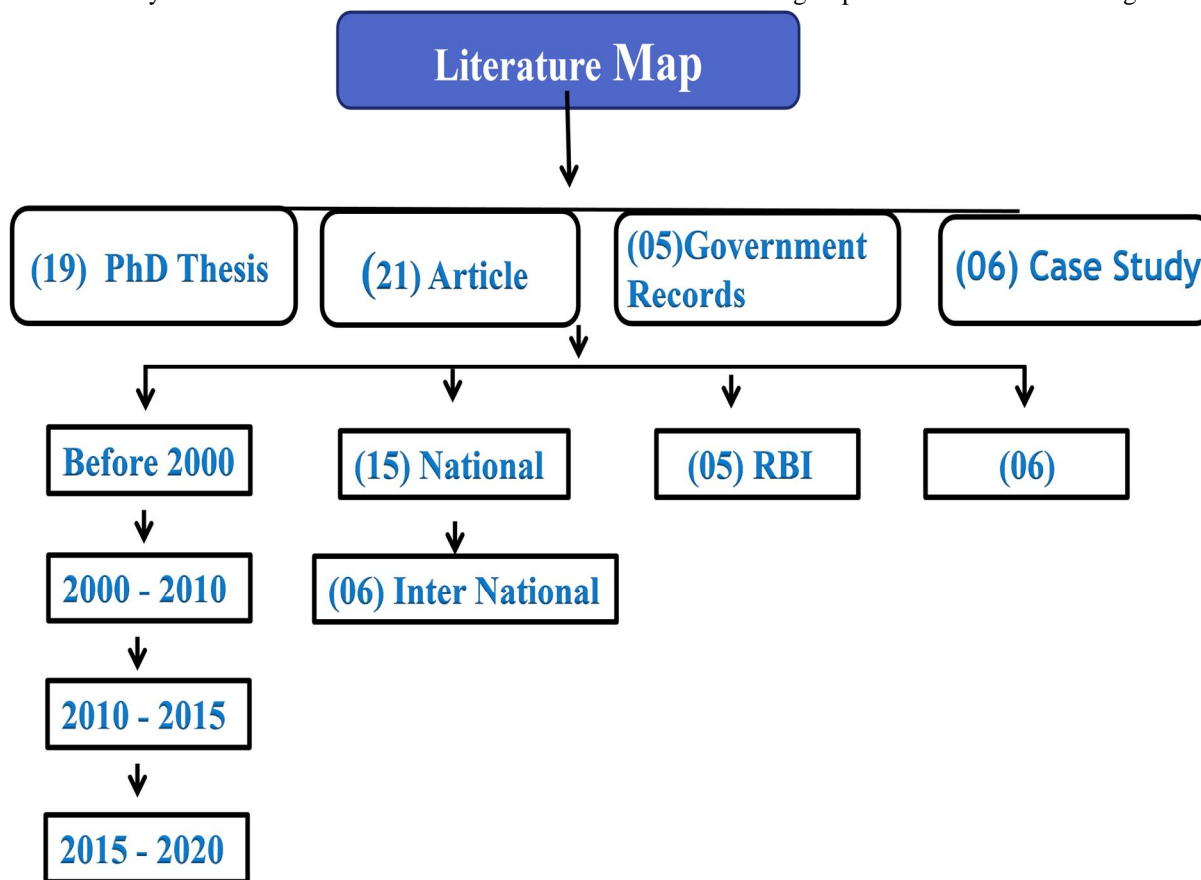
The process of mapping helps the mind visualize relationships and connections from any type of literature such as works with artistic merit or a body of reviewed texts for technology and business studies or for the social, behavioral and physical sciences. Research Scholars use literature maps to organize and synthesize the literature reviewed for a research paper, thesis or dissertation.

The Research Observatory shows how to map the literature reviewed for this project into key concepts and reference texts numerically.

This type of mapping saves space and allows some texts to be listed in different categories.

**A. Constructing A Literature Map Helps In**

- 1) Develop your understanding of the key issues and research findings in the literature. to organize ideas in your mind.
- 2) To see more clearly how different research studies relate to one another and to group those with similar findings



**B. Thesis**

- 1) *Increasing non-performing assets & its impact on the profitability of banks during the Pandemic-2019. Bhramar Koche, 30-06-2021, Research paper*

Assets become non-Performing asset when it stops generating returns for the bank. The non-performing assets significantly impact the financial performance of the banks especially during the pandemic 2019. Thus non-performing assets is very important to be considered while measuring the financial performance of any financial institution and NPAs has shown a huge grown owing to the adverse situation due to the Covid-19 pandemic all over the world. Irrespective of the fact that the banks disburse credit utmost precautions still they are widely facing the issues of non- Repayment of loans and advances leading to increasing non-performance assets. The Research is based on the secondary data retained from annual reports of the banks, report of trend and progress of banking in India, handbook of RBI and research journal. This research aims to determine the impact of non-performing assets on the profitability of selected banks in India.

- 2) *The Origins of India's NPAs Crisis Lakshita Jain Nirupama Kulkarni, October 8, 2019*

The Stressed Assets Resolution Framework in India as of late 2016, Indian banks did not have access to an effective and comprehensive bankruptcy apparatus. In the absence of a legal framework for resolving stressed loans, not being serviced in accordance with the terms of the original contracts, especially in times of widespread economic distress, the central bank resorted makeshift arrangements that mimicked formal bankruptcy laws with out-of-court resolutions.

A cross-country study ranked India very low in terms of recovery prospects and time. Debts Recovery Tribunals (DRTs) were set up under the Recovery of Debts Due to Banks and Financial Institutions (RDBFI) Act, 1993 to help banks and financial institutions recover their dues speedily without being subject to the lengthy procedures of usual civil courts.

The oldest measure in the 2000s was the SARFAESI Act which allowed banks and other financial institutions to auction off residential or commercial properties (of Defaulter) to recover loans.



- 3) *A critical review of non-performing assets in the Indian banking industry Varuna Agarwala, Nidhi Agarwala, 28 November 2019.*

Purpose; The level of non-performing assets (NPAs) best indicates the soundness of the banking sector of a country. The purpose of this study is an effort to look into the contribution of the different banks individually to the NPAs in the industry by looking into its growth pattern during the period 2010-2017. Further, the study is made to look into the effect of different groups of banks, namely, State Bank of India (SBI) and its associates, nationalized banks and private sector banks on the banking industry in this regard.

- 4) *Is the efficiency of banks degenerating Due to the mounting of Non-performing Assets? An empirical Investigation using DEA, Sudarshan Maity, Tarak Nath Sahu, 01-12-2019*

The Institute of cost Accounts of India Department of Commerce, Vidyasagar University West Bengal, India. West Bengal, India.

- a) *Introduction:* Indian banking system is saddled with bad loans which have resulted in huge losses. Profitability remains a concern due to the rise of NPAs. Investors should not expect high reporting profits from banks due to the ascending provision of the NPAs. Banks are not performing well and they may not be much efficient due to the rise of NPAs daily. Using data envelopment analysis, the present study intends to assess technical efficiency of banks. As the requirement of homogeneity is fulfilled, the input oriented CCR model is applied.

The study finds that the number of efficient banks has shortened and the average overall technical efficiency of selected banks moves downward throughout the study period. It also reveals that the inefficiency is mostly due to the upward trend of NPAs. Asset quality plays the most crucial role toward the performance of banking sector. Thus, banks and regulators should control the upward trend of NPAs to enhance the efficiency level.

- b) *Conclusion:* In order to focus on the efficiency level of the Indian banking sector due to the enhancement of NPAs, the present study has applied the DEA model. The results of this empirical analysis show that there is a downtrend in the efficiency level due to the rise of NPAs.

- 5) *A Study on Operational Performance and Status of Non-Performing Assets of Foreign Banks in India, Dr M. Jegadeeshwaran, 2019 Bharathiyar University*

Tightening of Prudential Norms in Indian banking industry to reach international standard clearly demonstrates intention of RBI in containing growth in NPAs. With continued global recession, volatility in market driven factors and changes in socio-economic environment of the country, restoration of asset quality has gained paramount importance. NPAs is one of the most important banking variables, which is having direct influence over the health and prospect of the monetary system in an economy. NPAs have inevitable burden on the banking industry.

- a) *Conclusion:* The level of NPAs is high in Citi bank, SCB, and Deutsche bank among other select foreign banks in India. The foreign banks profitability is satisfactory and also restricted to expand their business in India is the huge priority sector requirement. the study concludes that the banks should take essential steps to curtail the mounting NPAs. This will allow the overall development of the economy and carry hope among the investors across the world in the Indian economy.

### C. Article/ Journal

- 1) *Write-offs in Covid year helped banks reduce bad loan RBI (29/12/2021)*

The central bank said some of the policy measures taken by the RBI in response to the pandemic reached the pre-announced sunset dates in 2021-22. THE BANKING sector managed to improve asset quality during the Covid year with the ratio of gross non-performing assets to advances declining from 8.2 per cent at March-end 2020 to 7.3 per cent at March-end 2021 — and further to 6.9 per cent at September-end 2021, according to a new report by Reserve Bank of India (RBI). According to “Report on Trend and Progress of Banking in India 2020-21”, loan write-offs were the predominant recourse for lowering gross NPAs in 2020-21. This improvement was also driven by lower slippages, partly due to the asset classification standstill, it said. In absolute terms, gross NPAs declined to Rs 8,37,771 crore in March 2021 from Rs 8,99,803 crore in March 2020. NPAs worth Rs 4 lakh crore were added during the year while bad loans of Rs 2.08 lakh crore were written off by banks.

- 2) *The Need for Increased Policy Support for Reviving the Lending Appetite of Banks. K Srinivasa Rao, 25 Dec, 2021 Economic and Political Weekly*

The flow of bank credit is crucial to revive the economy. The fear of potential asset quality woes has reduced the risk appetite of banks. Going beyond the restructuring support, banks need policy support by relaxations in prudential norms in the near term to be normalized in the next four–five years. Coping with the adversities of the pandemic needs a collaborative policy support of all stakeholders to step up the lending appetite.

3) *A Method with Limitations Bank Recapitalisation Bonds for Government-owned Banks. Errol D' Souza, Astha Agarwal 02 Oct, 2021*

Introduction; Weak balance sheets of public sector banks warrant infusion of equity capital by the government. Recapitalization is liquidity neutral for the government when financed via an issue of government securities that a recapitalized bank is mandated to purchase. Bank balance sheets at the time of recognition of non-performing assets and the associated negative net worth is equivalent to that when the bank receives equity through this liquidity neutral mode of financing. Correspondingly, the fiscal deficit is higher than reported the moment a state-owned bank has negative net worth and there are negative feedback loops between the fiscal and banking systems.

4) *Effective Credit Processing and Administration as a Panacea for Non-performing Assets in the Nigerian Banking System*

Lending remains one of the major functions of banks in all economies. In fact, interest charged on loans and advances today constitute a sizeable part of banks' earnings. However, the possibility of failure of loans creates nightmares for not only the borrower and lender, but also poses a serious setback to the economy. This paper identifies non-performing credit as a major threat to the profitability of banks in Nigeria. It reviews some of the past studies on the concepts of credit, evaluations of credit requests of customers and presents certain probing questions to which any prudent banker must find satisfactory answers before extending the credit facility. It emphasizes that bankers should embrace the new concept of credit rating/scoring recently enunciated by the Central Bank of Nigeria.

5) *NPAs: A Failure of Neo-liberal Policy C P Chandrasekhar and Jayati Ghosh, 2nd August 2021*

Engineering Banking sector growth and recovery Introduction; As of March 2017, corporate borrowers accounted for 87% of NPAs. C P Chandrasekhar and Jayati Ghosh write that government attempts to have the loans repaid have failed. Debtors try to prevent liquidation, and the government does not force the issue, for fear of a backlash by the business class. In 2017–18, only two creditors recovered over 50% of total dues. The authors discuss the Financial Resolution and Deposit Insurance (FRDI) Act, 2017, which aims to create an independent FRDI Corporation to recover dues from failing financial firms.

#### D. Case Study

1) *The effects of interest rate spread on the level of non-performing assets: A case of commercial banks in Kenya.*

Introduction: This study sought to establish the effects of interest rate spread on the level of Non-Performing Assets in commercial banks in Kenya. This study adopted a descriptive research design on a sample of all commercial banks in Kenya operating by 2008 which are 43 in number. The study used questionnaires to collect data from primary data sources and secondary data, collected from Bank Supervision Report, to augment the primary data findings. The study used both quantitative and qualitative techniques in data analysis to the relationship between the interest rate spread and loan non-performance.

2) *Effect of Non-Performing Assets on the Profitability of Banks -A Selective Study*

Introduction: Nonperforming asset is the key term for the banking corporations. Non-Performing Assets show the efficiency of the performance of the banks. Non-Performing Assets is the amount which is not received by the bank in return of loans disbursed. The amount of Non-Performing Assets affects not only the banking industry but the total financial system and there by the economy of the country. Thus, a selective study has been done on public sector banks in India to evaluate the effect of Non-Performing Assets on the profitability of banks.

3) *Non-Performing Assets of Commercial Banks: A Case Study*

Introduction: The flagrant size of Non-Performing Assets (NPAs) has been creating panic in the banking industry. With a view to overcoming the menace of NPAs, various research studies have been conducted in India and abroad. Several groups, from time to time, made many recommendations, quite many of which were accepted by the Reserve Bank of India for implementation. In a study on loan losses of the US banks, Mc Goven (1998) found that 'character' is a paramount factor of credit and a major determinant in the decision to lend money. In a study on non-performing loans in Italy, Sergio (1996) found evidence that risk of loan assets is rooted in a bank's lending policy adducing to relatively unselective and inadequate assessment of sectoral prospects.

4) *The determinants of non-performing loans: an econometric case study of Guyana*

Introduction: The study attempts to ascertain the determinants of non-performing loans in the Guyanese banking sector using a panel dataset and a fixed effect model similar to Jimenez and Saurina (2005). Consistent with international evidence we find that the real effective exchange rate has a significant positive impact on non-performing loans. This indicates that whenever there is an appreciation in the local currency the non-performing loan portfolios of commercial banks are likely to be higher. Our empirical results show that GDP growth is inversely related to non-performing loans, suggesting that an improvement in the real economy translates into lower non-performing loans.

### 5) *Analysing Non-Performing Assets in Agricultural Loans: A Case Study of India.*

Introduction; One of the keys constitutes of the financial sector in India is the banking system, which has been playing a significant role in the national economic development by providing the provision of intermediation services, the capital formation process and enhancing resources in the direction of national objectives and priorities. Since the early 1990s, the structure of the banking sector has significantly changed due to deregulation and liberalization, accompanied by divestment of public banks and entry of new private and foreign banks. These developments are expected to have important implications for operating performance and profitability in the Indian Public Sector Banks (PSBs).

#### E. *Government Records*

##### 1) *RBI releases the Financial Stability Report, 29 December 2021*

The Reserve Bank released the 24th issue of the **Financial Stability Report (FSR)**, which reflects the collective assessment of the Sub-Committee of the Financial Stability and Development Council (FSDC) on risks to financial stability and the resilience of the financial system. Highlights: The global economic recovery has been losing momentum in the second half of 2021 in the face of resurfacing COVID-19 infections, the new variant Omicron, supply disruptions and bottlenecks, elevated inflationary levels and shifts in monetary policy stances and actions across advanced economies and emerging market economies. On the domestic front, progress in vaccination has enabled the recovery to regain traction after the debilitating second wave of the pandemic, notwithstanding signs of slowing pace more recently; the corporate sector is gaining strength and bank credit growth is improving. The capital to risk-weighted assets ratio (CRAR) of scheduled commercial banks (SCBs) rose to a new peak of 16.6 per cent and their provisioning coverage ratio (PCR) stood at 68.1 per cent in September 2021. Macro stress tests for credit risk indicate that the gross non-performing asset (GNPAs) ratio of SCBs may increase from 6.9 per cent in September 2021 to 8.1 per cent by September 2022 under the baseline scenario and to 9.5 per cent under a severe stress scenario. SCBs would, however, have sufficient capital, both at the aggregate and individual levels, even under stress conditions. Emerging signs of stress in micro, small and medium enterprises (MSME) as also in the micro finance segment call for close monitoring of these portfolios going forward.

(Yogesh Dayal)

Chief General Manager

Press Release: 2021-2022/1441

##### 2) *Guidelines on purchase/sale of Non-Performing Assets RBI/2005-06/54 DBOD.NO. BP. BC. 16 / 21.04.048/ 2005-0613 July 2005*

All Commercial Banks (excluding RRBs) All India Term Lending and Refinancing Institutions All Non-Banking Financial Companies (including RNBCs) In order to increase the options available to banks for resolving their non-performing assets and to develop a healthy secondary market for non-performing assets, where securitization companies and reconstruction companies are not involved, it has been decided to issue guidelines to banks on purchase / sale of Non-Performing Assets. Since the sale/purchase of non-performing financial assets under this option would be conducted within the financial system the whole process of resolving the non-performing assets and matters related thereto has to be initiated with due diligence and care warranting the existence of a set of clear guidelines which shall be complied with by all entities so that the process of resolving non-performing assets by sale and purchase of NPAs proceeds on smooth and sound lines. Accordingly, guidelines on sale/purchase of non-performing assets have been formulated and furnished Yours faithfully,

### III. RESEARCH QUESTIONS

- 1) Will NPAs has strong hold on Profit of Banks?
  - a) What are the key parameters of banking sector measures the NPAs?
  - b) Is there any relationship between Net NPAs and Net Profit of the bank?
  - c) Which bank is better for NPAs?
  - d) Which bank is worsening for NPAs?
  - e) What are the key parameters of banking sector measures the NPAs?
  - f) Is there any relationship between Net NPAs and Net Profit of the bank?
  - g) Which bank is better for NPAs?
  - h) Which bank is worsening for NPAs?
  - i) What are the key parameters of banking sector measures the NPAs?
  - j) Is there any relationship between Net NPAs and Net Profit of the bank?
  - k) Which bank is better for NPAs?

- l) Which bank is worsening for NPAs?
- m) What are the key parameters of banking sector measures the NPAs?
- n) Is there any relationship between Net NPAs and Net Profit of the bank?
- o) Which bank is better for NPAs?
- p) Which bank is worsening for NPAs?
- 2) What are the key parameters of banking sector measures the NPAs?
- 3) Is there any relationship between Net NPAs and Net Profit of the bank?
- a) Which bank is better for NPAs?
- b) Which bank is worsening for NPAs?
- 4) Which bank is better for NPAs?
- 5) Which bank is worsening for NPAs?
- 6) What are the various reasons and the significance of each in creating NPAs?
- 7) Are Public Sector Banks still vulnerable to financial crisis than Private sector banks?

#### IV. RESEARCH GAP

An overview of the above literature shows that there are quite a few studies in the field of non-performing assets in the banking industry. However, there are no studies that look at the data till 2017, which is important and pertinent because the major piling up has been taking place after 2011 in the aftermath of the financial crisis of 2008. Moreover, the major focus of the paper is not only on groups of banks but also individual banks. This is done to identify those banks, which have been contributing more to the NPAs menace in the banking space. Hence, the article is not only relevant but also addresses a contemporary issue like NPAs. The research adds new knowledge to the banking literature, which will help readers to comprehend the position of banks in a better way. The overall findings point to a worrisome situation for the banking sector as a whole. An analysis of the growth rate in the NPAs level shows that the problem is evident not only with small-sized banks but also with big names in the banking space. Hence, the entire sector is gripped in the crisis. The poor asset for the banks is a problem because as per the guidelines, given by the RBI, banks are required to keep some amount as provision depending on their asset quality thereby leading to declining profitability of the banks.

Hence, it impacts not only the profitability level of these banks but also affects the shareholders' wealth. Thus, the time is apt that the RBI has been coming up with very stringent norms so that the growth in these assets can be put under control. The Insolvency and Bankruptcy Code of 2016 is playing an important role with regard to recovery of assets of those creditors whose case has been filed with the National Company Law Tribunal.

In fact, figures are given by the RBI point to a declining phase in the NPAs growth rate, which is a positive development. But there is still a lot to be done. Only time will say how successful has the RBI been in controlling the NPAs growth in the sector. It is necessary to pull the trigger hard as these poor loans are having a severe impact on the liquidity position of banks and even the banks have been asked to go slow with regard to lending, which is ultimately having an impact on the economic growth, which has been slow during the past few quarters.

A number of factors make the NPAs an interesting subject for study.

- 1) First, during the 1990s, India underwent liberalization of the banking sector with the objective of enhancing efficiency, productivity, and profitability (RBI, 1991).
- 2) Second, the banking sector passed through an important transformation, driven by the need for creating a market-driven, productive, and competitive economy in order to support higher investment levels and accentuate growth (GOI, 1998).
- 3) Third, studies on NPAs in banking industry in emerging economies like India has great relevance, as it dampens the bottom-lines and thereby poses a serious threat to the very existence of the most important sector in propelling the desired growth and development of the economy.

#### V. STATEMENT OF THE PROBLEM

The Indian banking sector is dominated by public sector banks (PSBs) that include SBI & its associates and nationalized banks. The post-liberalization period saw an upsurge of many private sector banks and foreign banks. One of the major objectives of banking sector reforms was to encourage operational self-sufficiency, flexibility and competition in the system and to improve banking standards in India to the international best practices.

Based Committee on Financial Sector Reforms under the chairmanship of Mr. M. Narasimham and according to the Basel requirements, various measures were implemented to liberalize the banking sector and it includes; Liberalizing rules for entry of more domestic and foreign banks, Infusion of government capital in PSB and permission to inject private equity, Deregulation of interest rate except for specific classes, Reduction of SLR and CRR requirements, Reduction in credit controls, Incorporation of broader definition of priority sector lending, Implementation of prudential measures for income recognition, asset classification and provisioning requirements, Implementing Basel based capital adequacy requirements, and Emphasis on performance, transparency and accountability and many more. Despite the various prudential measures taken from the post-liberalization period, the non-performing assets still pose an important threat to the very existence of banking. From ₹636.09 billion in 2000-01, the total gross NPAs (GNPAs) has increased to ₹979.25 billion in 2010-11 and ₹1,423.26 billion in 2011-12.

In percentage terms, Gross NPAs increased to 45.3% in 2011-12, compared to 15.7% increase during the previous year. Similarly, from ₹314.63 billion in 2000-01, the total net NPAs (NNPAs) has increased to ₹418.15 billion in 2010-11 and ₹649.75 billion in 2011-12. In percentage terms, the net NPAs increased to 55.6% in 2011-12, compared to 7.7% in the previous year. On the other hand, from ₹5,407 billion in 2000-01, the total 66 loans and advances increased to ₹42,975 billion in 2010-11 and ₹50,746 billion in 2011-12. In percentage terms, the total loans and advances increased to 18.1% during 2011-12. Gross NPAs for banks, including restructured assets, now stand close to 12 percent -- a level seen in 2002-03. The gross NPAs of 19 banks touched a high of Rs. 2.6 lakh crore in September (Rs 2.3 lakh crore in March 2015). Along with increase of NPAs, there exists an increase in the level of loan restructuring in standard advances during the study period.

The observation made by Reserve Bank of India in its annual report 2011- the period immediately following the global financial crisis, when asset quality of banks in most advanced and emerging economies took a beating, the asset quality of Indian The restructured standard advances of public sector banks (PSBs) as a percentage of gross advances 5.07% in 2009-10, 4.2% in 2010-11 and 5.92% in 2011- 12. The total NPAs written off by banks in India during the last 13 years (2000 to 2013) is ₹100,000 crores. (Chakrabarty, 2013).

- 1) The financial analysts and rating agent negative outlook on Indian banking and mentioned that the asset quality of banks would reiterate the fact that even though the post-liberalization period witnessed significant reforms in the banking sector, the asset quality explained by the level of NPAs still worries Indian banking sector, its stability and growth. Examination of published works on NPAs in scheduled commercial banks (NPAs ratio and net NPAs Ratio) to assess the asset quality and effectiveness of credit risk management.
- 2) Very few studies were conducted examining the relationship between NPAs and bank performance and macroeconomic indicators. The mediation or moderation effect of these variables on asset quality is not studied in depth.
- 3) the fresh NPAs generated during a particular year, gross NPAs generation rate and net additions to NPAs were not emphasized in assessing the asset quality,
- 4) Only a few studies were management of NPAs, and
- 5) Many measures were initiated since 2000 to effectively manage the menace of NPAs.

Further, limited studies have been done on the effectiveness of various measures taken from the post-millennium period, including 67 One Time Settlement/Compromise Scheme (2000), Debt Recovery Tribunals (originally established in 1993, significant amendment was carried out during 2003), Corporate Debt Restructuring (2001), SARFAESI (the act was passed during 2002) and Asset Reconstruction Company (ARC).

Thus, the review of literature available on NPAs highlighted the necessity to study NPAs since the post-millennium period with specific focus to examine;

- a) Whether NPAs is managed effectively in Indian banking sector particularly the public sector banks (PSBs) which holds significant share of deposits and advances of Indian banking sector.
- b) the moderating and/or mediating effect of bank performance and macroeconomic indicators on NPAs, and
- c) the major causes of NPAs and the various measures to be taken to enhance the credit risk management system in Indian banking. Indian banking industry, which was in glory phase once upon a time, has been facing a lot of challenges on non-performing assets at present scenario.

Many banks have kept their NPAs under the control but some banks are not able to control their NPAs levels. They are facing many problems. There can be various reasons behind this NPAs. Non-performing assets has been hitting the profitability of the banks or it can be said that due to NPAs, the profitability of the banks is going down day by day. In spite of various measures, NPAs level of the Bank are increasing year on years.

Problem needs to be analyzed and investigated. The substance of the Banks will be threatened depending upon the level of NPAs. If banks have many accounts that are turning out to NPAs, the existence of the bank would be difficult. The banks, which have higher, NPAs, can lose the confidence of the customer and it would affect the liquidity, profitability and solvency position of the bank.

## VI. NEED FOR THE STUDY

The Indian commercial banks have been facing serious problems of raising Non- performing Assets (NPAs). NPAs have been eating the banking industries from within, since nationalization of banks in 1969. It also affected profitability, liquidity and solvency position of the Indian banking sector. The earning capacity and profitability of banks have been adversely affected by the high level of NPAs. The reduction of NPAs in banks is posing the biggest challenges in the Indian economy.

Though NPAs are increasing in Indian banking industry and specifically in Indian public sector banks because of their compulsory lending to priority sector yet the banks have huge scope to extend credit to priority sector as the NPAs have not reached at alarming stage where they start affecting adversely the efficiency performance.

At one hand the banks provide finance for the different sectors of economy and on the other hand, they stimulate money supply in the economy on the other. So, the banking industry is expected to be strong enough to withstand the shocks like inflation, depression etc. The banks are also expected to cushion the other financial Institutions along with industries and common people against financial crisis. Also, the public sector banks having a large stake of the Government in their Capital structure are preferred by the commoners often. So, they should be able to manage their resources and liability position very keenly so that the resources are optimally utilized and liabilities are paid off regularly in order to maintain trust of the depositors. Non-Performing Assets are like a black spot in the asset side of a Bank 's Position Statement where the unrecoverable amount of assets is shown. The more it is, the more will be the amount of loss for the banks in their banking business. So, it is the hour of the need to have an analysis of NPAs position of the banks and to find if there is any significant effect of NPAs on their Net Profits.

## VII. OBJECTIVES OF STUDY

- 1) To identify the impact of Non-Performing Assets on profitability of Banks.
- 2) To study the growth and trends of Non-Performing Assets in selected Public and Private Sector Banks.
- 3) To identify the remedies for reduction of Non-performing Assets.
- 4) To study the relationship between Non-Performing Assets with the lending norms of selected banks.
- 5) To Study the Challenges faced by public and private sector banks to minimize Non-Performing Assets.

## VIII. HYPOTHESIS

- 1) Ho: There is no impact of NPAs on Net Profit of the selected banks.  
H1: There exists significant impact of NPAs on Net Profit of the selected banks.
- 2) Ho: There exist specific reasons for growth of NPAs.  
H1: There is no specific reason exist for the growth of NPAs.
- 3) Ho: There exists the strong relationship in designing recovery strategies and reduction of NPAs.  
H1: There is no existence of strong relationship in designing recovery strategies and reduction of NPAs.
- 4) H0: There is no relationship between NPAs and the lending norms of the Banks.  
H1: There is a relationship between NPAs and the lending norms of the Banks.

## IX. RESEARCH METHODOLOGY

Methodology relates to plan of study, which includes steps of data collection, types of Questionnaires, process of data and finally interpretation of data is collected from public Sector Banks, Private Sector Banks,

This research will use Secondary sources in order to explain the Non-Performing Assets of public and private sector banks in India. Statistics on NPAs and various NPAs indicators during post-millennium period (from 2015-16 to 2021-22) along with selected bank performance indicators and macroeconomic variables will be utilized in order to study the movement of NPAs, its relationship with selected variables, and efficiency of management of NPAs during post-millennium period. In order to examine the magnitude and dimensions of NPAs of banks, the relevant literature such as articles, published books and reports including RBI sources will be considered as source of information.

The analysis of NPAs as also its dimensions, obviously, will be at-the aggregate industry level. However, in order to get insights into the various dimensions of NPAs, a comparative analysis of NPAs of commercial bank and private sector banks will be attempted.

The study is descriptive research based on collection of secondary data. The information relating to details of various aspects of NPAs and management of it, it will be collected from web sites and other secondary sources.

The present study is designed to be a narrative study with appropriate analytical discussions presented in tune with the proposed objectives. For the present purpose, five banks from public sector and five from the private sector have been selected purely considering the bank's profitability current performance based on banks. In each sector, one bank from the high performing group and the other from the low performing group will be picked up on random basis. Accordingly, SBI, UBI, PNB, Canara Bank and IOB from the public sector, while ICICI, South Indian Bank, HDFC, Karnataka Bank and AXIS bank from the private sector have been selected and performance figures of these banks will be used for the comparative analysis.

## X. CHAPTER SCHEME

- 1) *Chapter One:* Introduction – This chapter comprises of the broader perspectives of the research and includes a statement of the problem, rationale of research, the specific objectives of the research, various hypotheses used in the research, research methodology and various limitations of the research.
- 2) *Chapter Two:* Review of Literature - This chapter reviews the existing literature on non-performing assets. The literatures were classified into
  - a) Studies on Non-Performing Assets in Indian context, and
  - b) Studies on Non-Performing Assets in International context.
- 3) *Chapter Three:* Indian Banking Sector: An Overview – This chapter is about Indian Banking Sector, its background and development phases. The major changes in Indian banking sector since the post - liberalization period is explained. As well, the development of Indian banking sector during the study period in terms of number of branches, offices, deposits and advances are explained. Scenario of Non-Performing Assets against public and private sector banks at presents is presented in broader sense.
- 4) *Chapter Four:* Non-Performing Assets: A Theoretical Approach – The focus of this chapter is on the conceptual core, the non-performing Assets. The term Non-Performing Assets is defined along with detailed evaluation of various reasons for Non-Performing Assets, its impact on different stakeholders and its management in the post -liberalization period.
- 5) *Chapter Five:* Non-Performing Assets in Indian Banking Sector – This chapter deals with analysis of statistical data on Non-Performing Assets Also, the chapter explains the moderating and mediating role of bank performance indicators and macroeconomic indicators on NPAs of public sector banks.
- 6) *Chapter Six:* Incidence of NPAs: Causes, Impact and Management –This chapter essentially validates the findings of secondary data analysis based on primary data collected from bankers.
- 7) *Chapter Seven:* Findings, Recommendations and Conclusion: The chapter briefs the various findings and put forward significant recommendations to mitigate the effects of Non-Performing Assets. In addition, the chapters narrate the major contributions of this research and possible directions for future research is also included.

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