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# An Analysis of NPAs Management in PSBs, PVTSBs and FBs

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# Abstract

Non-Performing Assets (NPAs) are one of the biggest challenges facing the global banking system, and particularly Indian banks. Some years before these banks were in flourishing heights, but health of these banks deteriorated because of NPAs. Many Indian banks have been controlled their NPAs up to a level, but some banks still have been failed to control their NPAs. As a result, NPAs hitting the profitability, liquidity and solvency, in addition to posing threat on quality of asset and survival of these banks. It involves the necessity of provisions, which reduces the overall profits and shareholders' value. The problem of NPAs is not only affecting the banks but also the whole economy. In fact high level of NPAs in Indian banks is nothing but a reflection of the state of health of the industry and trade. It is essential to trim down NPAs to improve the financial health in the banking system. In the background of these developments, this study strives to examine the state of affair of the NPAs of the Public Sector Banks (PSBs), Private Sector Banks (PVTSBs) and Foreign Banks (FBs) in India. The study is based on the secondary data retrieved from "Statistical Tables Relating to Banks in India". This paper analyses the position of NPAs in PSBs, PVTSBs and FBs for the period of 2009-10 to 2014-15. **Keywords :** Non-Performing Assets, Profitability, Liquidity, Public Sector Banks, Private Sector Banks, Private Sector Banks and Foreign Banks.

# 1. INTRODUCTION

NPAs can be defined as a loan or an advance where payment of interest or repayment of installment of principal (in case of term loans) or both remains unpaid for a certain period. In India, the definition of NPAs has changed over time. According to the Narasimham Committee Report (1991), those assets (advances, bills discounted, overdrafts, cash credit etc.,) for which the interest remains due for a period of four quarters (180 days) should be considered as NPAs. Subsequently, this period was reduced, and from March 31, 2004 onwards when interest or principle payments due to a bank remains unpaid for more than 90 days, the entire bank advance automatically turns into NPAs. If NPAs not controlled timely will reduce the earning capacity of assets and badly affect the Return on Investment (ROI). The cost

of capital will go up, the assets liability mismatch will widen, higher provisioning requirement on mounting NPAs adversely affect capital adequacy ratio (CRAR) and banks profitability. Economic value added (EVA) by banks will get upset because EVA is equal to the net operating profit minus cost of capital. NPAs cause to decrease the value of share sometimes even below the book value in the capital market and affect the risk facing ability of banks. Ever mounting NPAs, Risk management and Basel II norms, Consolidation, Mergers and Acquisitions, overseas expansion, technology changes, government reforms, skilled manpower and consumer protection etc. are the major challenges and problems being faced by the Indian banking Industry during last decades due to competitive environment and adoption to the international best practices. The PSBs and PVTSBs are now facing acute

competition from the FBs who are trying to tap the Indian domestic market after adoption of economic reforms. In spite of the overall growth in business of PSBs and PVTSBs, particularly in advancing loan in much liberal manner, the number of defaulters is also increasing from time to time. So it seems highly important to have a study on the management of NPAs in banking sector. Thus, a need arise to study the concept of NPAs and its trend over a period of years for PSBs, PVTSBs and FB in India.

# 2. CLASSIFICATION OF NPAs

## Standard assets

Standard assets are the ones in which the bank is receiving interest as well as the principal amount of the loan regularly from the customer. It is also very important to note that in this case the arrears of interest and the principal amount of loan do not exceed 90 days at the end of financial year. If asset fails to be in category of standard asset that is amount due more than 90 days then it is NPAs and NPAs are further need to classify in sub categories.

- (i) **Sub-standard assets:** with effect from 31 March 2005, a substandard asset would be one, which has remained NPAs for a period less than or equal to 12 month.
- (ii) Doubtful assets: With effect from March 31, 2005 an asset would be classified as doubtful if it remained in the sub standard category for 12 months.
- (iii) Loss assets : A loss asset is one which is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted- although there may be some salvage or recovery value. Also, these assets would have been identified as "Loss Assets" by the bank or internal or external auditors or the RBI inspection but the amount would not have been written-off wholly.

# 3. CAUSES OF NPAs

The causative factors for rising NPAs in the banks are 3 'B's i.e. Business Environment, Borrower and Banker. These causes are elaborated on next page.

Standard Assets	<ul> <li>(a) Direct advances to agricultural and SME sectors at 0.25%;</li> <li>(b) Residential Housing loans beyond Rs. 20 lakh at 1%;</li> <li>(c) Commercial Real Estate loans at 1%.</li> <li>(d) All other advances not included in (a), (b) and (c) above, at 0.40% (Tier II), 0.25% (Tier I)</li> </ul>				
Sub-standard Assets	15% for total outstanding				
Doubtful Assets Up to 1 year 1 to 3 years More than 3 years:- (i) Outstanding stock of NPAs as on March 31, 2010	25% 40% -60% with effect from March 31, 2011 -75% with effect from March 31, 2012 -100% with effect from March 31, 2013				
<ul><li>(ii) Advance classified as</li><li>"Doubtful for more than 3 years" on or after April 1, 2010</li></ul>	100%				
Loss Assets	100% of the outstanding				

# Table 1 : Provisional Norms

<b>Business Environment</b>	Borrower	Banker
<ul> <li>Business environment refers to economy, regulatory regime, legal system and political climate in which banks are operating. The causative factors attributing to business environment are as under:-</li> <li>Recession in the economy</li> <li>Sudden change in Global &amp; Domestic markets</li> <li>Lack of conducive legal system for loan recovery i.e. inadequate legal provisions on foreclosure &amp; bankruptcy laws and dilatory legal procedures in enforcing security rights</li> <li>Lack of cohesive regulatory framework</li> <li>Political pronouncements like debt relief</li> <li>Socio-political pressures on commercial credit decisions</li> <li>Vitiated loan repayment culture</li> <li>Policy reversal i.e. changes in governmental policies, for example cancellation of Telecom &amp; Coal mine licences in recent times.</li> <li>Natural Calamities</li> <li>Scams</li> </ul>	<ul> <li>The causative factors attributing to borrowers are as under:-</li> <li>Improper choice of project/activity</li> <li>Adoption of obsolete technology</li> <li>Promoters/ Management disputes</li> <li>Inefficient management</li> <li>Resource crunch</li> <li>Strained labour relation</li> <li>Diversion &amp; siphoning of funds</li> <li>Wilful defaulter</li> <li>Fraudulent intention</li> </ul>	<ul> <li>The causative factors attributing to bankers are as under:-</li> <li>Lack of credit skill</li> <li>Delay in credit decision &amp; disbursement</li> <li>Credit decision taken under extraneous influences</li> <li>Lack of proper credit monitoring</li> <li>Lack of effective NPA management</li> </ul>

**Causes of NPA** 

## 4. TYPES OF NPAs

(a) **Gross NPAs:** Gross NPAs is an advance which is considered irrecoverable, for bank has made provisions, and which is still held in banks' books of account. Gross NPAs are the sum total of all loan assets that are classified as NPAs as per RBI Guidelines as on Balance Sheet date. Gross NPAs reflects the quality of the loans made by banks. It consists of all the nonstandard assets like as sub-standard, doubtful, and loss asset. It can be calculated with the help of following ratio: Gross NPAs Ratio = Gross NPAs / Gross Advances

(b) Net NPAs: Net NPAs are those type of NPAs in which the bank has deducted the provision regarding NPAs. Net NPAs shows the actual burden of banks. Since in India, bank balance sheets contain a huge amount of NPAs and the process of recovery and write off of loans is very time consuming, the banks have to make certain provisions against the NPAs according to the central bank guidelines. It can be calculated by following ratio:

Net NPAs = Gross NPAs – Provisions /Gross Advances – Provisions

## 5. IMPACT OF NPAs

(a) Profitability : NPA means booking of money in terms of bad asset, which occurred due to wrong choice of client. Because of the money getting blocked the profitability of bank decreases not only by the amount of NPAs but NPAs lead to opportunity cost also as that much of profit can be invested in some return earning project/asset. So NPAs not only affect current profits but also future stream of profits, which may lead to loss of some long-term beneficial opportunity. Another impact of reduction in profitability is low ROI (Return on Investment), which adversely affect current earning of bank.

(b) Liquidity : Money is getting blocked lead to lack of enough cash in hand which lead to borrowing money for short period of time from outside which lead to additional cost to the bank. Difficulty in operating the functions of bank is another cause of NPAs. Due to lack of money Routine payments and dues are not paid on time.

(c) Credit loss : In case of bank is facing problem

of NPAs then it adversely affect the value of bank in terms of market credit. It will lose its goodwill and brand image because as we have discussed earlier that bank is not able to pay its dues on time and its negative impact is that people start withdrawing their money from bank which then cause liquidity problem and also decrease in credibility.

(d) Involvement of management : Time and efforts of management is another indirect cost which bank has to bear due to NPAs otherwise time and efforts of management in handling and managing NPAs would have been diverted to some fruitful activities, which would give good returns. Now a day's banks have special employees to deal and handle NPAs, which is additional cost to the bank.

## 6. COMPREHENSIVE APPROACH TO NPAs MANAGEMENT & EWS

The Banks will require a comprehensive approach to NPAs management that includes not just curative but also preventive actions across the credit life cycle. While tools such as automated decision making, early warning solution (EWS), external credit data can further strengthen a bank's existing credit origination and appraisal process and drive lower NPAs formation, in our view post-facto measures such as default management, covenant enforcement, and independent collateral liquidation can help banks better manage their existing NPAs stock.

Although we believe there are a number of gaps in the current credit capabilities of Indian banks, and those operating in Continental Europe and Latin America, the matter needs to be approached in a phased manner by focusing on a select few capabilities initially. Some of the capabilities that should be prioritized include external data acquisition for credit assessment models, early warning framework and collateral management for credit monitoring, soft landing and care programs for default management and centralized recovery and collection.

**Business Case for an EWS :** Through multiple engagements across large global banks, we believe that implementing an EWS can help substantially reduce banks' NPAs. A comprehensive early warning framework that included identifying the right customer segment, understanding the data landscape, formulating early warning triggers and creating a risk mitigation plan, resulted in 15-20% reductions in NPAs among some of the large global banks we have worked with. An EWS can also help banks irrespective of scale, scope and region:

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NPA Phase	Credit Origination and Appraisal	<ul> <li>Risk assessment models</li> <li>Line and limit assignment</li> <li>Risk assessment and decision process integration</li> <li>Risk mitigation techniques and workflows</li> </ul>	<ul> <li>Automated acquisition models and scorecards leveraging multiple sources of information e.g., firmographic, bureaus, financial information, news flow, etc.</li> <li>Integration of centralized risk assessment models and branch level decision process</li> </ul>
Prventive	Credit Monitoring	<ul> <li>Automated risk ratings systems</li> <li>Early warning systems</li> <li>Portfolio analytics and feedback</li> <li>Dynamic collateral management</li> </ul>	<ul> <li>Automated centralized risk rating systems</li> <li>Early warning systems based on analytics driven rules and qualitative inputs</li> <li>Dynamic collateral management with emphasis on periodic revaluation and prudent cross- collateralization logic</li> </ul>
IPA Phase	Default Management	<ul> <li>Default recognition</li> <li>Soft landing and care programs</li> <li>Loan restructuring</li> <li>Collection analytics</li> </ul>	<ul> <li>Regulatory compliant default identification logic</li> <li>Segment based collections strategy including call-center capacity planning, prospensity scorecards, dialer-manual mix, fraud scorecards, etc.</li> <li>Soft landing and care programs for corporate defaults and stressed assets</li> </ul>
Curative N	NPA Collections and Legal Recovery	<ul> <li>Collection and recovery management</li> <li>Liquidation</li> <li>Debt sale</li> <li>Litigation management</li> </ul>	<ul> <li>Independent collateral liquidation and covenant enforcement teams</li> <li>Effective pricing of bad asset for optimizing debt-sale</li> <li>Standardized litigation management strategies</li> </ul>

## Figure 1 : High level approach to NPAs Management

- Reduce the new NPAs flows (and a resulting reduction in NPAs stock).
- Maximize the recovered value and reduce the Exposure at Default with timely alerts.
- Better utilize capital.

## **Building an EWS**

Building an EWS requires banks to adopt a custom approach that is specific to their portfolio needs. Five steps approach that combines a bank's existing and new data sources within a strong analytical framework offers an effective solution.

## (a) **Portfolio Prioritization**

For banks to derive maximum value from an EWS within a short time-frame, they should prioritize select customer segments (MSME, Corporate, and Retail) within their portfolio. Depending upon the composition of their portfolio, banks can consider factors like loan loss provisions, cyclicality of the portfolio, management view, regulatory guidelines, significant deterioration in credit quality, and risk mitigation levers, to prioritize. For example - while EWS for an MSME segment can significantly drive lower NPAs formation, it might have limited impact on directed lending which is governed by specific regulatory requirements. Additionally, a proof of value assessment through case studies can help drive additional insight into the relevance of an early warning framework and address portfolio requirements.

# (b) Data Landscape

A comprehensive EWS solution utilizes a mix of the bank's internal data as well as external data elements. While banks across regions have historically focused on traditional data sources, we have observed that recently more successful banks have differentiated themselves by leveraging non-traditional and powerful data that exists both within and outside their systems. For example; instances of bounced checks in customer's deposit account, advance tax deposit receipts, stock market data, and more. While evaluating alternate data sources, it is important for a bank to clearly articulate the value of these sources from a credit perspective and avoid the temptation of some of the new age source/techniques that offer limited incremental value, like sentiment analysis through social media.

The figure below illustrates various sources of EWS trigger information. These consist of information captured from external bureaus and public sources as well as internal trade line and customer payment behaviour data. Banks, particularly those operating in India may want to also consider evaluating these different data sources across the following dimensions:

- Availability Although the data source might provide very rich information, a bank might not have access to it or the data might not be available in a very timely manner.
- Usability This dimension would help govern whether the bank can use the information (e.g., regulatory restrictions) from an early warning perspective.
  - **Reliability** The focus here is whether the source of information is complete and accurate. Integrity of the data source would help determine how effective the source would be in identifying distressed clients and possibly avoiding raising unnecessary alerts which could be detrimental to the business. Another dimension banks should consider while evaluating the different data sources is the frequency of updates (e.g., real-time, daily, monthly, and bi-weekly). The exercise of identifying and shortlisting data sources needs to be aligned to the bank's portfolio segment. A generic approach may result in negative returns for the bank due to a large number of false alerts. This exercise can be time and resource consuming but banks can accelerate through this phase by leveraging tools such as Early Warning Trigger Library that contains a pre-defined set of triggers mapped by their relevance to each customer segment.

# (c) Early Warning Trigger

For an effective early warning framework, it is important to study the pre-default behaviour of customers in the context of the various data elements. Defining triggers that can identify a problem before a customer faces severe credit challenges or is already

past due/default can positively impact a bank's ability to take appropriate action. While studying the predefault behaviour of customers, it is important to identify key data attributes that show correlation with default behaviour or stress scenario, for example a small company with limited liquidity facing decline in sales. This can help define triggers and their relevance to the bank. Banks can define either simple or complex triggers. Simple triggers that are single dimensional and are easy to capture and track, often fail to include the interdependencies that exist in the real world and therefore could be less predictive (e.g., decline in sales). Whereas complex triggers which are derived from several simple triggers can be much more powerful predictors of business distress than a simple variable. These variables can be combined using advanced



#### Figure 2 : Early Warning Data Landscape

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statistical techniques along with business intuition and expert judgment(e.g., two consecutive quarters with declines in year-over-year (y-o-y) advance tax deposit of greater than 25% (based on bank information) and declines in employee count greater than 20%). After defining the triggers that will be used, we recommends banks consider evaluating each one of them on two important dimensions: hit rate and signal strength.

- Hit rate: Of the total number of customers flagged by the trigger, how many of the customers ended up in default
- Signal strength: The average time lag between the trigger point and the actual default event

Having triggers which are high on both dimensions is very important. A trigger with a high hit rate but very low signal strength is irrelevant as it does not provide the bank with any time to action since the customer would already be in default (e.g., customer missing two scheduled loan repayment indicates a distress giving this trigger a high hit rate but low signal strength as the time lag between the trigger and default is too short). In comparison a trigger that looks into two consecutive y-o-y declines in the advance tax deposit will have high signal strength – as this would indicate the client is experiencing stress in its business model and might experience credit difficulties in coming months, giving the bank more time to take appropriate risk mitigation measures.

# (d) Composite Risk Index (CRI)

How banks bring together different triggers and integrate them into score/watch-list categories is important for a successful implementation of an EWS. After relevant triggers are shortlisted for different segments and portfolios based on signal strength and hit rate analysis, each of these triggers will be assigned an overall impact score based on statistical analysis of the bank's historical data, business intuition and expert judgment. For each customer, a composite index score is generated based on number of triggers hit, impact of triggers, type of triggers and correlation between triggers using the following logic.

**Step 1:** Define triggers and assign an impact score for each of the triggers; group together

correlated triggers into categories based on correlation matrix.

- **Step 2:** Identify the trigger within each trigger category that has maximum impact score for each customer. Simple addition of scores from correlated triggers will overstate the stress significantly.
- **Step 3:** Correlation adjusted summation of impact scores of selected triggers with maximum impact score from each trigger category are used to come up with a final composite score.
- **Step 4:** Design a rating scale to group customers into different groups based on final composite score. Incorporating all the triggers into a composite risk index will provide financial institutions with a normalized score that enables them to monitor a multitude of customers simultaneously on a standardized scale.

# (e) Risk Mitigation Action Plan (RMAP)

Developing and implementing an early warning framework is not very meaningful unless banks are ready to integrate it with their customer management processes and up-skill their credit officers. Identifyinga customer in distress will not yield any result until the Bank Credit Officer clearly understands the action that he/she is required to take. Action plans that contain a pre-defined set of mandatory action items (e.g., initiating recovery, soft-landing, additional covenants) along with certain recommended items (e.g., re-underwriting, request updated financials) for each risk score/ category are important. In addition, banks should create a work-flow system to effectively manage and action the cases that are triggered by the system.

# 7. NPAs LIFE CYCLE IN BANKS

The NPAs life cycle of banks has three main stages: Identification of stressed assets and NPAs, investigation by measurement and obtaining insight and lastly, resolution through crisis management and revitalization assets. The RBI has taken a number of steps which are pushing banks in India to be more proactive in recognition of stress and to take remedial steps so as to preserve the economic value of assets.

As a part of such efforts, Special Mention Accounts (SMAs) classification has been recently introduced with defining a time bound procedure towards deciding the course and nature of remedial actions. In addition, it is also strengthening the NPAs resolution ecosystem in India including increase in foreign participation rules in ARCs in India and bringing a sunset clause to the regulatory forbearance accorded to restructured accounts. There is also an increasing demand from industry to keep MSMEs out of the ambit of SMAs.

## (a) Role of EWS to mitigate credit risks

Over the years, the credit monitoring function has assumed criticality for banks, as it has direct impact on the profitability and liquidity of their credit portfolios. Credit monitoring can be important for the following reasons:

(i) **Dynamic portfolio mix:** With changing market conditions, a robust credit monitoring system allows the bank to align its exposure in line with its risk strategy.

(ii) **Slippages and NPAs:** Increase in slippages and NPAs indicate low asset quality on the loan book

leading to credit and reputational risks for the banks.

(iii) Better capital management: Provisions have a draining effect on the profitability of the bank and hence the equity, which has an impact on the capital structure.

(iv) Efficient cost management: Recovery of NPAs could lead to incremental operational and legal cost for the bank.

EWS can be an important tool to mitigate credit risks through proactive monitoring. A good EWS can include key parameters indicative of 'hidden' problems:

## (b) The building blocks of a EWS

- Analysis of trends in NPAs of the bank including factors leading to NPAs
  - Internal factors include diversion of funds, time and cost overruns during project implementation, business failure, inefficiency in management, slackness in credit management and monitoring, inappropriate technology and lack of coordination between lenders.



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- External factors include recession, price escalation and currency fluctuations, changes in government policies, environment concerns and accident and natural calamities to name a few.
- Analysis of trends in credit portfolio diversification
- Studying the relationship between diversified portfolio and NPAs of the bank
- Profiling and analysis of concentration risk in the bank
- Evaluating the credit risk management practices in banks
  - The key to success for EWS lies in identifying Key Elements of EWS



Mitigation of credit risks

the triggers and customising them. The idea is to develop proactive monitoring across the asset portfolio lifecycle with continuous monitoring of assets from sanction till loan closure through development of a system by taking data-based cues from the early signs and red flags:

## (c) The benefits of EWS

- Definite process to govern credit monitoring, ensuring a standardised bank-wide approach to detect and escalate EWSs
- Implementation of a knowledge management system to retain the organisation's learning of each type of customer

Relationship manager's time freed up to make him or her capable to handle more responsibilities at the ground level

• Better compliance to regulatory requirements and audits

# 8. FACTORS CONTRIBUTING

# TO NPAs

According to the recent study conducted by RBI, the factors

s contributing to NPAs are divided into two segments.

# Factors Contributing to NPAs

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Internal factors	External factors	Other factors
<ul> <li>Diversion of fund for expansion, diversification, modernization or for taking up new projects.</li> <li>Diversion of fund for assisting or promoting associate concerns.</li> <li>Time or cost overrun during the project implementation stage.</li> <li>Business failure due to product failure, failure in marketing etc.</li> <li>In efficiency in bank management.</li> <li>Slackness in credit management and monitoring.</li> <li>In appropriate technology or problems related to modern technology</li> <li>(h) Wilful defaults, siphoning of funds, fraud, disputes, misappropriation etc.</li> </ul>	<ul> <li>Recession in the economy as a whole</li> <li>Input or power shortage</li> <li>Price escalation of inputs</li> <li>Exchange rate fluctuations</li> <li>Change in government policies</li> <li>Government policies like excise duty changes, import duty changes etc.,</li> <li>(g) Accidents and natural calamities.</li> </ul>	<ul> <li>Liberalization of the economy and the consequent pressures from liberalization like several competitions, reduction of tariffs etc.</li> <li>Poor monitoring of credits and failure to recognize early warning signals shown by standard as sets.</li> <li>Sudden crashing of capital market and inability to raise adequate funds.</li> <li>Mismatching of funds i.e. using loan granted for short term for long term transactions.</li> <li>(e) Granting of loans to certain sectors of the economy on the basis of government directives rather than commercial imperatives.</li> </ul>

# 9. **REVIEW OF LITERATURE**

NPAs engender negative impact on banking stability and growth. Issue of NPAs and its impact on erosion of profit and quality of asset was not seriously considered in Indian banking prior to 1991. There are many reasons cited for the alarming level of NPAs in Indian banking sector. Asset quality was not prime concern in Indian banking sector till 1991, but was mainly focused on performance objectives such as opening wide networks/branches, development of rural areas, priority sector lending, higher employment generation, etc. The accounting treatment also failed to project the problem of NPAs, as interest on loan accounts were accounted on accrual basis (Siraj K.K. & P. SudarsananPillai, 2012). NPAs not only affect the performance of credit institutions but also have a direct negative impact on economy (Satpal, 2014). In the studies of Ganesan and Santhanakrishnan (2013), it is clearly revealed that the sound financial position of a bank depends upon the recovery of loans or its level of NPAs. According to Sontakke and Tiwari (2013) NPAs doesn't affect current profit but also future stream of profit, which may lead to loss of some longterm beneficial opportunity. However according to Vemula and Mahalingam (2012) in recent times, the banks have become very cautious in extending loans, the reason being mounting non-performing assets.

A Committee on Banking Sector Reforms known as Narasimham Committee was set up by RBI to study the problems faced by Indian banking sector and to suggest measures revitalize the sector. The committee identified NPAs as a major threat and recommended prudential measures for income recognition, asset classification and provisioning requirements. These measures embarked on transformation of the Indian banking sector into a viable, competitive and vibrant sector. The committee recommended measures to improve "operational flexibility" and "functional autonomy" so as to enhance "efficiency, productivity and profitability" (Chaudhary S & Singh S, 2012). The main cause of mounting NPAs in public sector banks is malfunctioning of the banks. Narasimham Committee identified the NPAs as one of the possible effects of malfunctioning of public sector banks (Ramu N, 2009). It has been examined that the reason behind the falling revenues from traditional

sources is 78% of the total NPAs accounted in public sector banks (Bhavani Prasad, G. & Veena V D, 2011).

An evaluation of the Indian experience in Financial Sector Reforms Published in the RBI Bulletin gives stress to the view that the sustained improvement of the economic activity and growth is greatly enhanced by the existence of a financial system developed in terms of both operational and allocation efficiency in mobilizing savings and in channelizing them among competing demands (G Rangarajan, 1997). It has been observed that the current banking Scenario and the need for the policy change, opines that a major concern addressed by the banking sector reform is the improvement of the financial health of banks. The Introduction of prudential norms isbetter financial discipline by ensuring that the banks are alert to the risk profile of their loan portfolios (S.P.Talwar, 1998).

The RBI has also conducted a study to ascertain the contributing factors for the high level of NPAs in the banks covering 800 top NPA accounts in 33 banks (RBI Bulletin, July 1999). The study has found that the proportion of problem loans in case of Indian banking sector always been very high. The problem loans of these banks, in fact, formed 17.91 percent of their gross advances as on March 31, 1989. This proportion did not include the amounts locked up in sick industrial units. Hence, the proportion of problem loans indeed was higher. However, the NPAs of Indian Banks declined to 17.44 percent as on March 31, 1997 after introduction of prudential norms. In case of many of the banks, the decline in ratio of NPAs was mainly due to proportionately much higher rise in advances and a lower level of NPAs accretion after 1992. The study also revealed that the major factors contributing to loans becoming NPAs include diversion of funds for expansion, diversification, modernization, undertaking new projects and for helping associate concerns. This is coupled with recessionary trend and failure to tap funds in the capital and debt markets, business failure (product, marketing, etc.), inefficient management, strained labour relations, inappropriate technology/technical problems, product obsolescence, recession input/power shortage, price escalation, accidents, natural calamities, Government policies like changes in excise duties, pollution control orders, etc.

The RBI report concluded that reduction of NPAs in banking sector should be treated as a national priority issue to make the Indian banking system stronger, resilient and geared to meet the challenges of globalization (ParulKhanna, 2012).

Bhatia (2007) after considering the NPAs level of PSBs, PVTSBs and FBs with a Model, comprising two factors (Bank parameters and macroeconomic factor) conveyed that to evaluate the financial health and work performance of the Indian Banks NPAs is addressed as very important factor, financial soundness and growth of Indian banking sector affected by the percentage of NPAs level in the banks. Balasubramaniam C.S. (2012) evaluated the NPAs could be reduced by good credit appraisal procedures, effective internal control systems, and with the help of efforts to mobilize funds in order to comply with provisioning norms and capital adequacy requirements. Bihari (2012) highlighted that the steps for conversion of NPAs in performing assets. These following steps are helpful to reduce and control NPAs level: -banks must be aware of Right kind of borrower at the time of selection, banks must have adequate finance at the time of need and this must be disbursed within time, they have to see the funds used in the right manner, loans must be recovered timely to reduce NPAs level.

Shyamal (2012) studied that the prudential norms and other schemes had rushed banks to improve their performance and accordingly resulted in orderly down of the NPAs as well as an enhancement in the financial strength of the Indian banking structure. Patidar&Kataria (2012) described and compared the NPAs of PSBs and PVTSBs stated that the Priority Sector lending has significant impact on Total NPAs in PSBs, whereas in Priority Sector lending has no significant impact on Total NPA. Kaur&Saddy (2011) compared the PVTSBs and PSBs in regard to NPAs and concluded that the extent of the NPAs is comparatively higher in PSBs as compared to PVTSBs. Government induced so many steps to reduce & control NPAs level to the maximum possible extent, so that position of Banks with regard to profitability and efficiency can improve in future. This has led to decline in the level of NPAs of the Indian banking sector.

## 10. RESEARCH METHODOLOGY

The study is descriptive in nature. It is based on secondary data. The data have been collected from RBI reports (Statistical Tables Relating to Banks in India), Journals, Magazines, Books, Newspapers and Websites for the latest happening in the banking sector in India. For analysing the data, descriptive statistics like tabulation, percentage and ratio have been used. The period of study will be carried out from last six financial years from 2009-2010 to 2014-2015.

## 11. OBJECTIVE OF THE STUDY

The study aims to gain insights into the concept of loss assets of NPAs in PSBs, PVTSBs and FBs. The following broad objectives are laid down for the purpose of the study.

- To assess the loan assets performance of PSBs, PVTSBs and FBs.
- To determine Gross Advances, Gross NPAs, Net Advances and Net NPAs of PSBs, PVTSBs and FBs.

Year	Standard Advances		Sub-Standard Advances		Doubtful Advances		Loss A	Total Advances	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
2009-10	26,735	97.8	288	1.1	254	0.9	58	0.2	27,335
2010-11	32,718	97.8	350	1.1	332	1.0	65	0.2	33,465
2011-12	38,255	97.0	623	1.6	490	1.2	60	0.2	39,428
2012-13	43,957	96.4	815	1.8	761	1.7	68	0.2	45,601
2013-14	49,887	95.6	958	1.8	1,216	2.3	99	0.2	52,159
2014-15	53,382	95.0	1,054	1.9	1,630	2.9	100	0.2	56,167
Source: ht	tps://www.r	bi.org.in/							•

## **Table 2 : Classification of Loan Assets of Public Sector Banks**(Amount in Billion)

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To suggest various measures to control the menace of NPAs.

## 12. DATA ANALYSIS AND INTERPRETATION

The above table 2 depicts the classification of loan assets of PSBs. The standard assets has rising trend from 26,735 (97.8) to 53,382 (95.0) during the period of 2009-10 to 2014-15. It clearly indicates that the amount of performance assets is occupying the advances which reduce the provision requirements and thereby improving the profitability. NPAs havefluctuation among the banks both increase and decrease. In case of sub-standard assets and doubtful assets has constant increase from 288 (1.1) to 1,054 (1.9) and 254 (0.9) to 1,630 (2.9) during the period of 2009-10 to 2014-15. In case of loss assets has also increasing trend from 58 (0.2) to 100 (0.2) during the period of 2009-10 to 2014-15. It indicates that the amount of NPAs has increasing year by year which need to be take efficiency management andloan portfolio.

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Year	Standard Advances		Sub-Standard Advances		Doubtful Advances		Loss Advances		Total Advances
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
2009-10	6,265	97.3	89	1.4	66	1.0	22	0.3	6,442
2010-11	7,936	97.8	45	0.6	108	1.3	29	0.4	8,118
2011-12	9,629	98.1	52	0.5	104	1.1	29	0.3	9,814
2012-13	11,384	98.2	64	0.6	112	1.0	32	0.3	11,592
2013-14	13,371	98.2	86	0.6	114	0.8	42	0.3	13,613
2014-15	15,750	97.9	108	0.7	176	1.1	52	0.3	16,087
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 Table 3 : Classification of Loan Assets of Private Sector Banks
 (Amount in Billion)

## Source: https://www.rbi.org.in/

The above table 3 depicts the classification of loan assets of PVTSBs. The standard assets has rising trend from 6,265 (97.3) to 15,750 (97.9) during the period of 2009-10 to 2014-15. It clearly indicates that the amount of performance assets is occupying the advances which reduce the provision requirements and thereby improving the profitability. NPAs have fluctuation among the banks both increase and

decrease. In case of sub-standard assets and doubtful assets has constant increase from 89(1.4) to 108(0.7) and 66(1.0) to 176(1.1) during the period of 2009-10 to 2014-15. In case of loss assets has also increasing trend from 22(0.3) to 52(0.3) during the period of 2009-10 to 2014-15. It indicates that the amount of NPAs has increasing year by year which need to be take efficiency management and loan portfolio.

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Year	Standard Advances		Sub-Standard Advances		Doubtful Advances		Loss Advances		Total Advances
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
2009-10	1,603	95.7	49	2.9	14	0.9	8	0.5	1,674
2010-11	1,943	97.5	19	0.9	21	1.1	11	0.6	1,994
2011-12	2,284	97.3	21	0.9	22	1.0	20	0.8	2,347
2012-13	2,610	97.0	29	1.1	27	1.0	23	0.9	2,689
2013-14	2,880	96.1	43	1.4	43	1.4	29	1.0	2,996
2014-15	3,259	96.8	23	0.7	54	1.6	30	0.9	3,366
Source: http	ns·//www.rh	ni org in/	•		•	•			

**Table 4 : Classification of Loan Assets of Foreign Banks**(Amount in Billion)

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The above table 4 depicts the classification of loan assets of FBs. The standard assets has rising trend from 1,603 (95.7) to 3,259 (96.8) during the period of 2009-10 to 2014-15. It clearly indicates that the amount of performance assets is occupying the advances which reduce the provision requirements and thereby improving the profitability. NPAs have fluctuation among the banks both increase and decrease. In case of sub-standard assets and doubtful assets has constant increase from 49 (2.9) to 23 (0.7) and 14 (0.9) to 54 (1.6) during the period of 2009-10 to 2014-15. In case of loss assets has also increasing trend from 8 (0.5) to 30 (0.9) during the period of 2009-10 to 2014-15. It indicates that the amount of NPAs has increasing year by year which need to be take efficiency management and loan portfolio.

Compared to PSBs, PVTSBs and FBs, the NPAs level is more in PSBs and FBs of sub-standard assets, doubtful assets and loss assets. But in case of standard assets PVTSBs remain high which shows a good position of PVTSBs and also it shows that they have adopted all necessary measures in order to avoid any account becoming NPAs. PSBs and FBs need to be more cautions while granting loan and also to avoid the occurrence of NPAs.

	Public	c Sector Ban	ks	Private	Sector Ba	nks	Foreign Banks		
Year	Gross Advances	Gross NPAs	Gross NPAs %	Gross Advances	Gross NPAs	Gross NPAs %	Gross Advances	Gross NPAs	Gross NPAs %
2009-10	27,334.58	573.01	2.3	5,795.35	173.07	3.0	1,632.13	71.11	4.4
2010-11	30,798.04	710.47	2.3	7,232.05	179.05	2.5	1,929.72	50.45	2.6
2011-12	35,503.89	1,124.89	3.2	8,716.41	182.10	2.1	2,267.77	62.69	2.8
2012-13	45,601.69	1,644.62	3.6	11,512.46	203.82	1.8	2,604.05	79.26	3.0
2013-14	52,159.20	2,272.64	4.4	13,602.53	241.84	1.8	2,995.76	115.68	3.9
2014-15	56,167.18	2,784.68	5.0	16,073.39	336.90	2.1	3,366.09	107.58	3.2
Source: http	s://www.rbi.o	org.in/							

**Table 5 : Gross NPAs of PSBs, PVTSBs and FBs**(Amount in Billion)

The above table 5 indicates the quality of Credit Portfolio of PSBs, PVTSBs, and FBs. High Gross NPAs ratio indicates the low Credit Portfolio & Risk of bank and vice-versa.Over the year, the PSBs has higher Gross NPAs ratio is5.0 during the year 2014-15 and lower Gross NPAs ratio is 2.3 during

the year 2009-10& 2010-11. Further, the PVTSBs has higher Gross NPAs ratio is 3.0 during the year 2009-10 and lower Gross NPAs ratio is 1.8 during the year 2012-13 & 2013-14. Similarly, the FBs has higher Gross NPAs ratio is 4.4 during the year 2009-10 and lower Gross NPAs ratio is 2.6 during the year

 Table 6 : Net NPAs of PSBs, PVTSBs and FBs

(Amount in Billion)

	Public	e Sector Ban	ıks	Private	Sector Ba	inks	Foreign Banks		
Year	Net Advances	Net NPAs	Net NPAs %	Net Advances	Net NPAs	Net NPAs %	Net Advances	Net NPAs	Net NPAs %
2009-10	27,013.00	293.75	1.1	6,324.94	65.01	0.5	1,632.60	29.77	1.8
2010-11	33,056.32	360.00	1.2	7,975.35	44.32	0.6	1,955.39	12.00	0.6
2011-12	38,773.08	593.91	1.5	9,664.02	44.01	0.5	2,298.49	14.12	0.6
2012-13	44,728.45	900.36	2.0	11,432.48	59.94	0.5	2,636.80	26.80	1.0
2013-14	51,011.43	1,306.23	2.6	13,429.35	88.62	0.7	2,911.54	31.72	1.1
2014-15	55,164.40	1,602.08	2.9	15,764.80	141.28	0.9	3,241.66	17.57	0.5

Source : https://www.rbi.org.in/

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#### 2010-11.

Whereas, the PVTSBs showed lower ratio is1.8 during the year 2012-13 &2013-14and it indicates the good management of PVTSBs as compared to PSBs and FBs. PSBs and FBs should take necessary actions under the Securitization Act to reduce the Gross NPAs.

The above table 6 indicates the quality of NPAs of PSBs, PVTSBs, and FBs. High Net NPAs ratio indicates the low Credit Portfolio & Risk of bank and vice-versa. Over the year, the PSBs has higher Net NPAs ratio is 2.9 during the year 2014-15 and

lower Net NPAs ratio is 1.1 during the year 2009-10. Further, the PVTSBs has higher Net NPAs ratio is 0.9 during the year 2014-15 and lower Net NPAs ratio is 0.5 during the year 2009-10, 2011-12 and 2012-13. Similarly, the FBs has higher Net NPAs ratio is 1.8 during the year 2009-10 and lower Net NPAs ratio is 0.5 during the year 2014-15.

Whereas, the PVTSBs showed lower ratio is 0.5 during the year 2014-15 and it indicates the good management of PVTSBs as compared to PSBs and FBs. PSBs and FBs should take necessary actions under the Securitization Act to reduce the Net NPAs.

Year	Interest Earned I	Other Income II	Interest Expended III	Operating Expenses IV	Net Interest Income V=(I-III)	Provisions and Contingencies VI	Operating Profit VII= (I+II-III-IV)	Profit(Loss) during the year VIII
2009-10	3059.83	488.93	2119.40	660.75	940.43	376.04	768.61	392.57
2010-11	3661.35	479.65	2311.53	829.65	1349.81	550.80	999.81	449.01
2011-12	4847.32	504.00	3285.89	902.05	1561.43	668.24	1163.37	495.14
2012-13	5548.72	567.63	3879.29	1018.67	1669.43	712.56	1218.39	505.83
2013-14	6202.28	651.29	4371.39	1205.66	1830.89	906.33	1276.52	370.19
2014-15	6761.50	756.32	4809.76	1329.89	1951.74	1002.77	1378.17	375.40
Source: h	ttps://www	.rbi.org.in	/					

 Table 7 : Trends in Income and Expenditure of Public Sector Banks
 (Amount in Billion)

The above table 7 represents the Income and Expenditure of PSBs. The Net Interest Income has constant increase from 940 to 1,951 Billion during the period of 2009-10 to 2014-15. It helps to increase the Operating Profit. Further, Provision and Contingencies has also increasing trend from 376 to 1,002 Billion during the period of 2009-10 to 2014-15. It indicates that the PSBs have taken adequate safety measures. It has direct bearing on the profitability,

Dividend and safety of shareholders' fund. Similarly, Operating Profit has also rising trend from 768 to 1,378 Billion during the period of 2009-10 to 2014-15. It indicates that the measure of efficiency and profitable of the PSBs.

Whereas, Net Profit has increasing from 392 to 505 Billion during the period of 2009-10 to 2012-13 and then slight decrease from 370 to 375 Billion

 Table 8 : Trends in Income and Expenditure of Private Sector Banks
 (Amount in Billion)

Year	Interest Earned I	Other Income II	Interest Expended III	Operating Expenses IV	Net Interest Income V=(I-III)	Provisions and Contingencies VI	Operating Profit VII= (I+II-III-IV)	Profit (Loss) during the year VIII
2009-10	828.06	204.23	512.06	228.51	316.01	160.61	291.73	131.11
2010-11	967.13	208.73	571.49	276.06	395.64	151.19	328.31	177.12
2011-12	1345.56	250.48	867.84	340.30	477.71	160.71	387.89	227.18
2012-13	1664.86	297.93	1071.33	404.90	493.53	196.60	486.56	289.95
2013-14	1891.36	354.74	1188.34	465.20	703.02	255.03	592.57	337.54
2014-15	2141.46	416.98	1322.49	540.09	818.96	308.59	695.85	387.26
Source: h	ttps://www	.rbi.org.in	/	•	•		•	•

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during the period of 2013-14 to 2014-15 due to higher provision and increasing higher NPAs level. Thus, it shows that the management of loans and recovery from borrowers is not well.

The above table 8 represents the Income and Expenditure of PVTSBs. The Net Interest Income has constant increase from 316 to 818 Billion during the period of 2009-10 to 2014-15. It helps to increase the Operating Profit. Further, Provision and Contingencies has also increasing trend from 160 to 308 Billion during the period of 2009-10 to 2014-15. It indicates that the PVTSBs have taken adequate safety measures. It has direct bearing on the profitability, Dividend and safety of shareholders' fund. Similarly,Operating Profit has also rising trend from 291 to 695 Billion during the period of 2009-10 to 2014-15. It indicates that the measure of efficiency and profitable of the PVTSBs.

Whereas, Net Profit has constant increase from 131 to 387 Billion during the period of 2009-10 to 2014-15. Thus, it shows that the management of loans and recovery from borrowers is well.

Year	Interest Earned I	Other Income II	Interest Expended III	Operating Expenses IV	Net Interest Income V=(I-III)	Provisions and Contingencies VI	Operating Profit VII= (I+II-III-IV)	Profit (Loss) during the year VIII
2009-10	263.90	99.51	89.38	111.02	174.52	115.60	163.01	47.41
2010-11	284.93	110.12	106.23	125.69	178.70	85.95	163.14	77.19
2011-12	359.97	108.96	149.82	133.37	210.14	91.47	185.73	94.26
2012-13	422.49	112.29	187.39	143.07	235.10	88.45	204.32	115.87
2013-14	457.69	134.89	211.92	153.29	245.77	125.97	227.37	101.40
2014-15	504.43	148.99	238.35	162.61	266.08	124.43	252.46	128.03
Source: http	os://www.r	bi.org.in/						

 Table 9: Trends in Income and Expenditure of Foreign Banks
 (Amount in Billion)

The above table 9 represents the Income and Expenditure of FBs. The Net Interest Income has constant increase from 174 to 266 Billion during the period of 2009-10 to 2014-15. It helps to increase the Operating Profit. Further, Provision and Contingencies has also increasing trend from 115 to 124 Billion during the period of 2009-10 to 2014-15. It indicates that the FBs have taken adequate safety measures. It has direct bearing on the profitability, Dividend and safety of shareholders' fund. Similarly,Operating Profit has also rising trend from 163 to 252 Billion during the period of 2009-10 to 2014-15. It indicates that the measure of efficiency and profitable of the FBs.

Whereas, Net Profit has constant increase from 47 to 128 Billion during the period of 2009-10 to 2014-15. Thus, it shows that the management of loans and recovery from borrowers is well.

# 13. STATEMENT OF THE PROBLEM

The NPAs have always created a big problem for the banks in India. It is just not only problem for the banks but for the economy too. The money locked up in NPAs has a direct impact on profitability of the bank as Indian banks are highly dependent on income from interest on funds lended. This study shows that extent of NPA is comparatively very high in PSBs as compared to PVTSBs and FBs. Although various steps have been taken by government to reduce the NPAs but still a lot needs to be done to curb this problem. The NPAs level of our banks is still high as compared to the FBs. It is not at all possible to have zero NPAs but the bank management should speed up with the recovery process. The problem of recovery is not with small borrowers but with large borrowers and a strict policy should be followed for solving this problem. The government should also make more provisions for

faster settlement of pending cases and also it should reduce the mandatory lending to priority sector as this is the major problem creating area. So the problem of NPA needs lots of serious efforts otherwise NPAs will keep killing the profitability of banks which is not good for the growing Indian economy at all.

# 14. RECOMMENDATIONS AND SUGGESTIONS

- While advancing loans, the three principles of bank lending viz., Principle of Safety, Principle of Liquidity and Principle of Profitability must be adhered.
- Banks should find out the original reasons and purposes of the loan required by the borrower.
- Proper identification of the guarantor should be checked by the bank including scrutiny of his/her wealth.
- Framing reasonably well documented loan policy and rules.
- Sound credit appraisal on well-settled banking norms with emphasis on reduction of NPAs.
- Position of overdue accounts is reviewed on a weekly basis to arrest slippage of fresh account to NPAs.
- Half yearly balance confirmation certificates should be obtained from the borrowers.
- A committee is constituted at Head Office, to review irregular accounts.
- Based on the recent trends, banks should emphasize more on priority sector for reducing the quantum of NPAs.
- Banks should ensure credibility of the borrower.
- Banks should ensure that there is no diversion of funds disbursed to the borrower.
- Bank officials should frequently visit the unit and should assess the physical conditions of the assets, receivables and stocks therein.
- Banks should get the Non Encumbrance and Valuation of the primary and collateral securities done.

- Banks should critically examine and analyse the reasons behind time overrun.
- The banks should ensure that latest technology is being used by the borrower, to avoid obsolescence.
- The banks should ensure that the assets are fully insured.
- Recovery competition system should be extended among the staff members. The recovering highest amount should be felicitated.
- Adopting market intelligence for deciding the credibility of the borrowers.
- Creation of a separate "Recovery Department" with Special Recovery Officer.
- There surely is a need to distinguish between wilful and non wilful defaulters. In case of the latter category of defaulters, the law should not be as harsh as in case of former category.
- The recovery process is very slow; as such the Government needs to update the process which is fast and effective.
- And last but not the least; the bank officers shouldn't forget the ethics of doing job.

# 15. CONCLUSION

Now days the serious problem faced by banks all over the world is the growth of NPAs. The value of loan-disbursement process is harmed because of nonrecovery of loan instalment and the interest on the loan which in turn is the consequence of growth of NPAs which adversely affect the lending activity of the banks. As a result significant importance has been given, to make stronger the capital adequacy requirements like the measure of Capital adequacy ratio(CRAR) to measure the capacity of banks to absorb losses occurring from NPAs. PSBs in India have been able to manage high level of CRAR to provide sufficient cushion for any unexpected losses, in relation to capital adequacy requirements. Despite the fact, rise of NPAs in recent years remains an area of concern and should be tackled with sincere efforts during the periods of disbursement of loans and recovery of the same. In recent times, the use of the method, in which

compromise settlements has been effected by banks; certain serious concerns have been articulated from different sections and by the Debt Recovery Tribunals. It was examined that the banks take up different parameter to different borrowers, and agreed for a lesser amount as against claimed amount, regardless of availability of plentiful securities and thus ignoring RBI guidelines. The study finally observes that the prudential and provisioning norms and other initiatives taken by the regulatory bodies has pressurized banks to improve their performance, and consequently resulted into trim down of NPAs as well as improvement in the financial health of the Indian banking system. In the nutshell, we can say that, however during the periods of economic slowdown PSBs in India have shown flexibility, management of NPAs through better quality of advances and recovery procedures is essential for banks to maintain their continued existence and expansion.

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