



# A STUDY OF NON PERFORMING ASSETS MANAGEMENT WITH REFERENCE TO SELECT INDIAN PUBLIC SECTOR BANKS AND PRIVATE SECTOR BANKS

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**Abstract-** The asset quality of banks is one of the most important indicators of their financial health. It also reflects the effectiveness of banks' credit risk management and the recovery environment. It is important that the signs of distress in all stressed accounts are detected early and those which are viable are also extended restructuring facilities expeditiously to preserve their economic value. (RBI/2012-13/208). The Indian banking sector has been facing severe problems of raising Non- Performing Assets (NPAs). The NPAs growth directly affects the profitability of banks. The problem of NPAs is not only affecting the banks but is affecting the economy as a whole. In fact high level of NPAs in Indian banks is nothing but a reflection of industry and trade. NPA do not generate any income, whereas, the bank is required to make provisions for such as assets. (Olekar and Talawar, 2012). NPAs do not just reflect badly in a bank's account books, they adversely impact the working of economy.

There are many research conducted on the topic of Non- Performing Assets (NPA) Management, concerning particular bank, comparative study of public and private banks etc. In this paper the researcher is considering the aggregate data of select public sector and private sector banks and attempts to compare analyze and interpret the NPA management from the year 2010 -2015. On the conceptual side, it gives an overview of NPA, various types of NPA and its cause. The tools used in the study are Least square method and ANOVA. The findings reveals the percentage of Gross NPA to Gross advances is increasing for public banks, the Estimated Gross NPA for 2014-15 is also more in public banks as compared to private banks and from the ANOVA test, it is concluded Ratio of Gross NPA to Gross Advances for public sector and private Sector Banks does not have significant difference between 2010 to 2015.

**Keywords:** Non Performing Asset (NPA), NPA Management, Public Banks, Private Banks

## 1. INTRODUCTION

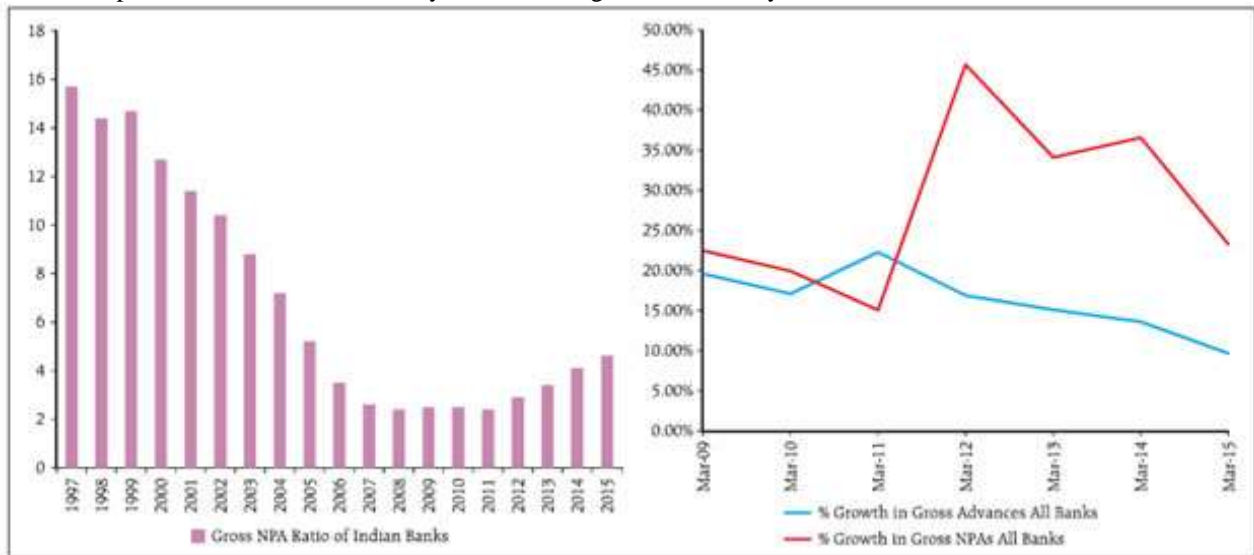
A Non-performing asset (NPA) is defined as a credit facility in respect of which the interest and/or installment of Bond finance principal has remained 'past due' for a specified period of time. NPA is used by financial institutions that refer to loans that are in threat of default. Once the borrower has failed to make interest or principle payments for 90 days the loan is considered to be a non-performing asset. Non-performing assets are problematic for financial institutions since they depend on interest payments for income. Troublesome pressure from the economy can lead to a sharp increase in non-performing loans and often results in massive write-downs. ). The Indian banking sector has been facing severe problems of raising Non- Performing Assets (NPAs). The NPAs growth directly affects the profitability of banks. The problem of NPAs is not only affecting the banks but is affecting the economy as a whole. In fact high level of NPAs in Indian banks is nothing but a reflection of industry and trade. NPA do not generate any income, whereas, the bank is required to make provisions for such as assets. (Olekar and Talawar, 2012). NPAs do not just reflect badly in a bank's account books, they adversely impact the working of economy.

## 2. CURRENT POSITION

However, if we look a little far back, the asset quality of the Indian banking system was not like as of today, it had actually been improving significantly since the implementation of reforms in the banking sector and introduction of prudential norms, enactment of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002, Credit Information Companies Act, etc. The gross NPAs ratio steadily declined from 15.7 per cent in 1996-97 to 2.36 per cent in 2010-11. However, the amount of non- performing assets witnessed spurt subsequently and as on March 2015, it was at 4.62 per cent of the gross advances of the banks in comparison with 2.36 per cent of the gross advances as at March 2011. The growth in NPAs was much higher than the growth in advances during the last four years. In addition, the ratio of restructured standard assets to gross advances grew to

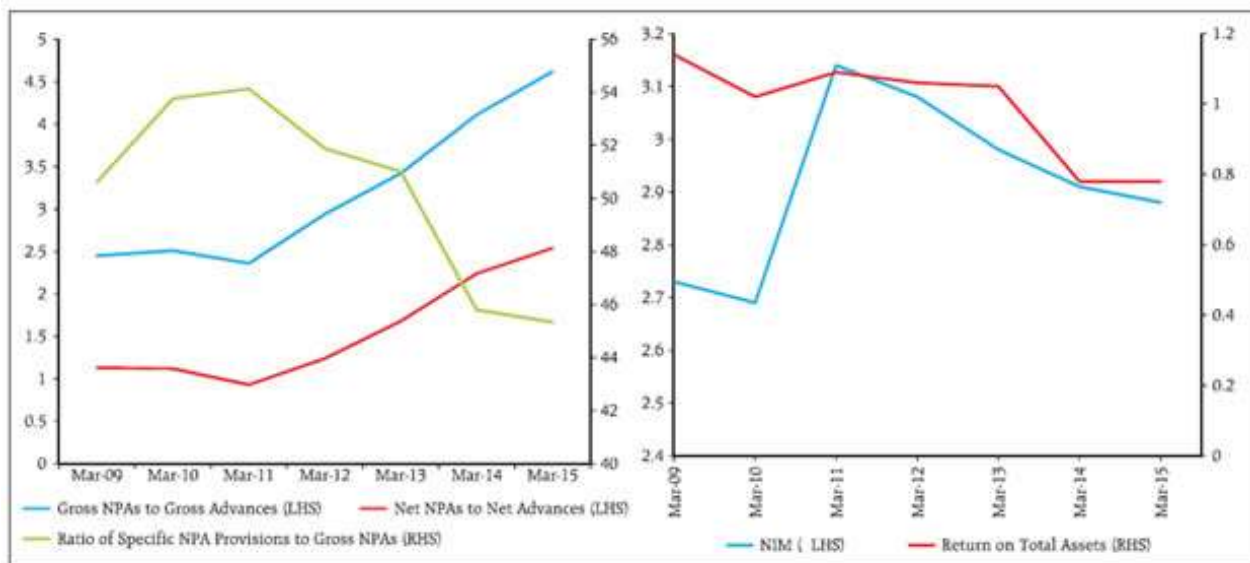
6.44 per cent as at the end of March 2015 from 5.87 per cent of gross advances as on March 2014. The total stressed assets (i.e., NPAs plus Restructured Assets) as on March 2015 were 11.06 per cent of gross advances.

The sharp increase in stressed assets has adversely impacted the profitability of the banks. The annual return on assets has come down from 1.09 per cent during 2010-11 to 0.78 per cent during 2014-15. Considering the effect it has on both capital and liquidity position of the bank, there is an urgent need for banks to reduce their stressed assets and clean up their balance sheets lest they become a drag on the economy.



**Fig. 2.1 Gross NPA Ratio of Indian Banks**

Managing asset quality is always very important and becomes a prominent objective especially during a period of economic downturn. Recognising the importance of effective asset quality management, Reserve Bank has issued various guidelines to banks, from time to time, on various aspects of asset quality management.



**Fig. 2.2 Gross & Net NPA's to Gross & Net Advances**

### 3. LITERATURE REVIEW

**Narula and Singla (2014)** evaluate the non – performing assets of Punjab National Bank and its impact on profitability & to see the relation between total advances, Net Profits, Gross & Net NPA. The study uses the annual reports of Punjab National Bank for the period of six years from 2006-07 to 2011-12. These papers conclude that there is a positive relation between Net Profits and NPA of PNB. It is because of the mismanagement on the side of bank.

**Arora and Ostwal (2014)** conducted study on “Unearthing the Epidemic of Non-Performing Assets: A Study of Public and Private Sector Banks” which deals with the concept of Non-performing assets and analyze the

DOI Number: 10.30780/IJTRS.V04.I01.002

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Paper Id: IJTRS-V3-I11-001

Volume IV Issue I, January 2019

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classification of loan assets of public and private sector banks. It also explores the comparison of loan assets of Public sector and private sector banks. The study concluded that private sectors improving due to decline in NPAs ratio compare to Public sector banks due to recovery management done in NPAs and suggest that there is need to check the NPAs of public sector banks so that Indian banking system becomes efficient.

**Srinivas K T (2013)** emphasis on identify the Non-performing assets at Commercial banks in India. This paper highlights the various general reasons which convert advances/ assets into NPA and also give suitable suggestion on findings to overcome the mentioned problem.

**Sikdar and Makkad (2013)** this paper provide insight on the role of NPA in risk frame work of selected Indian commercial banks and try to put forward the means of interpreting credit risk from existing levels of bank NPAs. Further, research highlights the significant steps taken and procedures implemented by major Indian commercial banks, within the public and private sector, towards recovery of loans and advances falls into the NPA bracket. The research for the present paper is based on extensive study of annual publications on performance of public sector and private sector commercial banks by the Indian Banks Association (IBA). Further, annual reports of commercial banks in focus for the year ending March 2012 have been studied. The study conclude that problem of NPAs can be tackled only with proper credit assessment and risk management mechanism.

**Olekar and Talawar (2012)** studied NPA management with reference to Karnatak central co-operative bank ltd., where they described conceptual data about NPA and on the other hand, they calculated few NPA related ratios and used trend projection method to predict next year advances for the bank. Their finding includes the considerable reduction of NPA for the bank and some suggestions for recovery of NPA.

**Malyadri and Sirisha (2011)** this study examine the NPA of Public Sector banks and Private sector banks of weaker sections for the period seven years in India. The secondary data compiled from Report on Trends and Progress of Banking in India, 2004-10 which has been analyzed by statistical tool such as percentages and compound Annual Growth rate. This study reveals that the public sector banks have achieved a greater penetration compared to the private sector banks.

**Kaur and Saddy (2011)** in the research paper entitled “A Comparative Study of Non-Performing Assets of Public and Private Sector Banks” an attempt is made to clarify the concept of NPA, the factors contributing to NPAs, the magnitude of NPAs, reasons for high NPAs and their impact on Indian banking operations. Besides capital to risk weight age assets ratio of Public and Private sector banks, management of credit risk and measures to control the threat of NPAs are also discussed.

**Hosmani and Hudagi (2011)** conducted study on “Unearthing the Epidemic of Non Performing Assets with Reference to Public Sector Banks in India” an empirical and descriptive in nature which shows the magnitude and trend of Public Sector banks in India and found that there is a slight improvement in the asset quality reflected by decline in the diverse NPA percentage. The study concluded that NPA is an important parameter for assessing financial performance of banks in terms of profitability, liquidity and economies of scale in operation and banks has to take timely action against degradation of good performing assets.

#### 4. OBJECTIVES

The objectives of the paper is

- An overview of NPA, various types of NPA and its cause
- Considering the aggregate data of select public sector and private sector banks and attempts to compare analyze and interpret the NPA management from the year 2010 -2015.

##### 4.1 Identification

With a view to moving towards international best practices and to ensure greater transparency, it has been decided to adopt the ‘90 days’ overdue’ norm for identification of NPA, from the year ending March 31, 2004. Accordingly, with effect from March 31, 2004, a non-performing asset (NPA) is a loan or an advance where;

- Interest and/or installment of principal remain overdue for a period of more than 91 days in respect of a term loan,
- The account remains ‘out of order’ for a period of more than 90 days, in respect of an Overdraft/Cash Credit (OD/CC),
- The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- Interest and/or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and
- Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.
- Non submission of Stock Statements for 3 Continuous Quarters in case of Cash Credit Facility.

➤ No active transactions in the account (Cash Credit/Over Draft/EPC/PCFC) for more than 91 days  
Non-performing assets can further be divided into the following three categories based on the period for which the asset has remained non-performing and the reliability of the dues:

- **Sub-standard assets:** a sub standard asset is one which has been classified as NPA for a period not exceeding 12 months.
- **Doubtful Assets:** a doubtful asset is one which has remained NPA for a period exceeding 12 months.
- **Loss assets:** where loss has been identified by the bank, internal or external auditor or central bank inspectors. But the amount has not been written off, wholly or partly.

#### 4.2 Reasons for Occurrence of NPAs

NPAs result from what are termed “Bad Loans” or defaults. Default, in the financial parlance, is the failure to meet financial obligations, say non-payment of a loan installment. These loans can occur due to the following reasons:

- Usual banking operations /Bad lending practices
- A banking crisis (as happened in South Asia and Japan)
- Overhang component (due to environmental reasons, natural calamities, business cycle, Disease Occurrence, etc...)
- Incremental component (due to internal bank management, like credit policy, terms of credit, etc...)

#### 4.3 The Problems Caused by NPAs

NPAs do not just reflect badly in a bank’s account books, they adversely impact the national economy. Following are some of the repercussions of NPAs:

- Depositors do not get rightful returns and many times may lose uninsured deposits. Banks may begin charging higher interest rates on some products to compensate Non-performing loan losses
- Bank shareholders are adversely affected
- Bad loans imply redirecting of funds from good projects to bad ones. Hence, the economy suffers due to loss of good projects and failure of bad investments
- When bank do not get loan repayment or interest payments, liquidity problems may ensue.

#### 4.4 Sectoral Credit Risk

Sectoral stress tests examined the credit risk of exposure to the broad sectors of agriculture, industry, services, retail and others. The assumed shock was an incremental increase in NPA by 5 percentage points in each sector. These tests are designed to capture the effect of a negative shock affecting important sectors. The results of a sensitivity analysis revealed that the shocks would significantly increase the system level NPAs, with the most significant effect of the single sector shock being in the industry sector (Table 4.1). The impact of the shock on capital ratios was limited given that only a portion of the credit portfolio was shocked. However, there could be a significant impact on banks’ profitability (profit before tax).

**Table-4.1 Credit Risk Sectors**

(Per cent)							
Sector Level			System Level				
			CRAR	Tier 1 CRAR	NPA Ratio	Losses as per cent of Capital	Losses as per cent of Profit
Baseline:			12.7	9.8	3.9	-	-
	Share in Total Advances	NPA Ratio of the sector	Shock: 5 percentage points increase in NPAs in each sector				
Agriculture	11.8	4.7	12.4	9.5	4.5	2.2	18.8
Industry	44.5	4.6	11.7	8.9	6	8	69.1
Services	21.2	4.2	12.2	9.4	4.9	3.5	29.8
Retail	18.9	2.1	12.3	9.4	4.8	3.1	26.5
Others	3.6	4.5	12.6	9.7	4.1	0.6	5.1

Priority Sector	32.2	4.5	12	9.1	5.5	5.9	50.9
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Source: RBI Supervisory Returns and Staff Calculations

Further, using the same shocks at individual industry levels, the key industries which may potentially impact individual banks severely, are ranked in Table-4.2.

**Table-4.2 Credit Risk: Key Industries**

Industries impacting more banks severely on account of potential losses on future assumed impairments			
Industry	Rank	Industry	Rank
Infrastructure	1	Paper	10
Metal	2	Cement	11
Textiles	3	Rubber & Plastic	12
Chemicals	4	Mining	13
Engineering	5	Petroleum	14
Food Processing	6	Beverages & Tobacco	15
Gems and Jewellery	7	Wood	16
Construction	8	Leather	17
Vehicles	9	Glass	18

Source: RBI Supervisory Returns and Staff Calculations

#### 4.5 Hypothesis-1

$H_0 = \mu_1 \neq \mu_2$  (NPA is not significantly difference between the Private sector banks & public sector banks)

$H_1 = \mu_1 = \mu_2$  (NPA is significantly difference between the Private sector banks & public sector banks)

**Table-4.3 Group Statistics**

	Types of Bank	N	Mean	Std. Deviation	Std. Error Mean
Gross NPA	Public Sector Banks	5	1292.0900	689.39437	308.30653
	New Private Sector Banks	5	2.0600	.27019	.12083

#### 4.6 Hypothesis for Leven's Test

$H_0: \sigma_1^2 - \sigma_2^2 \neq 0$  ("the population variances of group 1 and 2 are not equal")

$H_1: \sigma_1^2 - \sigma_2^2 = 0$  ("the population variances of group 1 and 2 are equal")

**Table-4.5 Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
									Lower	Upper
Gross NPA	Equal variances assumed	13.374	.006	4.184	8	.003	1290.03000	308.30656	579.07380	2000.98620
	Equal variances not assumed			4.184	4.000	.014	1290.03000	308.30656	434.03387	2146.02613

A two sample independent t-test was conducted to compare Gross NPA (dependent variable) of India for the Public (Level 1- IDV) & private sector banks (Level 2- IDV). There is a significant difference in the gross NPA for the public sector banks ( $M = 1292.0900$  &  $SD = 689.39437$ ). There is a significant difference in the gross NPA for the private sector banks ( $M=2.0600$  &  $SD= .27019$ ) conditions;  $t(8)= 4.184$ ,  $p = .003$

Since  $p < .003$  is less than our chosen significance level  $\alpha = 0.05$ , we can reject the null hypothesis, and conclude that the NPA is significantly different between Private & public sector banks.

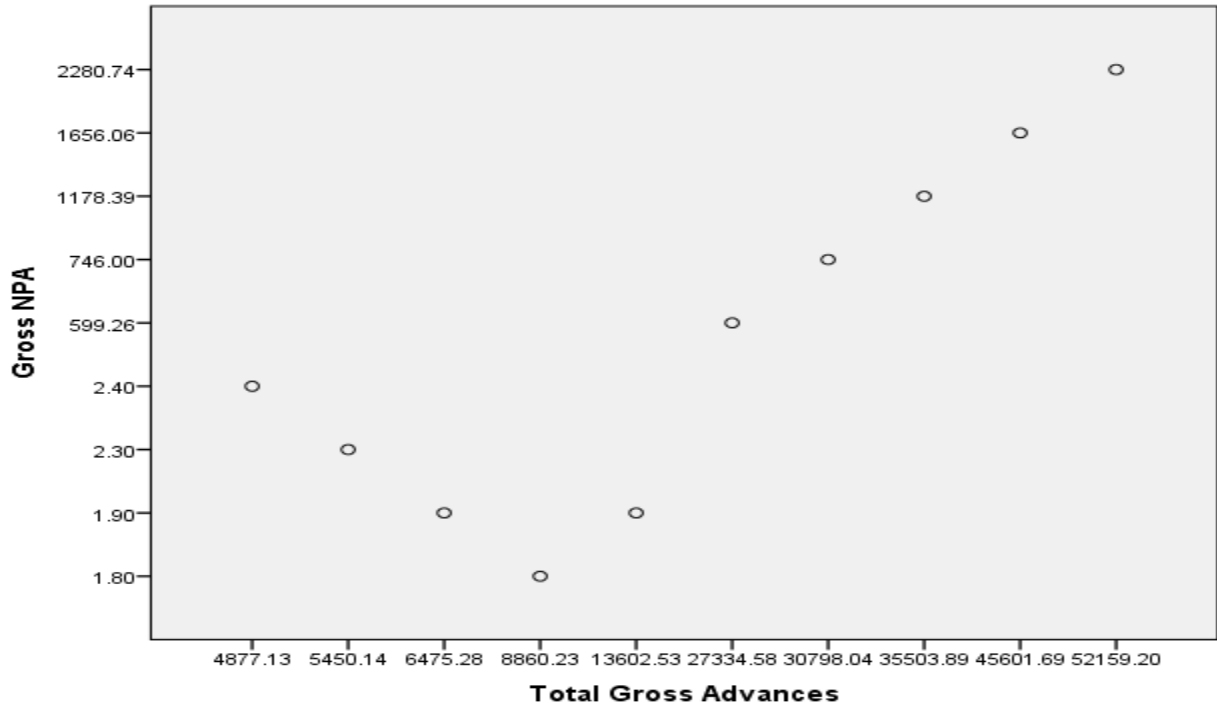


Fig. 4.1 Total Gross Advances

Table 4.6 Variables Entered/Removed

Variables Entered/Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	Total Gross Advances <sup>b</sup>	.	Enter
a. Dependent Variable: Gross NPA			
b. All requested variables entered.			

Table-4.7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.972 <sup>a</sup>	.945	.938	204.94040
a. Predictors: (Constant), Total Gross Advances				

Table- 4.8 ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5725497.634	1	5725497.634	136.320	.000 <sup>b</sup>
	Residual	336004.530	8	42000.566		
	Total	6061502.165	9			
a. Dependent Variable: Gross NPA						
b. Predictors: (Constant), Total Gross Advances						

Table-4.9 Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1							

1	(Constant)	-396.955	110.435		-3.594	.007	-651.619	-142.291
	Total Gross Advances	.045	.004	.972	11.676	.000	.036	.054

a. Dependent Variable: Gross NPA

## 5. RECOMMENDATIONS

Management of credit risk should receive the top management's attention and the process should encompass:

- Measurement of risk through credit rating / scoring;
- Quantifying the risk through estimating expected loan losses and unexpected loan losses
- Risk pricing on a scientific basis
- Controlling the risk through effective Loan Review Mechanism and portfolio management.

### 5.1 Enhancing Credit Appraisal Capacity

One of the fundamental issues that hampers NPA Management is the inadequacies in the credit appraisal capacity of banks, more specifically on project appraisal. As we know, there is just one technical consultancy firm, besides some specific desks in some banks. With the requirement of independent evaluation for JLFs and the number of JLFs, there is a crying need for emergence of additional technical capabilities to undertake evaluation of projects, restructuring schemes, etc. Banks will have to strengthen their inhouse desks as well. Reserve Bank through the Centre for Advanced Financial Research and Learning has taken initiative to organise capacity building program for bankers.

### 5.2 Number of members in a consortium

Another suggestion that has come relates to limiting the number of banks and financial institutions that should be permitted in a consortium or even in a multiple banking arrangement. It is said that the banks with very meagre share neither have incentives nor inclination to independently assess the proposal and they typically and blindly go by one that has bigger share. Even if the bank has in-house technical capabilities, with a small share it's voice is not strong enough. Therefore, the suggestion is to have a regulatory limit on the number of members in a consortium or multiple banking arrangements so that every member has at least 10 per cent of the exposure and therefore will have serious independent credit appraisal and credit monitoring. There are counter views about this suggestion, especially with regard to the freedom to be available for a bank or borrower to take the commercial decision on a loan.

### 5.3 Ready List of Management and Technical Experts / Specialists

Yet another suggestion is to prepare a ready list of management and technical experts and specialists whose services can be availed by banks, financial institutions or the asset reconstruction companies whenever the JLFs decide to change the management under a CAP. Perhaps IBA can prepare and update such a ready list.

31. All these suggestions need further exploration and discussion before we take a final view.

### 5.4 Issues faced by SCs / RCs

#### 5.4.1 Capital

There is no denying the fact that SCs/RCs need capital and that too on continuing basis to be able to grow and be meaningful players in the sector while avenues of raising capital is limited. The network of 15 ARCs is only around 4000 crore whereas stressed assets in the system run into lakhs of crore. The industry being a capital intensive one, SCs/RCs are struggling to raise capital. Deep-pocket investors are interested in the business but cautious on account of slow pace of judicial and administrative environment. While there is limited appetite among the existing sponsors and shareholders, the limit of 50 per cent on individual shareholding and the stipulation that the sponsor should not have any controlling interest in the SCs/RCs (as stipulated by the SARFAESI Act) are proving to be stumbling blocks in this regard. However, it needs to be mentioned here that it would not be an easy option for SCs/RCs to raise funds through IPO for the reason that while on the one hand, there is an apparent lack of investor appetite in the domestic MARKET in the distressed space, the performance of SCs/RCs has, so far, remained dismal for a variety of reasons and this may prove to be a road block. SCs/RCs that can raise capital in a timely manner will be better positioned to play an active role in the field. SCs/RCs need to explore more in this regard especially through FDI route. There has also been a demand from the industry that subordinated debts like loans from the sponsors should be designated as Tier II capital and should be taken into account while calculating the capital adequacy of the SCs/RCs.

### 5.5 Pricing of NPAs

DOI Number: 10.30780/IJTRS.V04.I01.002

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Paper Id: IJTRS-V3-I11-001

Volume IV Issue I, January 2019

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The other important issue is pricing of NPAs. Currently there is no meeting point between price expectation of sellers and bid price by SCs/RCs, which is also evident from the low success rate of auctions. This also proves to be a hindrance while bringing in more investors willing to invest in the SRs being issued by the SCs/RCs to raise funds for acquisition of NPAs. Investors in stressed asset portfolios expect high returns, based on high-risk, high-reward principle which SCs/RCs find impossible to offer if the assets being acquired are not realistically priced. Equilibrium in offer and bid prices is essential for revival of the NPA market. This issue is best resolved by market forces and participants. Indian Banks Association in consultation with Association of Asset Reconstruction Companies may draw contours of mutually acceptable methodology for reserve price valuation. Discovery of fair price for NPAs may definitely help in more deals going through auctions and also generate interest from secondary investors like distress asset funds which can participate via SCs/RCs.

### 5.6 Need of Secondary Market for SRs

In the absence of third party investor money which is an automatic fall-out of a virtually non-existent secondary market, the bank that sells NPAs doubles up as investor in SRs. A meaningful solution would have been to delink investment in security receipts from only a select group of qualified institutional buyers (QIBs) (as mandated under the SARFAESI Act) and throwing it open for all institutional players in debt trading. Further, as pointed out by the SCs/RCs, in terms of Guidelines issued by SEBI, High Network Individuals (HNIs) are already allowed to participate in the SR market as Alternate Investment Funds (AIFs) have been notified as QIBs, eligible for investment in SRs issued by SCs/RCs. One possibility is that they may be allowed to participate directly in the SR market, as they have necessary risk capital and risk appetite. This measure may help widen investor base and infuse greater depth to the secondary market for SRs. An active secondary market for SRs will attract special situations funds and QIBs to this market. The Reserve Bank has already suggested to the Government of India that Section 7 of the SARFAESI Act may be amended by giving power to RBI to specify the category of the investors from time to time in consultation with SEBI.

### 5.7 Debt Aggregation

While sale of NPAs by banks depend on various factors like security package available, best price, etc., and therefore many times sale with respect to debt of a single borrower to a single SCs/RCs may not be possible, sale of entire debt of one borrower to single SC/RC would help in effective and efficient resolution. Piece meal sale of an asset particularly with turn around potential by different lenders defeats the purpose itself as it results not only in delays but also pricing hiccups and derails resolution process. Alternatively, SCs/RCs may also need to evolve mechanism to coordinate in successful resolution of those assets, in the best interest of all stake holders.

### 5.8 Judicial Delays

An important factor affecting recovery performance of SCs/RCs is the delay in judicial process: be it under SARFAESI Act or at the level of debt recovery tribunals. A fast and efficient judicial system is a sine qua non for effective resolution of NPAs. Realising the importance of having a strong bankruptcy framework in improving the ease of doing business, Government of India has constituted a Bankruptcy Law Reforms Committee to study the corporate bankruptcy legal framework in India. The Committee has submitted an Interim Report in February 2015 for immediate action and its final report is expected to be submitted within 12 months, recommending a Bankruptcy Code. The Reserve Bank expects that recommendations of the Committee, when implemented, would result in significant improvement in the bankruptcy framework of the country and enable banks/SCs/RCs to resolve their stressed assets in an effective manner.

## CONCLUSION

With the efforts of the Government in bringing in a strong bankruptcy framework and various regulatory initiatives being taken by the Reserve Bank of India, the effectiveness of the SCs/RCs would improve to a great extent. Also the market participants iron out the frictions which are best resolved among themselves, without looking for regulatory solutions to such issues.

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Paper Id: IJTRS-V3-I11-001

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