MOUNTING NON-PERFORMING ASSETS (NPAS) IN INDIAN BANKING SECTOR: STUDY OF FACTORS RESPONSIBLE

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Abstract

The growth of the economy depends upon the competence and stability of its banking sector. The most significant factor which measures the wellbeing of the banks in India is the extent of Non-Performing Assets. NPAs have straight consequences on the financial performance of banks i.e. their profitability. It signifies the effectiveness with which a bank is optimizing its total resources and therefore, serves as a guide to the extent of asset utilization and managerial efficiency. NPAs influences the prosperity of the banks in terms of mounting cost of capital, escalating risk perception thereby disturbing liquidity arrangement of banks. This paper attempts to analyze the factors responsible for increasing NPAs and suggest measures which banks can take to reduce their NPAs in order to boost their profitability and competency. This research study includes both type of data, i.e., primary data and secondary data. The research tool used for the study is Factor analysis tool for recognizing the most imperative factors responsible for increasing NPAs in the Banking Sector of India.

Keywords: Non-performing Assets, Profitability, Indian Banking Sector

Introduction

Business, Economy and Finance are intimately interlinked. As the economy and financial market grows and turn out to be more complicated, the banking sector has to build up pari passu in a way so as to support and encourage such development. By way of mounting worldwide assimilation, the financial system and banking system in India have to be toughened so that it can compete with the dynamic environment.

The banking sector occupies an extremely imperative position in the country's financial system, performing as a mediator to all industries, ranging from textile, agriculture, manufacturing, construction, and so on. The banking sector therefore contributes straightforwardly to GDP, national income and it's on the whole development. As the banking division have a major impact on the entire economy and financial system, therefore, monitoring, analysis and evaluation of its performance is extremely imperative (Dash Mihir and Das Annyesha).

The flagrant amount of Non-Performing Assets (NPAs) had been creating panic in the Indian banking industry. India's NPAs involve an extensive misallocation of credit, and thus a drag on development. With a vision of overcoming the threat of NPAs, a variety of research studies have been carried out in India and overseas. Numerous groups from time to time, made several suggestions, moderately a lot of them were acknowledged by the RBI for implementation and execution. In a study on reasons for growth of NPAs, it was founded that the main reasons for assets becoming non-performing is mismanagement and diversion of funds in non-productive areas. In a study on NPA, in 2002, Muniappan founded that crisis of NPAs in banks are allied with numerous in-house & outside reasons related to borrowers of the fund. The in-house reasons are business breakdown, incompetent

supervision, stressed work relationships, unsuitable machinery, practical troubles, diversion of funds, etc, while outside reasons are depression, default payments in other countries, inputs deficiency, cost acceleration, natural calamities and accidents.

Review of Literature

Today banking sector is becoming more complex and it's the fastest growing sector in India. Financial soundness of country's banking sector is the backbone of its financial firmness and development (Prasad K.V.N., Maheshwara Reddy D., Chari A. A., 2011). As the Indian banking sector was functioning in a globalised atmosphere, the credit expansion and poor loan account performance became a major factor for rising NPAs (Seth Neha). High altitude of NPA was a major issue in banks of India, which need to be addressed properly. The level of NPA has always been high in India in comparison to International standards. NPAs have a negative impact on the liquidity, prosperity as well as overall effectiveness of banks in India, therefore, it needs to be curbed and managed properly (Vij Madhu 2005). The credit managers of Indian banks need to be equipped with better loan appraisal and approval skills, which will enhance the quality of loan accounts and thereby reducing the amount of NPAs (Muniappan, 2003). In the last 15 years there has been a chain of reforms in the banking sector in India which lead to improvement in its efficiency. The accumulation of NPA is not a good indication for the banks as that implies a possibility of increase in bad debts if the loans are not recovered. The bank should take care to ensure that it does not lend money to risky borrowers. So that it can reduce on its NPA and improve the liquidity that is held in the NPA. Such step will show the way to enhancement in the performance of the banks.

Objectives

The proposed research study is designed to attain the listed below objectives:

- To identify the factors responsible for NPAs.
- To suggest measures to reduce Non- performing assets.

Research Methodology

The data used for the study includes primary as well as secondary data. The survey was conducted using a structured questionnaire which covered the various factors responsible for NPAs. The measurement of individual items is based on a 5 point Likertscale.

The total of 125 numbers of questionnaires was distributed in the Banks of Jaipur city, out of which 110 questionnaires were returned back. Banks were chosen randomly across Jaipur city. Questionnaires were distributed to the employees of loan department, credit managers and branch managers. Convenient sampling technique has been used for the study. On the basis of completeness, 95 questionnaires were selected for analysis purpose as sample for the study.

Reliability Analysis

The following tables show the result of reliability test for a sample of 95 questionnaires. Cronbach's alpha for the set of items is .8110, which indicates that questionnaire has good internal consistency.

Table 1 : Factors Responsible for NPA

Statistics for	Mean	N of Variance	Std. Dev.	Variables
SCALE	33.0105	60.2446	7.7617	13

Item-total Statistics

	Scale Mean if Item Deleted	Scale Corrected Variance if Item Deleted	Item- Total Correlation	Alpha if Item Deleted
ISB	30.0737	49.7286	.5937	.7856
SUP	29.9895	51.1807	.4927	.7944
SPP	30.9789	51.8081	.5760	.7897
WJF	30.9158	52.9716	.4562	.7979
CGP	30.9368	53.0598	.4353	.7993
LBC	29.9684	50.6905	.4987	.7938
LPP	31.2632	54.4087	.3727	.8039
MOF	29.9263	54.0052	.2891	.8119
AEE	30.6526	54.3142	.2277	.8196
BWD	30.3579	50.7003	.4387	.7997
LEE	29.9684	51.7969	.4679	.7965
UNC	31.0000	51.6170	.6304	.7868
POB	30.0947	51.5548	.4535	.7977

Reliability Coefficients

N of Cases =   95.0   N of Items = 13

Alpha =   .8110

The variables used for primary data analysis are ISB (Improper selection of borrowers), SUP (slackness in supervision and follow-up), SPP (socio-political pressures), WJF (weak judicial framework), CGP (changes in Government policies), LBC (lack of interbank co-ordination), LPP (lack of proper planning), MOF (mismanagement and diversification of funds), AEE (adverse external environment), BWD (wilful defaulters), LEE (lack of experience and exposure), UNC (unhealthy competition) and POB (Product obsolescence) for identifying the factors responsible for NPA in the banks

Results and Discussion

For the present study, 13 variables were analyzed to determine the factors responsible for NPAs. Mean and standard deviation were calculated to study the factors. PCA varimax rotation was applied for extracting the factors for data reduction in factor analysis. Following tables will explain in detail the

data pertaining to above methods and their interpretation will help in achieving the desired results.

Table 2: Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ISB	2.9368	1.10906	95
SUP	3.0211	1.11067	95
SPP	2.0316	.91620	95
WJF	2.0947	.95732	95
CGP	2.0737	.98112	95
LBC	3.0421	1.15699	95
LPP	1.7474	.91056	95
MOF	3.0842	1.15467	95
AEE	2.3579	1.27926	95
BWD	2.6526	1.26968	95
LEE	3.0421	1.08094	95
UNC	2.0105	.86903	95
POB	2.9158	1.13609	95

After studying the above data of the mean from the Table 2, it is concluded that mismanagement and diversification of funds (MOF) is the most imperative variable that is responsible for loans becoming NPAs. It has the maximum mean of 3.0842.

Table 3: Correlation Matrix

		ISB	SUP	SPP	WJF	CGP	LBC	LPP	MOF	AEE	BWD	LEE	UNC	POB
Correlation	ISB	1.000	.865	.285	.186	.161	.466	.268	.519	.091	.211	.339	.288	.215
	SUP	.865	1.000	.198	.258	.194	.330	.205	.380	.010	.232	.336	.198	.086
	SPP	.285	.198	1.000	.627	.542	.260	.290	.189	.172	.247	.213	.801	.207
	WJF	.186	.258	.627	1.000	.547	.217	.235	.089	.015	.124	.119	.804	.125
	CGP	.161	.194	.542	.547	1.000	.278	.259	.013	-.013	.174	.127	.710	.197
	LBC	.466	.330	.260	.217	.278	1.000	.253	.483	.047	.198	.211	.328	.294
	LPP	.268	.205	.290	.235	.259	.253	1.000	.192	.106	.117	.097	.339	.247
	MOF	.519	.380	.189	.089	.013	.483	.192	1.000	-.100	.107	-.003	.190	-.043
	AEE	.091	.010	.172	.015	-.013	.047	.106	-.100	1.000	.313	.304	.121	.475
	BWD	.211	.232	.247	.124	.174	.198	.117	.107	.313	1.000	.515	.264	.415
	LEE	.339	.336	.213	.119	.127	.211	.097	-.003	.304	.515	1.000	.181	.575
	UNC	.288	.198	.801	.804	.710	.328	.339	.190	.121	.264	.181	1.000	.173
	POB	.215	.086	.207	.125	.197	.294	.247	-.043	.475	.415	.575	.173	1.000

a Determinant = .001

The next part of investigation is shown in Table 3, which states that determinant of the correlation matrix is .001

Table 4: KMO

KMO's Measure of Sampling Adequacy	.579

The sample of the study was measured by KMO. It came out to be 0.579, as it was larger than 0.5, it is considered to be acceptable for doing factor analysis.

Table 5: Bartlett's Test

Bartlett's Test of Sphericity	Approx. Chi-Square	665.829
	Df	78
	Sig.	.000

Bartlett's test is an additional sign of strength of the association among variables. Table 5 shows that its associated probability is 0.000, which is less than 0.05, means it is significant.

Table 6: Communalities

	Initial	Extraction
ISB	1.000	.842
SUP	1.000	.703
SPP	1.000	.721
WJF	1.000	.732
CGP	1.000	.646
LBC	1.000	.465
LPP	1.000	.232
MOF	1.000	.609
AEE	1.000	.510
BWD	1.000	.506
LEE	1.000	.653
UNC	1.000	.914
POB	1.000	.694

The next part of analysis, i.e. Table 6 states that there is 91.4% of the variance in unhealthy competition and 84.2% of the variance in improper selection of borrower.

Table 7 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	Percentage of Variance	Cumulative Percentage	Total	Percentage of Variance	Cumulative Percentage	Total	Percentage of Variance	Cumulative Percentage
1	4.303	33.098	33.098	4.303	33.098	33.098	3.176	24.435	24.435
2	2.022	15.554	48.652	2.022	15.554	48.652	2.656	20.427	44.862
3	1.902	14.627	63.280	1.902	14.627	63.280	2.394	18.418	63.280
4	.953	7.328	70.608						
5	.799	6.147	76.755						
6	.727	5.590	82.345						
7	.641	4.933	87.278						
8	.479	3.687	90.965						
9	.381	2.930	93.895						
10	.331	2.544	96.438						
11	.283	2.177	98.616						
12	.141	1.081	99.697						
13	.039	.303	100.000						

The above table states all the major factors which can be identified from the investigation alongside with the eigenvalues, the percentage of variance attributable to each factor, and the cumulative variance percentage of the factor and the previous factors. The 1st factor records for 33.098% of cumulative variance, the 2nd for 48.652% of cumulative variance and the 3rd for 63.280% of cumulative variance. The left over factors are not noteworthy.

Table 8: Component Matrix

	Component		
	1	2	3
ISB	.659		-.520
SUP	.585		-.510
SPP	.737		
WJF	.661	-.535	
CGP	.630		
LBC	.587		
LPP			
MOF			-.659
AEE			.535
BWD			
LEE	.501	.540	
UNC	.799	-.506	
POB			.504

The table 8 states the loadings of 13 variables on the 3 factors extracted. The higher the total value of the loading, the more the factors have a say to the variable. The spaces on the table indicate loadings that are less than 0.5.

Table 9: Rotated Component Matrix

	Component		
	1	2	3
ISB		.890	
SUP		.822	
SPP	.820		
WJF	.850		
CGP	.799		
LBC		.615	
LPP			
MOF		.761	
AEE			.705
BWD			.675
LEE			.773
UNC	.938		
POB			.821

The thought of rotation was to trim down the quantity of factors on which the variables under the study have elevated loadings. Rotation congregate in 5 iterations. Have a glance at Table 9, it can be observed that Improper selection of borrower (ISB), Slackness in supervision and follow up (SUP), Lack of interbank co-ordination (LBC) and Mismanagement and diversification of funds (MOS) are substantially loaded on Factor (Component) 2 while Weak judicial framework (WJF), Socio - Political pressures (SPP), Unhealthy Competition (UNC) and Changes in Government Policies (CGP) are considerably loaded on Factor (Component) 1. All the left over variables are considerably loaded on Factor (Component) 3, i.e. Adverse External Environment (AEE), Borrowers wilful default (BWD), Product obsolescence (POB) and Lack of experience and expertise (LEE). The extracted factors are capable of being used as variables for advance investigation.

Principal Component Factor 1

Weak judicial framework (WJF), Socio - Political pressures (SPP), Unhealthy Competition (UNC) and Changes in Government Policies (CGP) are loaded on Factor (Componant) 1, which were grouped and named as External Factors. The respondents have given highest importance to Weak judicial framework. The 1st factor records for 33.098% of cumulative variance.

Principal Component Factor 2

Improper selection of borrower (ISB), Slackness in supervision and follow up (SUP), Lack of interbank co-ordination (LBC) and Mismanagement and diversification of funds (MOS) are loaded on Factor (Componant) 2, which were grouped and named as Internal Factors. Among these factors, highest importance has been given to mismanagement and diversification of funds by the respondents. The second factor accounts for 48.652% of cumulative variance.

Principal Component Factor 3

Adverse External Environment (AEE), Borrowers wilful default (BWD), Product obsolescence (POB) and Lack of experience and expertise (LEE) variables are loaded on Factor (Componant) 3, which were grouped and named as borrowers default. Among these, the main reason of default was borrower's wilful default and lack of experience and expertise. The 3rd factor records for 63.280% of cumulative variance.

Strategies for Reducing Non Performing Assets

There are various ways to manage and reduce the NPAs. The bank should, not only resort to recovery of NPAs, but also to control the potential NPAs from becoming actual NPAs. It means the bank should be able to recognize the bad and doubtful borrower, which can result in NPAs in near future and must initiate measures to control.

The figure 1 shows the measures to control NPAs including preventive and curative measures. Credit Appraisal including documentation of credit policy, credit audit immediately after sanction and human resources development through training interventions are some of the important measures. It is also important to identify potential and borderline NPA accounts of borrowers. For this purpose, controllers should monitor all accounts where one quarter interest/instalment is not paid and must be kept under check.
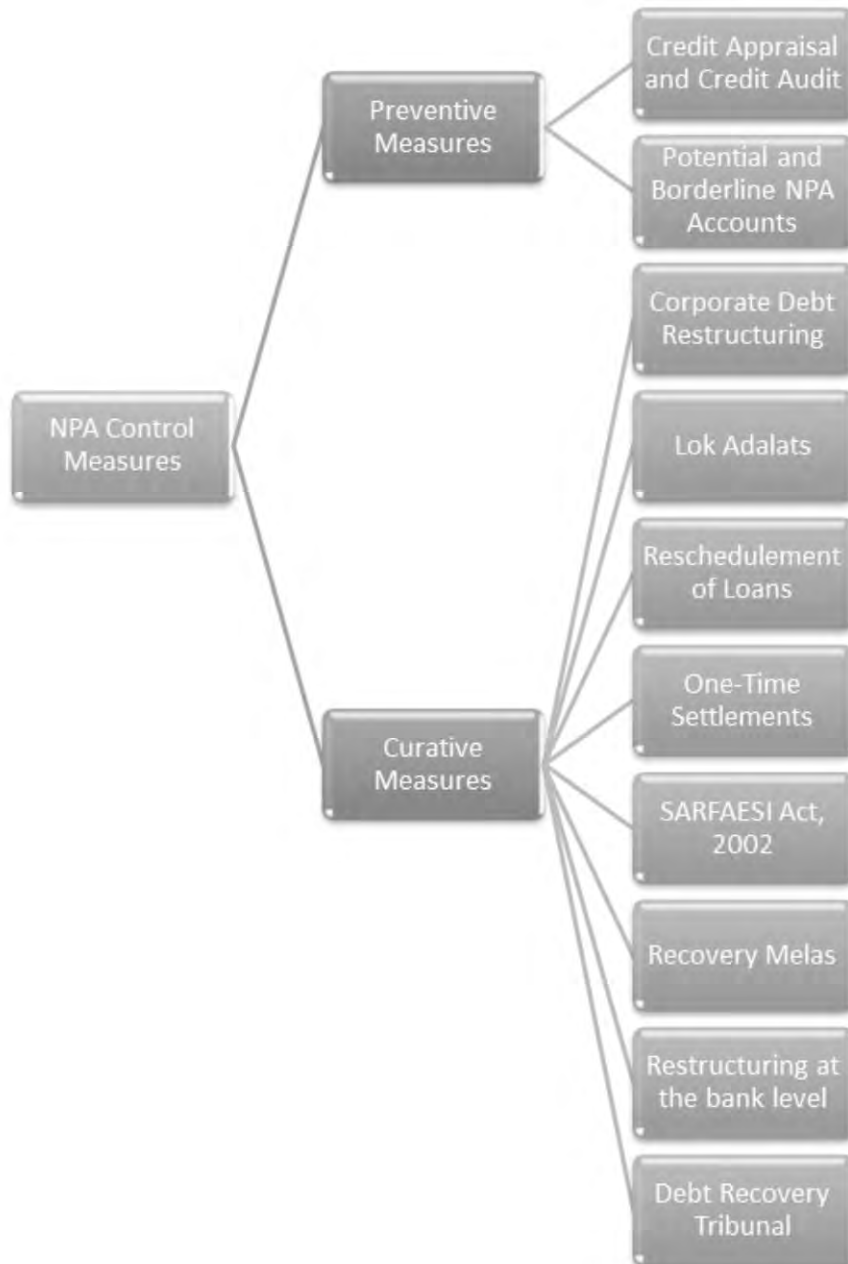
Figure 1 : Non-Performing Assets Control Measures

Findings and conclusion

From the factor analysis, it has been observed that the respondents considers mismanagement and diversification of funds, weak judicial framework, slackness in supervision and follow up, lack of inter-bank co-ordination and LEE as the main factors and reasons behind increasing NPAs in the banks.

The trouble of NPAs can be reduced simply by means of appropriate credit appraisal and risk administration techniques. In a state of credit extension, zeal of the banks to enlarge lending might negotiate on worth of asset quality which raises worry regarding the bad choices of borrowers, ultimately leading to added account of NPAs in the banking sector. It is mandatory for the banking system in India to raise their norms of lending and assessment of credit worthiness of borrowers for resolving the NPA crisis. It is healthier to evade them at the emerging stage of credit consideration by applying accurate and suitable credit assessment methods.

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