Magnitude of Non-Performing Assets in Publics Sectors Banks – A Perception Analysis of Bankers with Reference to State Bank of India

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Abstract: **Financial sector reform in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve requirements, barriers to entry, prudential norms and risk-based supervision. But progress on the structural-institutional aspects has been much slower and is a cause for concern. The importance of the study lies in its futuristic approach to tackle the problem of NPAs focusing mainly on a viable solution. The solution should strengthen the credit portfolio of banks over a period by removing the present deficiencies observed in the standard of credit appraisal, monitoring and follow-up and improving the overall lending policies of banks.**

Keywords: **Non-Performing Assets, Public sector Banks, Credit Risk**

I. INTRODUCTION

The economic crises of 1990s gave birth to the new economic macro level thinking to improve the economic health of the Indian economy. Under the regime of liberalization, privatization and globalization (LPG), new competitive strategies emerged and proved to be beneficial for overall economic development of the country. Financial sector reform is one of India's success stories. A major element of the financial sector comprises reform s in the banking sector. Liberalization and globalization policies have posed many challenges for these banks in the new millennium. Some public sector banks are facing very serious problems as their survival has become very difficult in the competitive world.

The problem of Non Performing Assets (NPAs) is alarming in public sector banks (PSBs) as compared to private sector banks and foreign banks. NPAs of Indian PSBs are considered relatively high by international standards. The bigger ever challenge that the banking industry ever faces is management of NPAs. The Indian banking sector is facing a serious situation, in view of the managing NPAs, which are to the tune of Rs. 56,000 crores by March; 2002and Rs74616crores by 2011.The earning capacity of the profitability of manly banks and financial institutions has been adversely affected by the high level of NPAs. Thus, reduction of NPAs is posing the biggest challenge to banks in the Indian economy. NPAs in banks affect their liquidity, profitability and equity

The NPAs in PSBs are growing not only due to external factors like ineffective recovery tribunals, willful defaulters, lack of demand, labor problems, changes in government policies etc. but also internal factors like managerial deficiencies, in appropriate technologies, poor credit appraisal systems improper SWOT analysis, absence of regular industry visits etc. Due to ineffective measures, NPAs will become more and more complex and will affect the banks liquidity and profitability adversely. The public sector banks must minimize the increasing trend of non-performing assets against the recovery position. Against this a backdrop, study of "Management of NPAs" by banks and comparing it with their counterparts in order to find out the grey area of their operation and to suggest the direction in which changes are necessary is of immense importance.

Conceptual Genesis of Non-performing Assets

Banking is an institution, dealing with lending and collection of money in its most primitive form is as old as authentic history. It followed the basic law of demand and supply where persons having excess money lent to persons who needed it for more productive purposes and were willing to pay a price for this. The operations were limited to the money lender knowing every person he lent money to. The lending was mostly security oriented and bad loans at present called non-performing, assets or NPAs were unheard of.. However, over a period of time the operations began to grow as the number of clients increased, resulting in the need for proper regulation and organization. Gradually, simple banking transformed itself into commercial banking, as at present known, according to requirements of the times. Commercial banking itself has undergone numerous changes all over the world, during the last five decades. In the case of India too, the changes during this period, have redefined the very complexion of commercial banking. As a matter of fact, the changes that have taken place in India have been far more significant and much more radical in some regards, than elsewhere in the world.

Intricacies of Non-performing Assets

The most important business implication of the NPAs is that is leads to the credit risk management of which assumes priority over other aspects of a bank's functioning. The bank's whole machinery would thus be pre-occupied with recovery procedures rather than concentrating on expanding business. A bank with a high level of NPAs would be forced to incur carrying costs on a non-income yielding assets. Other consequences would be reduction in interest income, high level of provisioning, stress on profitability and capital adequacy, gradual decline in the ability to meet the steady increase in cost, increased pressure on spread or net interest margin (NIM) thereby reducing competitiveness, steady erosion of capital resources and increased difficulty in augmenting capital resources. The lesser-appreciated implications are reputational risks arising out of greater disclosures on quantum and movement of NPAs, provisions, etc. The non-quantifiable implications can be psychological 'play safe' attitude and risk aversion, lower morale and disinclination to take decisions at all levels of staff in the bank.

II. NEED FOR THE STUDY

In banking, some levels of incidence of NPAs is bound to exist and are inevitable because of the very nature of banks' business in dealing with people and money and giving support to the growth of the economy, but these are generally within manageable limits. In India, the problem gets compounded as it is dependent on several factors including policies of changing governments, disturbances taking place in the area of international economies, cyclical exchanges that an economy is subject to, gambling of monsoons, willful defaults etc. There is an imminent urge to focus on the problem of NPAs to minimize its reoccurrence in the years to come and thereby strengthening the bank books for improved performance in terms of efficiency, productivity and profitability. Cost of bank funds which has effect on the cost of funds in the financial market and the economy as a whole and which need to be kept as low as possible continue to be high despite several measures initiated by Reserve Bank of India to bring in a low interest rate regime in tune with the fall in inflation rate and other rates of interest in the financial system. Since the problem emanates basically because of the failure of borrowers whatever may be circumstances for their default, there is an urgent need to make the borrowers feel that the money borrowed by them from banks belongs to the general public and has to be repaid at any cost. The importance of the study lies in its futuristic approach to tackle the problem of NPAs focusing mainly on a viable solution. The solution should strengthen the credit portfolio of banks over a period by removing the present deficiencies observed in the standard of credit appraisal, monitoring and follow-up and improving the overall lending policies of banks. Banks seems to be gradually shifting to invest in the less risky preferences like government securities and other not so desirable avenues of excessive consumerist activities. This study is expected to bring a level playing field for banks and borrowers and all stake holders of banks, particularly the government. Various studies which were conducted on NPA's and some suggestive Micro measures at an individual bank and branch level. Therefore there is a need to conduct a study on management of NPAs of Schedule Commercial Banks in India including Public Sector Banks, Private Sector and Foreign Banks.

III. OBJECTIVES OF THE STUDY

The Indian banking sector particularly the public sector banks have been facing the major challenge of NPAs. NPAs is an critical parameter and the analysis of financial performance of banks. Reduction of NPA`s is necessary to improve profitability of the banks and compliance with capital adequacy norms the present study is conducted with the following objectives:

The main objective of the study is to evaluate the management of NPAs of Public sector banks in India with special reference to SBI in Visakhapatnam zone of Andhra Pradesh. The other objectives are:

a) to analyze the incidence and trends of Non-performing assets in Indian banking sector in general and the public sector banks in particular.
b) to assess the magnitude and trends of Non-performing assets in State Bank of India and associate banks.
c) to study the impact of Non- performing assets on the performance of public sector banks.
d) to explore the causes cures for Non-performing assets in State Bank of India through the perceptional analysis of the borrowers and the bankers.
e) to suggest the measures and policy prescriptions for effectively managing Non- performing assets.

IV. HYPOTHESIS OF THE STUDY

The study aimed at testing the following hypothesis on the basis of the data collected for various sources to this research work:

1. Factors influencing the poor performance and financial status of borrowers are correlated.
2. Financial issues cause much for the failure of repaying the loan from the borrowers**.**
3. Documentary delays are the prime case for the delay in sanctioning the loans.

V. SCOPE OF THE STUDY

The scope of the study are cover background development of public sector banks in India, banking sector reforms along with focus on the recent development in

financial sector. Though the study in general encompasses the evaluation of the schedule commercial banks by groups, the main focus is on public sector banks. The focal emphasize of the study is on the analysis of the trends in the incidence and magnitude of the NPAs in public sector banks, with the special focus on State Bank of India group of banks. No doubt peripherally the overall assessment of non-performing assets in schedule commercial banks in India and the public sector banks is made as the core of the study to explore different dimensions and causes for the incidence of NPAs in public sector banks with special reference to State Bank of India.

VI. DATABASE AND METHODOLOGY

The methodology adopted for the study includes a detailed analysis of secondary data related to NPAs of Scheduled Commercial Banks and a study of primary data on the views and opinions of a sample group of mangers and borrowers. Banks group wise and Bank – wise comparison has been made to examine the difference existing between them through using CAGR and Ratio analysis. The growth rate of the relevant variables has also been found out by using the time series analysis. The survey of primary data is made taking a sample of managers and officials and also the borrowers on random cum convenience sample basis selected from the zone of Visakhapatnam covering four districts of Srikakulam, Vizianagaram, Visakhapatnam and East Godavari Districts in Andhra Pradesh.

VII. SAMPLE SELECTION

The present study has adopted multi-stage sampling technique for selecting the sample of respondents. Initially, for the purpose of sample survey, respondents in Hyderabad circle covering Visakhapatnam zone is considered. It is identified that Visakhapatnam zone in the state of Andhra Pradesh consists of East Godavari, Visakhapatnam, Vizianagaram and Srikakulam Districts. Now, each district is assumed as a cluster district and thereby, based on the geographical and demographical diversity of the respondents.

VIII. TOOL AND TECHNIQUSE FOR ANALYSIS

For the purpose of analysis and to facilitate interpretation simple statistical tools like percentages, averages, simple growth rate, compound annual growth rates, Garrett ranking method and Pearson Coefficient of Correlation are used.

Statistical tools such as Chi Square test, Reliability test, Kolmogorov- Smirnov test, Friedman's test, and Exploratory factor analysis are used for testing the hypothesis on SPSS for Windows Version 20.0 are used for the purpose of extensive analysis.

IX. DATA ANALYSIS OF BANKER'S PERCEPTION

The present study provides an analysis of the perception of the borrowers and Bankers of the State Bank of India in Visakhapatnam zone on various aspects of NPA management and dealing with the problem by the Bank. It starts with throwing light on the socio – economic profile of the select sample of borrowers and goes through various dimensions of the problem of management as perceived by the borrowers.

TABLE -1: FACTORS INFLUENCING THE POOR PERFORMANCE AND FINANCIAL STATUS OF BORROWERS AND THE LEVEL OF INTENSITY CROSS TABULATION

S. No	Statement	Level of intensity					Total	Friedman's Mean Ranks	Ranking
		Very Low	Low	Moderate	High	Very High			
1	Inadequate working capital.	50(5.4%) (9.9%)	121(13.1%) (7.9%)	254(27.5%) (5.6%)	356(**38.5%**) (11.2%)	144(15.6%) (6.3%)	925(100.0%) (7.7%)	7.211	**VI**
2	Others	42(4.5%) (8.3%)	134(**14.5%**) (8.7%)	445(48.1%) (9.9%)	132(**14.3%**) (4.1%)	172(**18.6%**) (7.5%)	925(100.0%) (7.7%)	6.281	**XIII**
3	Inadequate work Space & Sanitary measures	38(4.1%) (7.5%)	134(14.5%) (8.7%)	430(46.5%) (9.6%)	161 (**17.4%**) (5.1%)	162(**17.5%**) (7.0%)	925(100.0%) (7.7%)	6.398	**XII**
4	Bottlenecks in availability of raw material.	43(4.6% (8.5%	144(15.6% (9.4%	431(**46.6%** (9.6%	109(11.8% (3.4%	198(**21.4%** (8.6%	925(100.0%) (7.7%)	6.450	**X**
5	Unavailability of Credit during the needs.	24(**2.6%**) (4.7%)	122(13.2%) (8.0%	245(26.5%) (5.4%)	359(**38.8%**) (11.3%)	175(**18.9%**) (7.6%)	925(100.0%) (7.7%)	7.636	**IV**
6	Delayed/ inadequate sanction of funds by banks.	54 (5.8%) (10.7%)	73 (7.9%) (4.8%)	241(26.1%) (5.4%)	398(**43.0%**) (12.5%)	159(**17.2%**) (6.9%)	925(100.0%) (7.7%)	7.647	**III**
7	Poor bargaining power.	26 (2.8%) (5.1%)	89 (9.6%) (5.8%)	272 (29.4%) (6.0%)	335 (**36.2%**) (10.5%)	203 (**21.9%**) (8.8%)	925(100.0%) (7.7%	7.7816	**I**

8	Diversion of funds to other uses.	43 (4.6%) (8.5%)	107(11.6%) (7.0%)	234 (25.3%) (5.2%)	371 (**40.1%**) (11.6%)	170 (**18.4%**) (7.4%)	925(100.0%) (7.7%)	7.557	**V**
9	Shortage of finance.	25 (2.7%) (4.9%)	91 (9.8%) (5.9%)	267 (28.9%) (5.9%)	374 (**40.4%**) (11.7%)	168 (**18.2%**) (7.3%)	925 (100.0%) (7.7%)	7.699	**II**
10	Lack of standardization, lack of precision &q uality control of products.	38 (4.1%) (7.5%)	134 (**14.5%**) (8.7%)	442 (47.8%) (9.8%)	135 (**14.6%**) (4.2%)	176 (**19.0%**) (7.6%)	925 (100.0%) (7.7%)	6.416	**XI**
11	Lack of knowledge in assessment and there by inequilibrium in demand and supply of goods.	37 (4.0%) (7.3%)	141 (15.2%) (9.2%)	417 (45.1%) (9.3%)	154 (**16.6%**) (4.8%)	176 (**19.0%**) (7.6%)	925 (100.0%) (7.7%)	6.491	**IX**
12	Lack of responsive towards the changes in market.	38 (4.1%) (7.5%	111 (12.0%) (7.2%	440 (47.6%) (9.8%	148 (**16.0%**) (4.6%	188 (**20.3%**) (8.2%	925 (100.0%) (7.7%	6.668	**VIII**
13	Poor credit collection period from customers/ Delayed realization of receivables.	49 (**5.3%**) (9.7%	131 (**14.2%**) (8.6%	380 (41.1%) (8.4%	153 (**16.5%**) (4.8%	212 (**22.9%**) (9.2%	925 (100.0%) (7.7%	6. 759	**VII**
	Total	**507** (4.2%) (100.0%)	**1532** (12.7%) (100.0%)	**4498**(37.4%) (100.0%)	**3185**(26.5%) (100.0%)	**2303**(19.2%) (100.0%)	**12025**(100.0%) (100.0%)		
Chi Square:359.883; Degree of freedom : 12 ; Asymptotic significance: 0.000									

Note: 1. Figures in side brackets indicate percentage to Row Total
2. Figures in lower brackets indicate percentage to ColumnTotal
Source: Compiled and Computed from

X. FACTORS INFLUENCING THE POOR PERFORMANCE AND FINANCIAL STATUS OF BORROWERS AND THE LEVEL OF INTENSITY

Report of the working Group on Rehabilitation of Sick SMEs, 2007 Chaired by Sri K C Chakrabarty, Deputy Governor, RBI identified the issues pertaining to the sick small and micro enterprises. In its report, it identified that while marketing related issues, management issues and willful default / diversion of funds were found to be major contributors to sickness, the banks attributed high weight age to market factors and management factors as contributors to sickness. If the views of all stakeholders are taken together market issues, management issues, diversion of funds, technical obsolescence, delayed / inadequate working capital, willful default/ diversion of funds and delayed realization of receivables were the major causes of financial sickness of respondents.

The stakeholders viewed that the borrowers are the primary source of information to identify the major problems of their business and causes of sickness. Therefore an attempt is made as to which factors are the prime causes for the sickness of their business and the results presented in the table 1

As can be seen from the table, it is observed that a majority of 43.0 per cent of respondents perceived that the delayed/inadequate sanction of funds by the SBI bank branches is the major problem and stands as a cause for financial sickness while 40.4 per cent and 40.1 percent of respondents respectively opined that the shortage of finance and diversion of funds to other uses is also another problem area which stands as a cause for business sickness. From the above, it can be inferred that the delayed/inadequate sanction of funds has a rippling effect on the financial health of the borrowers landing them to the shortage of finance and forceful diversion of funds to other purposes. It is also observed from the table that 38.8 per cent and 38.5 per cent of respondents respectively opined that unavailability of credit during their business needs reflected on their working capital position respectively. The problem of poor credit collection period from their customers/delayed realization of receivables are found to be very high as stated by 22.9 per cent of respondents. It is followed by poor bargaining power (21.9 per cent) and bottlenecks in availability of raw material (21.4 per cent). An equal number of respondents opined the lack of standardization, lack of precision and quality control and also lack of knowledge in market assessment and there by inquilibrium in demand and supply of goods are also listed as the major problems for the sickness of the unit.

Level of Intensity of the problem Identified Friedman's test is used to identify the problems/factors which have high intensity in lending the business towards poor performance and sickness, and the results presented in the table 8.41. It is observed from the table that Poor bargaining power (7.7816) of the respondents is ranked first having very high intensity on the performance of the business and it is followed by Shortage of finance (7.699), Delayed/ inadequate sanction of funds by banks (7.647), unavailability of Credit during the needs (7.636) and Diversion of funds to other uses (7.557). It is also evident from the table that inadequate work Space and Sanitary measures (6.398), lack of knowledge in assessment and there by inequilibrium in demand and supply of goods (6.491) and also lack of responsiveness towards the changes in market (6.668) are not observed as the major as these are ranked in twelfth, eleventh and tenth places respectively.

Friedman's test also testifies the hypothesis that the ranks of the variable do not differ from their expected value, for a constant sample size, the higher the value of the chi-square statistic, the larger the difference between each variable's rank sum and its expected value. For these rankings, the chi-square value is 359.883 and degrees of freedom are equal to the number of variables minus 1 i.e., 13-1 = 12. The asymptotic significance is the approximate probability of obtaining a chi-square statistic as extreme as 359.882 with 12 degrees of freedom. As the chi-square value of 359.883, with degree of freedom 12, is high it has to be concluded that the borrower do not have equal opine on the intensity of factors on the poor performances and sickness of their business units.

The above analysis clearly states that the poor bargaining powers, delayed/ inadequate sanction of funds by banks, diversion of funds to other uses, shortage of finance and unavailability of credit during the period of need are the major causes on the high side of intensity lending to poor performance of the unit and their financial sickness.

Hypothesis–I: Factors influencing the poor performance and financial status of borrowers are correlated.

The study explored and focused on various important factors which affect the poor performance and sickness of business units. For the purpose of deducting important attributes, **exploratory factor analysis** was used which determines the significant and correlated factors that influence. To calculate the inter correlation among the factors the **principal component varimax rotation factor analysis method** was employed to the group for different factors.

In order to proceed further, the following steps were taken.

1. The correlation matrix was computed and evaluated. This reveals that there were enough correlations to go with the factor analysis.
2. Anti- image correlations were computed. These show the partial correlations were low, indicating that true factors existed in the data.
3. Reliability analysis was using **Cronbach's alpha** was conducted n the instrument / construct. Reliability coefficient relating to the opinion of responses turns out to be **0.8526.**
4. After checking the scaling reliability, appropriateness of the data collected was examined by using various measures. First **KMO (Kaiser – Meyer – Olkin)** to be **0.920** thereby, indicating that the sample is good enough for the factor analysis. KMO value for the individual factor ranges from 0.7403 to 0.9705 as observed from the diagonals of anti image correlation matrix. As far as **MSA (Measure of Sample Adequacy)** criteria is concerned, any variable with lower MSA indicate that they are not sufficiently correlated other variables in the model. The cut-off value for MSA is 0.6. Thus all the variables considered for the study satisfy the minimum cut-off value and , therefore, there is no need to reduce the size of variable. The KMO and Bartlett's test value 0.920, which was adequate to conduct factor analysis.
5. **Bartlett's test of sphericity** was the next statistical test applied in the study for verifying the appropriateness of the data. The test value 12939.42 is highly significant ($p<0.000$) thereby indicating the data is appropriate for the factor analysis.

As it is evident from Table 1 two factors were extracted. The last column in the table 1.2 shows communalities. It is the row sum squared factor loadings .They show the amount of variance in the variable that is accounted for the three factors taken together. The size of a commodity is useful index for assessing how much variance in a particular variable accounted for by the factor solution. Larger communalities indicate that a large number of variance has been accounted for the factor solution. In fact communality with more than 0.5 indicates the stability of the variable. From the table, communalities of individual variables are ranging from 0.2079 and 0.9279. Therefore, all the variables represent the stability for factor analysis.

The percentage of total variance is used as the index to determine how well the total factors account for variables represented together, the present solution account for the total 71.904 of total variance, which shows that the model with two factors is satisfactory.

It could be observed from the table that the variance explained by factor 1 to 2 is 48.617 per cent and 23.287 per cent respectively. By retaining only the variables with Eigen values greater than one, we can infer that 48.616 per cent of variance is explained by factor 1 and 23.287 per cent of variance is explained by factor 2 . Factor loadings are applied to group variables where factor loadings greater than 0.5 is found to be considered as an index.

The final step in factor analysis is the naming of factors. The labeling is intuitively developed by the factor analyst depending upon its appropriateness for representing the underlying dimensions of a particular factor. Although the process of naming the factors is not very scientific, a factor loading represents the correlation between on original variable and its factors. The signs are interpreted just as with any other correlation coefficients. On each factor like signs of factor loading mean that the variables are negatively related. All the two factors extracted have been given appropriate names on the basis of variables represented in each case. The names of factors, the statement/ variables, labels and factor loadings have been summarized in table 1.4.

Factor-1: Finance Related Factors:

Table 1.4 shows that the dimension of factor 1 is the most important factor which has 48.617 per cent of the total

variance and has an Eigen value of 6.320 and seven statements lead to this factor. The variable Diversion of funds to personal use has the highest factor loading 0.9767 followed by Unavailability of Credit during the needs (0.9689). On the basis of the factor loading the variables are arranged in the descending order i.e. Delayed/ inadequate sanction of funds by banks (0.9630), Shortage of finance (0.957), Inadequate working capital (0.9416), Poor credit collection period from customers/ Delayed realization of receivables (0.9404) and other finance related factors (0.8927). It is clearly indicated from the above analysis that the poor performance and sickness in small business units of respondent borrowers is due to the financial related factors which in turn lead to NPAs in State Bank branches.

Factor -2: Operational Related Factors:

The factor accounts for the second largest amount of total variance i.e. 23.287 and has an Eigen value of 3.0273. Six statements lead to this factor and this factor divulges what operational factor influence the condition of business. It is revealed that bottlenecks in the availability of raw material (0.7879) followed by inadequate work Space & sanitary measures (0.7817), poor bargaining power (0.7463), lack of responsiveness, towards the changes in market (0.6896) and lack of knowledge in assessment and there by inequilibrium in demand and supply of goods (0.553). It is clearly evident from the above analysis, that among the operation related factors bottlenecks in availability of raw materials, poor space in delivering their business and poor bargaining power are the reasons for poor performances /sickness of business unit of respondents and stand as the root cause of turning in to NPAs.

To test the normality of the residuals, Kolmogorov – Smirnov test (K-S test) has been used. The one- sample Kolmogorov - Smirnov test procedures compares the observed cumulative distribution function for a variable with a specified theoretical distribution, which may be normal, position or exponential. The Kolmogorov – Smirnov- Z is computed form the largest difference (in absolute value) between the observed and theoretical cumulative distributions functions. This goodness of fit tests whether the observations could reasonably have come from the specified distribution.

The Kolmogorov- Smirnov (K- S) Z-test statistics is the product of the square root of the sample size and the largest absolute difference between the empirical and theoretical cumulative attributes functions. The Z statistics for the selected variable range between 6.6024 & 8.3579, which are statistically significant at 0.00 per cent level of significance. Hence, it infers that the distribution is normal.

Table – 1.1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.920**
Bartlett's Test of Sphericity	Approx. Chi-Square	**12939.428**
	Df	**78**
	Sig.	**0.000**

Table- 1.2: Factor Statements, Anti-image Matrices and Kolmogorov-Smirnov Z- values FACTORS For INFLUENCING THE POOR PERFORMANCE AND FINANCIAL STATUS OF BORROWERS

S. No	Factor Statements	Anti-image Matrices	Kolmogorov – Smirnov – Z Values
1	Availability of raw material.	0.79805	7.128758
2	Inadequate work Space & Sanitary measures	0.781982	8.350219
3	Lack of standardization, lack of precision & quality control of products.	0.935257	7.985707
4	Poor bargaining power.	0.957165	8.328549
5	Lack of responsive towards the changes in market.	0.951317	7.14439
6	Shortage of finance.	0.960866	7.176
7	Unavailability of Credit during the needs.	0.933997	7.862787
8	Lack of knowledge in assessment and thereby in equilibrium in demand and supply of goods.	0.95159	6.602423
9	Poor credit collection period from customers/ Delayed realization of receivables.	0.970452	7.472772
10	Inadequate working capital.	0.768938	7.260293
11	Diversion of funds to personal use.	0.761014	8.357935
12	Delayed/ inadequate sanction of funds by banks.	0.747346	7.877146
13	Others.	0.740251	8.245071

Source: computed from primary data

Table- 1.3: TOTAL VARIANCE EXPLAINED

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.32	48.617	48.617	6.32	48.617	48.617	6.312	48.557	48.557
2	3.027	23.287	71.904	3.027	23.287	71.904	3.035	23.347	71.904
3	0.96	7.385	79.289						
4	0.734	5.65	84.939						
5	0.585	4.501	89.439						
6	0.356	2.741	92.18						

7	0.333	2.561	94.741	
8	0.25	1.92	96.661	
9	0.143	1.1	97.761	
10	0.108	0.832	98.592	
11	0.078	0.602	99.195	
12	0.058	0.447	99.641	
13	0.047	0.359	100	

Extraction Method: Principal Component Analysis.

TABLE – 1.4: ROTATED COMPONENT MATRIX WITH COMMUNALITIES

Factors No.	Name of the Dimension	Factor Statements	Component		Communalities
			1	2	
Factor – 1	**Financial Related Factors**	Unavailability of Credit during the needs.	**0.96895**	0.03243879	0.955252
		Shortage of finance.	**0.95756**	0.02552977	0.887327
		Poor credit collection period from customers/ Delayed realization of receivables.	**0.94046**	0.01433199	0.799355
		Inadequate working capital.	**0.94168**	0.02389787	0.611189
		Diversion of funds to personal use.	**0.97671**	0.03587144	0.556211
		Delayed/ inadequate sanction of funds by banks.	**0.96306**	0.01934996	0.559183
		Others.	**0.89272**	0.04910789	0.477105
Factor -2	**Operational Related Factors**	Availability of raw material.	-0.0557	**0.78797603**	0.62401
		Inadequate work Space & Sanitary measures	-0.0085	**0.78173934**	0.207886
		Lack of standardization, lack of precision & quality control of products.	-0.0775	**0.74175745**	0.939915
		Poor bargaining power.	-0.0464	**0.74634297**	0.917567
		Lack of responsive towards the changes in market.	-0.0381	**0.68967465**	0.884665
		Lack of knowledge in assessment and there by inequilibrium in demand and supply of goods.	-0.045	**0.5537234**	0.927857
Extraction Method: Principal Component Analysis. [a]3 components extracted.					

Source: Compiled from Primary Data

TABLE – 1.5: REASONS FOR FAILURE OF REPAYING THE LOAN AND LEVEL OF INTENSITY CROSS TABULATION

S. No	Reasons For Failure Of Repaying The Loan	Level of Intensity					Total	Friedman's Mean Ranks	Ranking	Kolmogorov- Smirnov Z-test
		Quietly Less Impact	Slightly High	Moderately High	High	Extremely High				
1	Asset sold early	53 (6.6%) (9.9%)	73 (9.1%) (4.0%)	133 (16.6%) (4.4%)	398 (49.8%) (10.6%)	143 (17.9%) (4.9%)	800(100.0%) (6.7%)	**8.392**	**III**	**8.756**
2	Business/Agriculture Failure due to cyclical and seasonal causes.	26(3.3%) (4.9%)	89(11.1%) (4.9%)	151(18.9%) (5.0%)	332 (41.5%) (8.9%)	202 (25.3%) (6.9%)	800 (100.0%) (6.7%)	**8.701**	**I**	**7.450**
3	Diversification of funds to other purposes	38 (4.8%) (7.1%)	109(13.6%) (6.0%)	125 (15.6%) (4.2%)	374 (46.8%) (10.0%)	154 (19.3%) (5.3%)	800 (100.0%) (6.7%)	**8.371**	**IV**	**8.383**
4	Gap between income and expenditure	25 (3.1%) (4.7%)	94 (11.8%) (5.2%)	153 (19.1%) (5.1%)	378 (47.3%) (10.1%)	150 (18.8%) (5.1%)	800 (100.0%) (6.7%)	**8.466**	**II**	**8.173**
5	Geographical distance of the banking branch	33 (4.1%) (6.2%	112 (14.0%) (6.2%)	219 (27.4%) (7.3%)	195 (24.4%) (5.2%)	241 (30.1%) (8.3%)	800 (100.0%) (6.7%)	**8.136**	**VI**	**5.140**

6	Government policies on priority sector	29 (3.6%) (5.4%)	154 (19.3%) (8.5%)	213 (26.6%) (7.1%)	226 (28.3%) (6.0%)	178 (22.3%) (6.1%)	800 (100.0%) (6.7%)	**7.570**	**XIV**	**5.274**
7	High Interest rate & High penal interest	37 (4.6%) (6.9%)	140 (17.5%) (7.7%)	221 (27.6%) (7.4%)	171 (21.4%) (4.6%)	231 (28.9%) (7.9%)	800 (100.0%) (6.7%)	**7.907**	**VII**	**5.039**
8	Migration to other locations	50 (6.3%) (9.3%)	141 (17.6%) (7.8%)	214 (26.8%) (7.1%)	218 (27.3%) (5.8%)	177 (22.1%) (6.1%)	800 (100.0%) (6.7%)	**7.396**	**XV**	**5.168**
9	Insufficient Funds	32 (4.0%) (6.0%)	131 (16.4%) (7.2%)	229 (28.6%) (7.6%)	200 (25.0%) (5.3%)	208 (26.0%) (7.1%)	800 (100.0%) (6.7%)	**7.854**	**X**	**4.777**
10	Less or no returns on assets	31 (3.9%) (5.8%)	138 (17.3%) (7.6%)	217 (27.1%) (7.2%)	205 (25.6%) (5.5%)	209 (26.1%) (7.2%)	800 (100.0%) (6.7%)	**7.883**	**VIII**	**4.948**
11	Low gestation period with other money lenders	43 (5.4%) (8.0%)	132 (16.5%) (7.3%)	210 (26.3%) (7.0%)	205 (25.6%) (5.5%)	210 (26.3%) (7.2%)	800 (100.0%) (6.7%)	**7.876**	**IX**	**5.040**
12	Misutilisation of funds	31 (3.9%) (5.8%)	105 (13.1%) (5.8%	225 (28.1%) (7.5%	218 (27.3%) (5.8%	221 (27.6%) (7.6%	800 (100.0%) (6.7%	**8.230**	**V**	**5.126**
13	Personnel and health problems	42 (5.3%) (7.9%)	130 (16.3%) (7.2%)	232 (29.0%) (7.7%)	194 (24.3%) (5.2%)	202 (25.3%) (6.9%)	800 (100.0%) (6.7%)	**7.651**	**XIII**	**4.668**
14	Post ponement of the repayment	33 (4.1%) (6.2%)	134 (16.8%) (7.4%)	228 (28.5%) (7.6%)	207 (25.9%) (5.5%)	198 (24.8%) (6.8%)	800 (100.0%) (6.7%)	**7.733**	**XII**	**4.888**
15	Willful default	32 (4.0%) (6.0%)	129 (16.1%) (7.1%)	224 (28.0%) (7.5%)	220 (27.5%) (5.9%)	195 (24.4%) (6.7%)	800 (100.0%) (6.7%)	**7.832**	**XI**	**5.131**
	Total	535 (4.5%) (100.0%)	1811 (15.1%) (100.0%)	2994(25.0%) (100.0%)	3741(31.2%) (100.0%)	2919(24.3%) (100.0%)	12000(100.0%) (100.0%)			
Chi Square: 146.788; Degree of freedom : 14 ; Asymptotic significance: 0.000										

Note: 1. Figures in side brackets indicate percentage to Row Total
2. Figures in lower brackets indicate percentage to Column Total
Source: Compiled and Computed from Primary Data

Proposition - I: operational and financial factors causing the poor performances are interrelated.

The canonical correlation coefficient (0.96499) with Chi-square value (χ^2) = 2482.6 at P = o.ooo between two groups of statements pertaining to the operational factors and financial related factors also reveal that the performance of the borrowers units are not independent of both the sets of factors.

Hypothesis-II-: Financial issues cause much for the failure of repaying the loan from the borrowers.

Reasons for Failure of Repaying the Loan and the Level of Intensity

According to Amartya Sen's ideology, economic growth is very useful that it could generate income to the relatively poor and this inclusive lead to poverty alleviation. Despite the role of public sector banks like SBI in assisting the rural and semi-urban people the very end objective of the inclusive growth is not achieved due to various reasons such as inflation conundrum in the economy, business failure of the borrowers due to cyclical and seasonal issues, gap between income and expenditure of the borrowers, diversification of funds to other purposes and Personal and health problems etc. The above conditions may also form the nuts and bolts of not repaying the loan to the banks and thus lead to the creation of Non-performing assets. Hence, based on the sample survey conducted sample respondents and the literature survey, fifteen causes were identified as to which reasons possess soaring intensity for not repaying the loan to the banks.

As can be seen from the table 1.4 a majority of 49.8 per cent of respondents opined that selling the asset early has a quiet high impact on not repaying the loan and it is followed by the gap between income and expenditure (47.3 per cent), diversification of funds to other purposes (46.8 per cent). The response as given by the respondents towards the gap between income and expenditure and diversification of funds to other purposes is clearly evident that selling the assets by borrowers is the major reason for not paying the loan. It can also be seen that the business/agriculture failure due to cyclical and seasonal fluctuations also stated as the foremost conundrum for not paying the loan as ascribed by 41.5 per cent of respondents (Quietly high) and 25.3 per cent respondents (extremely high). Despite SBI possessing the large network of 13698 branches, 30.1 per cent of respondents still attribute the geographical distance of the bank branch has extreme impact on their stand of not paying loan to the bank while high interest rate and high penal interest rate (28.9 per cent), misutilisation of funds (27.6 per cent) and migration to other

locations (27.3 per cent) has an extreme impact on the loan payment status. It is also observed that an approximately equal number of respondents i.e. 26 per cent of respondents disclosed those insufficient funds and less or no returns on assets lead to depend on the unorganized money lenders which has low gestation period are also the reasons for not paying the loan. The personal and health problems (25.3 percent) also stand as the reason for willful default (24.4 per cent) and post ponement of the repayment (25.9 per cent) of paying the loan to the bank.

Friedman's test is also applied to determine the major reasons which have extreme impact for not repaying the loan. According to the Friedman mean ranks business/agriculture failure due to cyclical and seasonal causes (8.70) is the major cause followed by gap between income and expenditure (8.47), selling the asset early (8.39), diversification of funds to other purposes (8.37) and misutilisation of funds (8.23) which are placed in second, third, fourth and fifth positions respectively. As per the Friedman's mean rank value, it is observed that migration to other locations (7.40) is having a less impact on the payment of loan status of respondents which is placed in fifteenth position and is followed by Government policies on priority sector (7.57), personnel and health problems (7.65), Post ponement of the repayment (7.73), willful default (7.83) and insufficient funds (7.85). Low gestation period with other money lenders (7.88), less or no returns on assets (7.88), High Interest rate & High penal interest (7.91) and Geographical distance of the bank branch (8.14) are the other reasons for non-repayment of loan which are placed in the descending order of ninth, eighth, seventh and sixth positions respectively.

Friedman's test also tests the hypothesis that the ranks of the variable do not differ from their expected value. For the rankings, the chi-square value is 146.788 and degrees of freedom are equal to the number of variables minus 1 i.e., 15-1 = 14. The asymptotic significance is the approximate probability of obtaining a chi-square statistic as extreme as 146.788 with 14 degrees of freedom. As the chi-square value 146.788 with degrees of freedom 14 is high, it has to be concluded that the respondents do not have equal opine on the intensity of factors on the non-repayment of loans.

The Z statistics for the selected variable range between 4.668 & 8.756, which are statistically significant at 0.00 per cent level of significance. Thus, it infers that the distribution is normal.

Through it can thus be inferred that selling the asset early due to business/agriculture failure and also due to cyclical and seasonal causes, gap between income and expenditure, diversification of funds to other purposes and misutilisation of funds are the major causes for the non repayment of loans. **Thus from the above analysis, the hypothesis as stated is proved that the financial issues causes much for the failure if repaying the loan from the borrower.**

XI. OBSERVATIONS

The NPAs in PSBs are growing not only due to external factors like ineffective recovery tribunals, willful defaulters, lack of demand, labor problems, changes in government policies etc. but also internal factors like managerial deficiencies, in appropriate technologies, poor credit appraisal systems improper SWOT analysis, absence of regular industry visits etc. Due to ineffective measures, NPAs will become more and more complex and will affect the banks liquidity and profitability adversely.

- The most important business implication of the NPAs is that is leads to the credit risk management of which assumes priority over other aspects of a bank's functioning. The bank's whole machinery would thus be pre-occupied with recovery procedures rather than concentrating on expanding business.
- The loans provided by the banks have specified purposes. For those specified purposes only, the bankers provide loan facility.
- An approximately equal number of respondents, i.e. 9.66 and 9.22 per cent of respondents revealed that they had taken the loan for personal use and for self employment.
- A majority of 55.43 per cent reported that they are also the debtors for the other financial institutions. This clearly supports the above proposition that the menace of NPAs in SBI bank branches is not only due to the shift of respondents to other institutions for financial support but also due to the kind of digging its own hole as the SBI branches have been sanctioning less amount of loans than actively needed by the borrowers .
- In spite of many reformatory and regulatory changes that took place in the financial system since the financial sector reforms, still the huge masses of the public rely on unorganized institutions for their needs when their needs are not adequately met at the bank level.

XII. SUGGESTATIONS

Based on the findings, the following recommendation can be made

- Due to provision for running their lunched business of inadequacy loan funds, borrower are forced to approach private money lending agencies, and they are unable to repay the loan and consequently the borrowers become NPAs. An attempt is made to know whether the amount sanctioned by the bank is sufficient for the borrower in establishing unit or

need of the unit.

- Banks should examine the viability of the project before providing financial assistance. It is necessary to ensure that the project will generate sufficient return on the resources invested in it.
- The onus of solving the ever recurring NPA problem barely lies with the zonal office which is the controlling authority to manage the affairs of their NPA portfolio. They should take up a review of branch-wise progress of NPAs in the zone and immediately fix targets monthly/quarterly for each branch for reduction of NPAs. Zonal banks should try hard to reduce the NPA level appreciably and also should see that new NPAs are not added.

XIII. CONCLUSION

NPAs have almost doubled. From Rs 3,40,556 crore in September 2015, bad loans have risen to Rs 6,68,825 crore in September 2016, largely due to the classification requirement of the RBI. Demonetisation is likely to stall the recovery process further in the coming two quarters, banking sources said. Though the government and the RBI have recently announced sops, including higher working capital limit, cash credit limit and credit guarantee for small units, small units are finding the going tough amid the cash crunch and curbs on withdrawal of money from bank accounts. “Demonetisation can put pressure on NPAs especially for SMEs whose turnover has been affected amid fixed interest costs. This needs to be monitored closely by banks,” Care Ratings said. NPA is not just a problem for banks they are bad for the economy. The money locked u in NPA is not available for productive use and to that extant the banks seek to make provisions for NPA or write them off. It adversely affects their profits and results in higher rate of interest and cost of credit to their diligent credit customers. Steps taken at the appropriate time may help in avoiding NPA. Qualitative appraisal supervision and follow up should be taken up for the present advances to avoid further NPAs. Things have reached a stage where a hard look at some of the basic issues will have to be taken to improve banks general capabilities and to meet prudential requirements.

REFERENCES

Books:

[1]. Arya, P.P. and Tandon, B.B. (2003), Economic Reforms in India, Deep and Deep Publications, New Delhi.
[2]. Avadhani, V.A. (1978), Studies in Indian Financial System, Jaico Publishers.
[3]. Basu, P. (2005), India’s Financial Sector: Recent Reforms, Future Challenges, Macmillan India, New Delhi.
[4]. Bhattacharya, B.B. (1998), Financial Reforms and Financial Development in India, first Edition, Excel Books, New Delh
[5]. Chakraborty, K.C. (1990), Banking in 1990, Himalayan Publishing House, Mumbai. Pp.317-330.
[6]. Chopra, K. (1987), Managing Profits, Profitability and Productivity in Public Sector Banking, ABS Publications, Jalanahar, 1st Edition.
[7]. Das, D.K. (1999), Financial Sector Reforms, Tax System and Development, Deep and Deep Publications, Delhi.

Articles:

[8]. Anantha Swamy, B.N. (2001), “New Competition, Deregulation and Emerging Changes in Indian-Banking: An Analysis of the Comparative Performance of Different Bank Groups”, Bank Quest, Vol. 72, No. 3, July-September, 2001, pp.3-22.
[9]. Angadi, V.B. and Devaraj, V. John (1983), “Productivity and Profitability of Banks in India”, Economic and Political Weekly, Vol. XVIII, No. 48, November, pp.161-176.
[10]. Arora, U. and Verma, R. (2007), “An Analysis of Operational and Productivity Efficiency of Public Sector Banks in India”, Finance India, Vol. XXI, No. 1, March, pp. 167-176.
[11]. Ballabh, J. (2001), “The Indian Banking Industry: Challenges Ahead”, IBA Bulletin, Vol. XXIII, No.4 & 5, April, pp. 8-10.
[12]. Berger, A.N. and Humbprey, D.B. (1991), “The Dominance of Inefficiencies Over Scale and Product Mix Economics in Banking”, Journal of Monetary Economics, 28 (1), pp. 117-48.
[13]. Rao, S. D. (2007), “Reforms in Indian banking sector: An Evaluative study of the performance of commercial banks”, Gitam Journal of Management, vol. 5, no. 2, April-June, 2007, pp. 180-187.0