# Trends in the Non Performing Assets of State Bank of India and Its Associates

*Dr. R. Jayachandran*
** T. Nagananthi*

## INTRODUCTION

The public sector banks dominate the Indian banking sector. They have 82 percent market share in the total deposits and advances of the industry. But when it comes to efficient non-performing assets management and innovative strategies for growth, foreign banks and even the private banks have an upper hand. The size of deposits, advances and the branch network are the tools to assess a good bank. Non-performing assets and excess staff are some of the banes of the banking sector.

## NEED FOR THE STUDY

The profitability performance of Commercial banks has become a fascinating topic for conversation, comment, and debate. There is growing evidence of concern of the authorities for the declining profitability of the banking system due to Non -Performing Assets. The Reserve bank of India stresses on banks profitability and suggests various methods to reduce the Non -Performing Assets. With change in the social and economic objectives of Indian commercial banks, particularly of State Bank of India and its associates, it becomes extremely essential to assess their profitability performance and find remedial measures to reduce the Non -Performing Assets in the wake of the new banking philosophy. The approach of policy-makers towards profitability has changed, with the result that low profits have become a fact of life. Therefore, it is high time to concentrate on analyzing the profitability performance and factors leading to Non -Performing Assets.

## STATEMENT OF THE PROBLEM

Banks are supposed to play an important role in achieving the objective of economic development by providing effective institutional credit support to various regions and sectors. Banking has been viewed as a catalytic agent that must develop and support not only one element of the national economy, but also provide an effective link between the productive, distributive and consumption side of it.

Due to stringent competition in the banking Industry, particularly among the public sector banks, the State Bank of India and its associates have to concentrate much on the development of resources and to accelerate the collection mechanism to make it viable to strengthen profitability and efficiency in a better way. In this regard, the researcher has probed further to find answer for the following Question. What are the factors affecting the NPA and in what way it affects the profits? To set the above critical situation right, the researcher has framed the relevant objective mentioned later.

## REVIEW OF LITERATURE:

**R. Murugadoss**[1] (1991) in his study has concluded that the emergence of large size of NPAs as a result of application of the prudential accounting norms prescribed by the RBI is a matter of great concern for the entire banking system in the country. Evident outcome of the application of the new norms in Indian banking is the turning of many banks into red in 1992-93. This being the scenario, the banks have no option but to go for slashing down the level of NPAs by footingbarriers in a planned and systematic manner.

**S.P. Talwar**[2] (1999) at the conference of chairmen of private sector banks in India, has addressed that in many cases Section 20 of the Banking Regulation Act 1948, is violated, which prohibits loans to directors or to any firm or company in which directors are interested. He has pointed out that as it has not been adhered to and violated in spirit; it ultimately resulted in the loan facilities turning as NPAs. He suggested that instances which have come to light during the course of inspections and through off site reporting by banks are to be viewed seriously by the central bank.

**KJ Tari**[3] (1999) in his paper entitled NPA management in SBI issues has focused that for the last two years Indian Industry has been reeling under a complete loss of confidence due to demand recession coupled with oversupply position in many commodities. This situation has led to weakening of prices and adversely affected the repaying capacities of industries. Thus, statistics reveal that recoveries and up gradation made in NPA accounts are set off

* *Director,* School of Commerce, RVS College of Arts & Science (Autonomous), Sulur, Coimbatore-641402 Tamil Nadu.
E-mail : jcjvjj@yahoo.com
** *Faculty Member,* School of Commerce, RVS College of Arts & Science (Autonomous), Sulur, Coimbatore-641402, Tamil Nadu. E-mail : nagananthi@yahoo.co.in

due to additions of New NPA.

**T.C.G Namboodiri**[4] (2001) in his paper has observed that the huge burden of NPA is really breaking the backbone of Indian Commercial banks. As on March 31 2001, Gross NPA of commercial banks is staggering at Rs. 61,416 crores. Although this is the age of credit marketing, credit has to be entrusted only to efficient hands. In this regard, there are certain simple but important basic points a banker must have in his mind and he should be alert about appraising a credit proposal. They are grouped as 5 C's viz, Character, Capital, Capacity, Conditions and Collateral, 6 M's viz. Men (Entrepreneur), Money, Machine, Material, Market and Men (employee) and 7 P's viz, Product, Project, Purpose, Place, People, Policies and Profit. He also opined that undoubtedly, proper appraisal is the best solution for reducing NPAs.

**S.Ravi**[5] (1994) in his article has stressed that to prevent shock waves from affecting the system, various measures have been taken by the Government of India and the RBI to enable banks recover NPAs. Waives of National interest, one time settlement (OTS) rescheduling and rehabilitations packages, setting up of Debt recovery Tribunal (DRTs) are weak measures taken to dispose of NPAs.

**K. Kothai**[6] (2003) in his paper on 'Non Performing Assets of Scheduled Commercial Banks in India: An Analysis' analyzed all the three groups (Public, Private and Commercial Banks). He concluded that in terms of branch expansion, deposit mobilization and deployment of credit and regarding non-performing assets, the performance of the public sector banks is extremely good. The NPAs of this group has been showing a decreasing trend during the study period. The study reveals that the reduction of NPA is mainly due to write off of bad debts and expansion of total advances over the years.

## PERIOD OF THE STUDY

The study covers a period of ten financial years from 1995 96 to 2004-05.

## OBJECTIVES OF THE STUDY

The main focus of the study is to analyze the factors responsible for the Non Performing Assets of State Bank of India and its associates.

## METHODOLOGY OF THE STUDY

## SOURCE OF DATA

The study is purely based on secondary data. The relevant secondary data are collected from the Annual reports of respective banks, RBI bulletin, journals, magazines, newspapers, and internet. Additionally, textbooks are also referred extensively to collect information relating to this study. The primary data are also collected from higher authorities of the bank through discussion.

## RATIO ANALYSIS

Factors contributing to Non-Performing Assets, the major components like Total Advances, Operating profit, Net profit and Total Assets have been considered.

To get a better picture of the banks of Non- performing Assets, the ratios shall be analyzed and interpreted by calculating Mean ($\bar{x}$) Standard Deviation (S.D.) and Co-efficient of Variation (C.V.) at yearly level. Compound growth rate are also calculated to assess the overall growth of profitability, and efficiency of Banks with respect to different ratios.

## LIMITATIONS OF THE STUDY

Taking into consideration the objectives of the study and its coverage in terms of the time span and different types of banks, the study is prone to some limitations.

1. The Study concentrates on the analysis of quantitative financial data. The qualitative aspects of progress of banking in India have not been analyzed. The emerging trends in qualitative aspects of banking as customer service, job satisfaction, regional disparities, concentration of bank branches and morale of the bank employees and the general public etc. have not been taken into consideration.

2. While computing the data for the purpose of analysis, the approximation of decimal places leads to minor variations in ratio which are bound to exist in the present study.

3. The study would have been more meaningful, if a comparison between levels of NPAs in the pre and post securitization had been attempted. In view of no reporting of data related to NPAs as such in the pre and post securitization period, such bifurcation could not be carried out.

In spite of the above-mentioned limitations, the present project has the strength of identifying the factors affecting the NPA of SBI and its associates.

## 1. RATIO OF NET NPA TO NET ADVANCE OF SBI & AND ITS ASSOCIATES

The ratio of NPA to advances is an important indicator of the Banks' performance as it is expected that an increasing Net advances would result in an increasing NPA. Hence, it becomes essential to understand the trends in the ratio of NPA to net Advances.

As it could be seen in Table 1, among the SBI and its associates, in the year 1995-96, the ratio of Net NPA to Net Advances stood lowest in the case of SBP with 5.7 per cent. The order of other groups in terms of percentage is: SBS (6.1%), SBBJ (6.6%), SBT (6.61%), SBI (7.38%), SBH (8.59%), SBIND (9.62%) and SBM (9.94%).

It is heartening to note that in the year 2004-05, the percentage of NPA to Net advances has declined considerably with SBM (0.61%) registering the least NPA to Net Advances followed by SBH (0.92%), SBIND (1.06%), SBBJ (1.23%), SBP (1.4%), SBS (1.61%), SBI (1.81%) and SBT (2.65%). A comparison of the data on Net NPA to Net Advances would also indicate that not only the share of all the banks has declined, but also the order of the banks has changed. This indicates that the banks are taking keen interest in reducing their NPA.

**Table: 1 Table showing the Ratio of Net NPA to net advance of SBI & and its associates 1995-96 to 2004-05**
**(In Percentage)**

| Year | SBT | SBS | SBM | SBIND | SBH | SBBJ | SBP | SBI |
|---|---|---|---|---|---|---|---|---|
| 1995-96 | 6.61 | 6.10 | 9.94 | 9.62 | 8.59 | 6.60 | 5.70 | 7.38 |
| 1996-97 | 7.30 | 7.96 | 11.42 | 11.29 | 10.96 | 5.88 | 6.47 | 8.82 |
| 1997-98 | 6.07 | 7.13 | 10.88 | 10.96 | 10.75 | 7.04 | 6.05 | 12.21 |
| 1998-99 | 7.81 | 10.45 | 8.78 | 10.10 | 10.55 | 8.23 | 7.70 | 10.80 |
| 1999-00 | 6.41 | 10.14 | 7.43 | 7.55 | 9.35 | 6.09 | 8.12 | 9.02 |
| 2000-01 | 6.03 | 7.83 | 7.82 | 5.91 | 7.65 | 4.92 | 8.63 | 8.28 |
| 2001-02 | 5.54 | 5.77 | 4.96 | 4.32 | 7.36 | 2.94 | 3.06 | 7.88 |
| 2002-03 | 4.47 | 4.38 | 3.26 | 3.27 | 5.19 | 1.42 | 3.34 | 7.36 |
| 2003-04 | 3.48 | 1.24 | 0.65 | 2.60 | 2.96 | 1.60 | 2.64 | 1.39 |
| 2004-05 | 2.65 | 1.61 | 0.61 | 1.06 | 0.92 | 1.23 | 1.40 | 1.81 |
| Average | 5.64 | 6.26 | 6.58 | 6.67 | 7.43 | 4.60 | 5.31 | 7.50 |
| Instability (%) | 2.08 | 17.01 | 21.82 | 5.75 | 13.29 | 9.35 | 11.26 | 16.41 |
| LGR | -8.34 | -11.38 | -19.22 | -17.75 | -13.39 | -16.28 | -10.55 | -10.99 |
| CGR | -9.26 | -16.36 | -27.42 | -21.04 | -18.72 | -19.38 | -13.85 | 8.17 |

*Source: Data complied and calculated from statistical Tables relating to the State Bank of India, RBI Mumbai, issues of relevant year*

In terms of average, the lowest share of NPA to Net Advances could be found in the case of SBBJ (4.6 per cent), SBP (5.31 per cent), SBT (5.64 per cent), SBS (6.26 per cent), SBM (6.58 per cent), SBIND (6.67 per cent), SBH (7.43 per cent) and SBI (7.5 per cent).

The growth rates worked out indicates that all the banks have recorded a negative growth rate indicating the increasing efficiency of the banks in controlling the NPA. As indicated by the linear growth rate, the highest decline in the ratio of NPA to Net Assets could be seen in the case of SBM (-19.22 per cent), followed by SBIND (-17.75 per cent), SBBJ (-16.28 per cent), SBH (-13.39 per cent), SBS (-11.38 per cent), SBI (-10.99 per cent), SBP (-10.55 per cent) and SBT (-8.34 per cent).

In the case of compound growth rate also, the same order of the bank has been maintained with: SBM (-27.42 per cent), SBIND (-21.04 per cent), SBBJ (-19.38 per cent), SBH (-18.72 per cent), SBS (-16.36 per cent), SBP (-13.85 per cent), SBT (-9.26 per cent) and SBI (8.17 per cent).

The instability index, an indication of the stability or other wise in the ratio of NPA to net Advances indicates that it has recorded the least in the case of SBT (2.08 per cent), followed by SBIND (5.75 per cent), SBBJ (9.35 per cent), SBP (11.26 per cent), SBH (13.29 per cent), SBI (16.41 per cent), SBS (17.01 per cent) and SBM (21.82 per cent).

Thus, from the analysis it can be concluded that in terms of the ratio of NPA to Net advances, the lowest share has been recorded by of SBBJ (4.6 per cent) while it was the highest in the case of SBI (7.5 per cent). In terms of growth rate, the highest decline in NPA to total Advances could be seen in the case of SBM (-19.22 per cent), while it was the highest in the case of SBT (-8.34 per cent).

## 2. RESULTS OF ANOVA OF NET NPA TO NET ADVANCE

The above discussion on the Net NPA to Net Advance of SBI and its associates indicated that the banks have differed in their share of NPA to net advances. This indicates that there is difference in the ratio of NPA to Advances. To test whether there are significant differences among the banks in terms of this ratio, a null hypothesis has been framed. The null hypothesis that "there is no significant difference among the banks in terms

**Table: 2 : Analysis of variance of net NPA to net advance of SBI & and its associates**

| SOURCE | D.F. | S.S | M.S. | F VALUE |
|--------|------|------|------|---------|
| BET GRP | 7 | 721.46 | 103.07 | 1.15 |
| ERROR | 72 | 6450.89 | 89.60 | |
| TOTAL | 79 | 7172.35 | | |

\* Indicates significant at 5 per cent level.
Source: Computed from Secondary Data.

of net NPA to net advances" has been framed.

The calculated value of 1.15 is less than the critical F value (2.09) for 7 and 72 degrees of freedom at 5 per cent level of significance. Hence, the Null Hypothesis that "there is no significant difference among the banks in terms of net NPA to net advances" has been accepted.

This provides the conclusion that there is a significant difference among the banks in terms of the ratio gross NPA to total advances among SBI and its associates.

## 3 . RATIO OF GROSS NPA TO TOTAL ADVANCE OF SBI & ITS ASSOCIATES

With increasing advances, the gross NPA is also expected to increase correspondingly. The efficiency of the bank lies in reducing the share of the NPA to total Advances. Hence, the present paragraph attempts to discuss trends in the share of Gross NPA to total advances of SBI and its Associates.

As it could be seen in Table 3, in the year 1995-96, the ratio of gross NPA to total Advances stood least at 11.74% in the case of SB. The next least share of 12.45 per cent is being recorded by SBS. The order of other banks in terms of increasing share of gross NPA to total Advances is: SBBJ (12.45%), SBP (13.5%), SBIND (14.2%), SBH (14.54 %), SBT (15.96%) and SBM (17.89%).

In the year 2004-05, the shares of all the banks have declined considerably indicating the declining NPA. The order of the banks has also changed: SBP (3.68%), SBBJ (3.71%), SBIND (3.99%), SBS (5.36%), SBM (5.6%), SBI (5.63%), SBH (7.76 %), and SBT (8.8%).

**Table: 3 : Table Showing The Ratio of Gross NPA to total advance of SBI & its associates 1995-96 to 2004-05**

(In Percentage)

| Year | SBT | SBS | SBM | SBIND | SBH | SBBJ | SBP | SBI |
|------|-----|-----|-----|-------|-----|------|-----|-----|
| 1995-96 | 15.96 | 12.45 | 17.89 | 14.20 | 14.54 | 12.45 | 13.50 | 11.74 |
| 1996-97 | 16.01 | 13.83 | 19.19 | 15.81 | 16.92 | 13.83 | 14.79 | 14.49 |
| 1997-98 | 14.14 | 11.73 | 18.96 | 15.05 | 14.47 | 11.73 | 14.83 | 20.06 |
| 1998-99 | 15.56 | 16.11 | 15.94 | 14.68 | 16.96 | 16.11 | 15.43 | 18.46 |
| 1999-00 | 14.25 | 16.15 | 14.18 | 10.80 | 13.89 | 16.15 | 13.71 | 14.43 |
| 2000-01 | 13.29 | 15.72 | 13.92 | 9.27 | 12.31 | 15.72 | 12.23 | 12.27 |
| 2001-02 | 12.70 | 12.91 | 14.08 | 9.16 | 12.83 | 9.66 | 14.57 | 11.38 |
| 2002-03 | 11.40 | 9.36 | 10.08 | 7.18 | 12.07 | 6.94 | 10.18 | 9.41 |
| 2003-04 | 10.40 | 8.15 | 7.28 | 5.53 | 10.14 | 4.80 | 7.32 | 6.67 |
| 2004-05 | 8.80 | 5.36 | 5.60 | 3.99 | 7.76 | 3.71 | 3.68 | 5.63 |
| Average | 13.25 | 12.18 | 13.71 | 10.57 | 13.19 | 11.11 | 12.02 | 12.45 |
| Instability (%) | 0.21 | 3.08 | 1.25 | 1.15 | 0.64 | 5.24 | 3.99 | 2.89 |
| LGR | -5.81 | -6.24 | -10.79 | -12.69 | -6.18 | -10.12 | -8.47 | -9.07 |
| CGR | -5.96 | -7.64 | -11.84 | -13.56 | -6.51 | -12.74 | -10.76 | -10.03 |

*Source: Data complied and calculated from statistical Tables relating to the State Bank of India, RBI Mumbai, issues of relevant year*

Due to considerable change in the order of the banks in terms of the ratio of gross NPA to Gross Advances, the average level of this ratio during the study period has undergone a change: SBIND (10.57%), SBBJ (11.11%), SBP (12.02%), SBS (12.18%), SBI (12.45%), SBH (13.19%), SBT (13.25%), and SBM (13.71%).

The declining trend in profit has resulted in negative growth rates of the ratio of gross NPA to total advances. The highest decline in the ratio of gross NPA to total advances is being recorded by SBIND (-12.69%). The order of the banks in terms of growth rates registered is as follows: SBM (-10.79%), SBBJ (-10.12%), SBI (-9.07%), SBP (-8.47%), SBS (-6.24%), SBH (-6.18%), SBT (-5.81%).

The instability index, a measure of stability in the growth of the ratio, worked out indicates that it is the least in the case of SBT (0.21%). This is followed by the other banks like, SBH (0.64%), SBIND (1.15%), SBM (1.25%), SBI (2.89%), SBS (3.08%), SBP (3.99%), and SBBJ (5.24%).

## 4. RESULTS OF ANOVA OF NET NPA TO NET ADVANCE

The above discussion on the gross NPA to total Advance of SBI and its associates indicated that the banks have differed in their share of gross NPA to gross advances. This indicates that there is difference in the ratio of gross NPA to total Advances. To test whether there is a significant difference among the banks in terms of this ratio a null hypothesis has been framed. The null hypothesis that "there is no significant difference among the banks in terms of gross NPA to total advances" has been framed.

The calculated value of 0.83 is less than the critical F value (2.09) for 7 and 72 degrees of freedom at 5 per cent level of significance. Hence the Null Hypothesis that "there is no significant difference among the banks in terms of gross NPA to total advances" has been accepted.

**Table: 4 : Analysis of Variance Table of Ratio of Gross NPA to total advance of SBI & its associates**

| SOURCE | D.F. | S.S | M.S. | F VALUE |
|--------|------|-----|------|---------|
| BET GRP | 7 | 822.1994 | 117.46 | 0.83 |
| ERROR | 72 | 10161.62 | 141.13 | |
| TOTAL | 79 | 10983.82 | | |

* Indicates significant at 5 per cent level.
Source: Computed from Secondary Data.

This provides the conclusion that there is no significant difference among the banks in terms of the ratio net NPA to net advances among SBI and its associates.

## 5. RATIO OF NET NPA TO TOTAL ASSETS OF SBI & ITS ASSOCIATES

In the case of banks, the assets indicate banks advances and investment. With increasing assets, there is a risk of increasing NPA. In such context, the efficiency of the bank lies in controlling the increasing NPA. Hence, the present paragraph attempts to discuss the trends in the share of Net NPA to total assets of SBI and its associates.

As it can be seen in Table 5, in the year 1995-96 the ratio of Net NPA to total assets stood lowest in the case of SBP (2.2%). The other banks are in the order of increasing share: SBS (2.32%), SBBJ (2.61%), SBT (2.71%), SBH (3.82%), SBI (3.87%), SBIND (4.51%) and SBM (4.72%).

In the year 2004-05, the share of all the banks had declined considerably with SBM (0.27%) registering the least. The other bank in their order of increasing share is: SBH (0.48%), SBIND (0.56%), SBP (0.57%), SBBJ (0.59%), SBS (0.82%), SBI (0.93%) and SBT (1.16%).

Due to changes in the order during the study period, the average share for the entire study period has changed considerably to have the following: OSBP (1.84%), SBBJ (2.06%), SBT (2.22%), SBS (2.59%), SBM (2.63%), SBIND (2.95%), SBH (4.10%) and SBI (4.12%).

The declining order of the share as resulted in registering the growth rate in the following order with: SBT (-8.88%), SBI (-9.8%), SBS (-9.87%), SBP (-12.16%), SBH (-12.34%), SBBJ (-15.35%), SBIND (-17.79%) and SBM (-20.85%).

In terms of compound growth rate also, the same order has been followed but with difference in the growth rate

**Table: 5 : Table Showing the Ratio of net NPA to total assets of SBI & its associates  1995-96 to 2004-05**

(In Percentage)

| Year | SBT | SBS | SBM | SBIND | SBH | SBBJ | SBP | SBI |
|------|-----|-----|-----|-------|-----|------|-----|-----|
| 1995-96 | 2.71 | 2.32 | 4.72 | 4.51 | 3.82 | 2.61 | 2.20 | 3.87 |
| 1996-97 | 2.89 | 3.01 | 4.88 | 5.19 | 5.18 | 2.56 | 2.64 | 4.30 |
| 1997-98 | 2.78 | 3.49 | 4.16 | 4.69 | 6.01 | 3.55 | 3.09 | 4.87 |
| 1998-99 | 2.65 | 3.48 | 3.04 | 4.03 | 6.55 | 4.00 | 2.00 | 4.63 |
| 1999-00 | 2.40 | 3.28 | 2.86 | 3.41 | 5.54 | 2.64 | 2.37 | 9.56 |
| 2000-01 | 2.67 | 5.15 | 3.02 | 2.46 | 6.17 | 1.41 | 1.97 | 5.33 |
| 2001-02 | 1.92 | 2.18 | 1.89 | 1.85 | 3.49 | 1.47 | 1.15 | 3.63 |
| 2002-03 | 1.63 | 1.65 | 1.21 | 1.49 | 2.40 | 0.75 | 1.25 | 3.42 |
| 2003-04 | 1.34 | 0.52 | 0.25 | 1.27 | 1.35 | 0.98 | 1.19 | 0.64 |
| 2004-05 | 1.16 | 0.82 | 0.27 | 0.56 | 0.48 | 0.59 | 0.57 | 0.93 |
| **Average** | 2.22 | 2.59 | 2.63 | 2.95 | 4.10 | 2.06 | 1.84 | 4.12 |
| **Instability (%)** | 2.86 | 39.59 | 45.50 | 6.98 | 28.80 | 22.13 | 14.22 | 36.20 |
| **LGR** | -8.88 | -9.87 | -20.85 | -17.79 | -12.34 | -15.35 | -12.16 | -9.80 |
| **CGR** | -9.54 | -14.76 | -27.95 | -20.10 | -18.84 | -17.38 | -13.59 | -16.24 |

*Source: Data complied and calculated from statistical Tables relating to the State Bank of India, RBI Mumbai, issues of relevant year*

due to difference in the model specification.  The order of the banks is: SBT (-9.54%), SBP (-13.59%), SBS (-14.76%), SBI (-16.24%), SBBJ (-17.38%), SBH (-18.84%), SBIND (-20.10%) and SBM (-27.95%).

In terms of instability, SBM recorded the highest (45.5%).  This is followed by SBS with a variation of 39.59%. The order of other banks in terms of declining instability is: SBI (36.20%), SBH (28.80%), SBBJ (22.13%), SBP (14.22%), SBIND (6.98%) and SBT (2.86%).

Thus, from the analysis it can be concluded that all the banks have recorded a negative growth rate.

## 6.   RESULTS OF ANOVA OF NET NPA TO TOTAL ASSETS

The above discussion on the net NPA to total Assets of SBI and its associates indicated that the banks have differed in their share of net NPA to total assets. This indicates that there is difference in the ratio of net NPA to total Assets. To test whether there is a significant difference among the banks in terms of this ratio, a null hypothesis has been framed. The null hypothesis that "there is no significant difference among the banks in terms of net NPA to total assets" has been framed.

The calculated value of 8.16 is greater than the critical F value (2.09) for 7 and 72 degrees of freedom at 5 per cent level of significance.  Hence, the Null Hypothesis that "there is no significant difference among the banks in terms of net NPA to total assets" has been rejected.

**Table: 6 : Analysis of Variance table of net NPA to total  Assets of SBI & its associates**

| SOURCE | D.F. | S.S | M.S. | F VALUE |
|--------|------|-----|------|---------|
| BET GRP | 7 | 532.93 | 189.10 | 8.16* |
| ERROR | 72 | 1668.60 | 23.18 | |
| TOTAL | 79 | 2201.53 | | |

* Indicates significant at 5 per cent level.
Source: Computed from Secondary Data.

This provides the conclusion that there is a significant difference among the banks in terms of the ratio net NPA to total advances among SBI and its associates.

## 7. RATIO OF NET NPA TO NET ADVANCE OF SBI & ITS ASSOCIATES AND PUBLIC SECTOR BANKS

The discussion made under Table1, has indicated that in terms of the ratio of NPA to net advances, the lowest share has been recorded by of SBBJ (4.6%), while it was the highest in the case of SBI (7.5%). In terms of growth rate, the highest decline in NPA to total Advances could be seen in the case of SBM (-19.22%), while it was the highest in the case of SBT (-8.34%). These results are obtained by making comparison among State Bank of India and its associates. However, this constitutes only an absolute analysis and the trends have been compared only among the state bank groups.  So as to understand the relative position, in the present paragraph it is attempted to discuss the trends in the growth of NPA of SBI and its associates with that of the other Public Sector banks.

As it can be seen in Table 7, in the year 1994-95, SBP(5.7%) recorded the least ratio of Net NPA to Net Advances. In the order of the banks, the Public sector banks occupy the seventh position.

**Table:7 Table showing comparison between the Ratio of net NPA to net advance of SBI & its associates and Public Sector Banks  1995-96 to 2004-05**  (In Percentage)

| Year | SBT | SBS | SBM | SBIND | SBH | SBBJ | SBP | SBI | PUBLIC SECTOR BANKS |
|------|-----|-----|-----|-------|-----|------|-----|-----|---------------------|
| 1995-96 | 6.61 | 6.10 | 9.94 | 9.62 | 8.59 | 6.60 | 5.70 | 7.38 | 8.90 |
| 1996-97 | 7.30 | 7.96 | 11.42 | 11.29 | 10.96 | 5.88 | 6.47 | 8.82 | 9.18 |
| 1997-98 | 6.07 | 7.13 | 10.88 | 10.96 | 10.75 | 7.04 | 6.05 | 12.21 | 8.15 |
| 1998-99 | 7.81 | 10.45 | 8.78 | 10.10 | 10.55 | 8.23 | 7.70 | 10.80 | 8.13 |
| 1999-00 | 6.41 | 10.14 | 7.43 | 7.55 | 9.35 | 6.09 | 8.12 | 9.02 | 7.40 |
| 2000-01 | 6.03 | 7.83 | 7.82 | 5.91 | 7.65 | 4.92 | 8.63 | 8.28 | 7.27 |
| 2001-02 | 5.54 | 5.77 | 4.96 | 4.32 | 7.36 | 2.94 | 3.06 | 7.88 | 6.80 |
| 2002-03 | 4.47 | 4.38 | 3.26 | 3.27 | 5.19 | 1.42 | 3.34 | 7.36 | 6.20 |
| 2003-04 | 3.48 | 1.24 | 0.65 | 2.60 | 2.96 | 1.60 | 2.64 | 1.39 | 5.50 |
| 2004-05 | 2.65 | 1.61 | 0.61 | 1.06 | 0.92 | 1.23 | 1.40 | 1.81 | 4.40 |
| **Average** | 5.64 | 6.26 | 6.58 | 6.67 | 7.43 | 4.60 | 5.31 | 7.50 | 7.19 |
| **Instability (%)** | 2.08 | 17.01 | 21.82 | 5.75 | 13.29 | 9.35 | 11.26 | 16.41 | 0.29 |
| **LGR** | -8.34 | -11.38 | -19.22 | -17.75 | -13.39 | -16.28 | -10.55 | -10.99 | -6.75 |
| **CGR** | -9.26 | -16.36 | -27.42 | -21.04 | -18.72 | -19.38 | -13.85 | -16.19 | -6.93 |

*Source: Data complied and calculated from statistical Tables relating to the State Bank of India, RBI Mumbai, issues of relevant year*

In the year 1994-95, the order has changed to have SBM (0.61) taking the least share. It can also be noted in the table that the public sector banks have been relegated to the back in terms of the share of NPA to Net Advances. This indicates that the share of net NPA to Net advances of SBI and associates have improved far higher than that of public sector banks.

In terms of growth rate also, the public sector banks have recorded the least growth rate of -6.75 indicating the lower rate of decline in the share of Net NPA to Net Advances.

Thus, from the analysis it can be concluded that the decline in net NPA to Net Advances of Public sector banks when compared to SBI and its associates is lower.

## 8. RESULTS OF ANOVA OF NET NPA TO NET ADVANCE OF SBI & ITS ASSOCIATES AND PUBLIC SECTOR BANKS

The above discussion on the net NPA to total advances of SBI and its associates and the public sector banks has indicated that the banks have differed in their share of net NPA to net advances. This indicates that there is a difference in the ratio of net NPA to net advances. To test whether there is a significant difference among the banks in terms of this ratio a null hypothesis has been framed. The null hypothesis that "there is no significant difference among the SBI and its associates and public sector banks in terms of net NPA to net advances" has been framed.

**Table: 8 :**

**Analysis of Variance table of net NPA to net advance of SBI & its associates and Public Sector Banks**

| SOURCE | D.F. | S.S | M.S. | F VALUE |
|--------|------|-----|------|---------|
| BET GRP | 7 | 730.31 | 104.33 | 1.16 |
| ERROR | 72 | 6450.89 | 89.60 | |
| TOTAL | 79 | 7181.20 | | |

\* Indicates significant at 5 per cent level.
Source: Computed from Secondary Data.

The calculated value of 1.16 is less than the critical F value (2.09) for 7 and 72 degrees of freedom at 5 per cent level of significance. Hence, the Null Hypothesis that "there is no significant difference among the banks in terms of net NPA to net advances of SBI and its associates and public sector banks has been accepted.

This provides the conclusion that there is no significant difference among the SBI groups and public sector banks in terms of the ratio net NPA to net advances.

## 9. RATIO OF OPERATING EXPENSES TO TOTAL INCOME OF SBI AND ITS ASSOCIATES

The increasing NPA affects the level of income of the bank. Also, it increases the expenses of the banks as depending on the amount of NPA, the banks make allocation under 'provisions and contingencies. This affects the expenditure, the income and ultimately the profits. Based on this view, in the present paragraph it is attempted to discuss the ratio of operating expenses to total income.

As given in Table 9, in the year 1995-96, the share of operating expenses to total income stood least in the case of SBI with 22.41%. The next lowest expenditure share could be seen in the case of SBT (23.38%). The order of

**Table: 9 : Table showing comparison between the ratio of operating expenses to total income of SBI and its associates 1995-96 to 2004-05**

(In Percentage)

| Year | SBT | SBS | SBM | SBIND | SBH | SBBJ | SBP | SBI |
|------|-----|-----|-----|-------|-----|------|-----|-----|
| 1995-96 | 23.38 | 31.89 | 26 | 31.13 | 29.71 | 23.9 | 29.84 | 22.41 |
| 1996-97 | 26.17 | 27.98 | 24.05 | 28.78 | 27.25 | 21.7 | 24.48 | 21.39 |
| 1997-98 | 25.24 | 27.69 | 22.23 | 29.1 | 28.36 | 23.53 | 27.33 | 19.19 |
| 1998-99 | 26.33 | 29.42 | 27 | 28.9 | 13.07 | 22.72 | 27.7 | 20.21 |
| 1999-00 | 24.42 | 26.63 | 21.44 | 27.25 | 29.31 | 21.67 | 23.8 | 21.73 |
| 2000-01 | 27.64 | 23.62 | 22.75 | 25.64 | 31.91 | 24.82 | 28.11 | 23.79 |
| 2001-02 | 26.31 | 24.82 | 20.63 | 23.47 | 29.42 | 22.32 | 26.74 | 22.82 |
| 2002-03 | 25.73 | 25.02 | 19.42 | 21.62 | 27.56 | 20.67 | 24.32 | 21.34 |
| 2003-04 | 24.26 | 25.42 | 18.21 | 19.91 | 26.33 | 17.56 | 20.67 | 20.46 |
| 2004-05 | 25.47 | 26.39 | 24.33 | 16.98 | 29.87 | 18.49 | 18.54 | 20.29 |
| Average | 25.5 | 26.89 | 22.61 | 25.28 | 27.28 | 21.74 | 25.15 | 21.36 |
| Instability (%) | 0.08 | 0.13 | 0.38 | 0.12 | 2.19 | 0.21 | 0.34 | 0.15 |
| LGR | 0.26 | -2.2 | -2.35 | -5.87 | 0.95 | -2.51 | -3.42 | -0.14 |
| CGR | 0.28 | -2.11 | -2.38 | -6 | 1.33 | -2.61 | -3.57 | -0.13 |

*Source: Data complied and calculated from statistical Tables relating to the State Bank of India, RBI Mumbai, issues of relevant year*

other banks is: SBBJ (23.9%), SBM (26.00%), SBH (29.71%), SBP (29.84%), SBIND (31.13%) and SBS (31.89%). However, in the year the order has considerably to have: SBIND (16.98%), SBBJ (18.49%), SBP (18.54%), SBI (20.29%), SBM (24.33%), SBT (25.47%), SBS (26.39%) and SBH (29.87%).

Due to a wide change experienced, the overall order for the entire study period, on the basis of the average operating expenditure to total income could be given as: SBI (21.36%), SBBJ (21.74%), SBM (22.61%), SBP (25.15%), SBIND (25.28%), SBT (25.5 %), SBS (26.89%) and SBH (27.28%).

In the case of growth rate registered, SBH (0.95%) and SBT (0.26%) could record a positive growth, while the other banks namely, SBI (-0.14%), SBS (-2.2%), SBM (-2.35%), SBBJ (-2.51%), SBP (-3.42%), SBIND (-5.87%).

In terms of instability, the least variation is being recorded by SBT (0.08) and the order of the other banks is as follows: SBT (0.08%), SBIND (0.12%), SBS (0.13%), SBI (0.15%), SBBJ (0.21%), SBP (0.34%), SBM (0.38%) and SBH (2.19%).

## 10. RESULTS OF ANOVA OF OPERATING EXPENSES TO TOTAL INCOME OF SBI & ITS ASSOCIATES AND PUBLIC SECTOR BANKS

The above discussion on the operating expenses to total income of SBI and its associates has indicated that the banks have differed in their share on operating expenses to total income. This indicates that there is difference in the ratio of operating profits to total operating expense. To test whether there are significant differences among the banks in terms of this ratio, a null hypothesis has been framed. The null hypothesis is that "there is no significant difference among SBI and its associates in terms of operating expenses to total income".

The calculated value of 5.53 is greater than the critical F value (2.09) for 7 and 72 degrees of freedom at 5 per cent level of significance. Hence, the Null Hypothesis "there is no significant difference among the banks in terms of operating expenses to total income".

Table: 10 : Analysis of variance Table of Ratio of operating expenses to total Income of SBI and its associates

| SOURCE | D.F. | S.S | M.S. | F VALUE |
|---|---|---|---|---|
| BET GRP | 7 | 3649.88 | 521.41 | 5.53* |
| ERROR | 72 | 6789.85 | 94.30 | |
| TOTAL | 79 | 10439.73 | | |

* Indicates significant at 5 per cent level.
Source: Computed from Secondary Data.

This provides the conclusion that there is a significant difference among the SBI groups and public sector banks in terms of the ratio operating expenses to total income.

## 11. RATIO OF NET PROFIT TO TOTAL ASSET

In the year 1995-96, in terms of the ratio of net profits to total assets, SBP (0.62 per cent) recorded the highest. The next lowest ratio is being recorded by SBH (0.61%). The order of other banks in terms of net profits to total assets is: SBI (0.58%), SBM (0.54%), SBT (0.39%), SBBJ (0.38%), SBIND (0.38%) and SBS (-4.93%).

The order of the banks in the year 2004-05 is: SBM (1.25%), SBI (0.94%), SBP (0.91%), SBBJ (0.88%), SBIND (0.79%), SBH (0.72%), SBT (0.66%) and SBS (0.27%).

In terms of average, SBP has recorded the highest with 1.17%. The order of other banks in terms of the ratio is: SBIND (0.92%), SBBJ (0.91%), SBH (0.87%), SBT (0.84 %), SBI (0.76%), SBM (0.76%) and SBS (0.36%).

In terms of average, the order has slightly changed to have: SBS (71.31%), SBIND (13.05%), SBM (8.87%), SBBJ (8.05%), SBP (6.48%), SBT (6.03%), SBH (5.28%) and SBI (2.31%).

The order of the banks in terms of compound growth rate has also been maintained, though the growth rates have differed slightly.

The instability index worked out indicates that it is the least in the case of SBS with a negative coefficient being arrived as -291.87. The order of other banks is: SBT (-75.37%), SBBJ (-56.79%), SBM (-54.38%), SBIND (-48.4%), SBH (-26.14%), SBI (-24.68%) and SBP (98.83%).

Thus, from the analysis it can be concluded that, SBP (0.62%) recorded the highest, while in terms of growth rate, SBS has recorded the highest.

## 12. RESULTS OF ANOVA OF INTEREST INCOME TO WORKING FUND OF SBI & ITS ASSOCIATES AND PUBLIC SECTOR BANKS

The above discussion on the operating expenses to total income of SBI and its associates has indicated that the banks have differed in their share on operating expenses to total income. This indicates that there is difference in

**Table 11: Table showing comparison between the ratios of net profit to total asset 1995-96 to 2004-05** (In Percentage)

| Year | SBI | SBBJ | SBH | SBIND | SBM | SBP | SBS | SBT |
|------|------|------|------|------|------|------|------|------|
| 1995-96 | 0.58 | 0.38 | 0.61 | 0.38 | 0.54 | 0.62 | -4.93 | 0.39 |
| 1996-97 | 0.86 | 0.49 | 0.55 | 0.49 | 0.73 | 0.68 | 1.44 | 0.51 |
| 1997-98 | 1.03 | 1.06 | 0.91 | 0.67 | 0.86 | 1.48 | 1.72 | 0.69 |
| 1998-99 | 0.46 | 0.89 | 0.84 | 0.62 | 0.48 | 0.93 | 0.39 | 0.39 |
| 1999-00 | 0.78 | 0.99 | 0.82 | 0.72 | 0.58 | 1.05 | 1.44 | 1.39 |
| 2000-01 | 0.51 | 0.75 | 0.81 | 0.77 | 0.27 | 1.12 | 0.17 | 1.74 |
| 2001-02 | 0.69 | 1.06 | 1.02 | 1.25 | 0.63 | 1.43 | 0.86 | 0.73 |
| 2002-03 | 0.82 | 1.13 | 1.15 | 1.76 | 1.02 | 1.85 | 0.84 | 0.89 |
| 2003-04 | 0.90 | 1.49 | 1.24 | 1.73 | 1.28 | 1.60 | 1.38 | 1.02 |
| 2004-05 | 0.94 | 0.88 | 0.72 | 0.79 | 1.25 | 0.91 | 0.27 | 0.66 |
| Average | 0.76 | 0.91 | 0.87 | 0.92 | 0.76 | 1.17 | 0.36 | 0.84 |
| Instability (%) | -24.68 | -56.79 | -26.14 | -48.40 | -54.38 | 98.83 | -291.87 | -75.37 |
| LGR | 2.31 | 8.05 | 5.28 | 13.05 | 8.87 | 6.48 | 71.31 | 6.03 |
| CGR | 2.65 | 10.12 | 5.56 | 14.55 | 7.80 | 7.49 | -10.47 | 8.17 |

*Source: Data complied and calculated from statistical Tables relating to the State Bank of India, RBI Mumbai, issues of relevant year*

the ratio of operating profits to total operating expenses. To test whether there is a significant difference among the banks in terms of this ratio, a null hypothesis has been framed. The null hypothesis that "there is no significant difference among SBI and its associates in terms of operating expenses to total income".

The calculated value of 0.99 is less than the critical F value (2.09) for 7 and 72 degrees of freedom at 5% level of significance. Hence, the Null Hypothesis that 'there is no significant difference among the banks in terms of operating expenses to total income' has been accepted.

**Table: 12**
**Analysis of variance table of Interest Income to working fund of State Bank of India and its associates**

| SOURCE | D.F. | S.S | M.S. | F VALUE |
|--------|------|------|------|---------|
| BET GRP | 7 | 36.16 | 5.17 | 0.99 |
| ERROR | 72 | 376.45 | 5.23 | |
| TOTAL | 79 | 412.61 | | |

* Indicates significant at 5 per cent level.
Source: Computed from Secondary Data.

Thus, from the analysis it can be concluded that there is no significant difference between SBI and its associates in terms of operating expenses to total income.

This provides the conclusion that there is no significant difference among the SBI groups and public sector banks in terms of the ratio operating expenses to total income.

## 13. REGRESSION ANALYSIS OF NPA

The earlier discussions made could provide a detailed idea on the trends in gross and net NPA in terms of certain crucial indicators. 'To earn profit' being the objective of the banks, it becomes pertinent to understand to what extent the level of NPA affects the profits of the banks. For this purpose, a simple regression is being run with NPA to total advances as the influencing factor on Net Profits to Income.

As it can be seen in Table 12, the $R^2$ value of the bank is found to be the highest in the case of SBM with 0.64. This implies that every 100 variation in NPA to advances could bring about 67% of the variation in NPA. The order of the banks in terms of this explanatory power can be given as: SBM (0.64%), SBH (0.58%,) SBI (0.54%), SBT (0.53 %), SBS (0.48%), SBP (0.4%) and SBBJ (0.25%).

The slope coefficient calculated indicates that all the banks have recorded a negative coefficient which establishes the theoretical relationship that there is an inverse relational between NPA and the level of profits of the banks. The highest contribution is being made by SBIND with a coefficient of -0.9872. This indicates that every one percentage change in NPA reduces the profits by almost 96 per cent. This again indicates the pervasive influence of NPA on profit.

The other bank in terms of the slope coefficients is: SBI (-0.9553), SBP (-0.8971), SBM (-0.8237), SBBJ (-0.5014), SBH (-0.4344), SBS (-0.0985) and SBT (0.994). Except the coefficients for SBBJ, all the slope coefficients are significant at 5% level indicating the significant influence of NPA on profits.

## Table: 13 : Linear Regresssion results of net profits to Income

**(In Percentage)**

| RESULTS | SBI | SBBJ | SBH | SBIND | SBM | SBP | SBS | SBT |
|---|---|---|---|---|---|---|---|---|
| Constant | 13.054* | 11.73896* | 10.69147* | 14.985* | 12.965* | 15.2182* | 3.263191 | 2.21477 |
| | (1.528) | (2.8684) | (1.5889) | (2.7351) | (2.2382) | (3.0115) | (19.1063) | (2.506) |
| NPA to Advances | -0.9553* | -0.5014 | -0.4344* | -0.9872* | -0.8237* | -0.89711* | -0.09851* | -0.994* |
| | (0.300) | (0.3035) | (0.1320) | (0.2430) | (0.2177) | (0.3878) | (0.025) | (0.329) |
| R Square | 0.54 | 0.25 | 0.58 | 0.67 | 0.64 | 0.40 | 0.48 | 0.53 |
| D.F. | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| N | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |

*\* Indicates significant at 5 per cent level*
*Source: Computed data*

Thus, from the analysis it can be concluded that the influence of NPA on profits is significant.

## CONCLUSION

One of the objectives of the present study is to examine the trends of NPA of SBI and its associates. The growth in NPA in terms of certain relation financial indicators has been examined and the analysis indicated that, invariably for all the banks, NPA has declined considerably during the study period.

## MAJOR FINDINGS

1) In terms of the growth in the ratio of NPA to Net advances the lowest share was recorded by of SBBJ (4.6%).

2) There is a significant difference among the banks in terms of the ratio gross NPA to total advances among SBI and its associates.

3) The instability index worked out indicated that SBT (0.21 per cent) recorded the least.

4) There is no significant difference among the banks in terms of the ratio net NPA to net advances among SBI and its associates.

5) All the banks have recorded a negative growth rate in the ratio of Net NPA to Net Advances.

6) There are significant differences among SBI and its associates in terms of the ratio net NPA to total advances.

7) The decline in net NPA to Net Advances of Public sector banks when compared to SBI and its associates is lower.

8) There is no significant difference among the SBI groups and public sector banks in terms of the ratio net NPA to net advances.

9) In the case of the growth in the ratio of operating expenses to total income SBH (0.95%) recorded the least.

10) There is a significant difference among the SBI groups and public sector banks in terms of the ratio operating expenses to total income.

11) In terms of ratio of operating expenses to total income, SBP (0.62%) recorded the highest.

12) There is no significant difference among the SBI groups and public sector banks in terms of the ratio operating expenses to total income.

13) The influence of NPA on profits is significant for all the banks.

## BIBLIOGRAPHY

Murugadoss R. Project Report 1993, *Effect of NPA on the health of IFMR* Chennai.
Talwar S.P. *Way forward for private Banks in India*, Vinimaya Vol XX, N021999.
Taari KJ NP*A management in state Bank of India* - same Issues, Monthly Review, Vol XXXVIII No.1 Jan 1999 PP 683-685.
Namboodiri T.CG NPA, *prevention is better than cure,* Vinimaya, Vol XXII No.3 2001-2002 P.19.
Ravi S *NPA recovery, Tortuous process*, The Economic Time Sep 27 1994 P.14.
K.Kothai,(2003) *Non performing Assets of Scheduled commercial banks in India* An analysis- Bharathiyar University-July 2003.
Amandeep, (1993) *Profit and Profitability in Commercial Banks*, Deep and Deep publications, New Delhi.
Basu, S.K. (1951) *Recent Banking Development: The Bank Exchange*, Calcutta.
Copra, Kiran (1987). *Managing Profit, Profitability and productivity in Public Sector Banking*, ABS Publications, Jalandhar.
Gupta S.P, Statistical Methods (1996). Sultan Chand and sons, New Delhi.
Kadodhar. P.G, Drawing up a plan for Computerisation in Banker state Bank of India Experience*State Bank of India Monthly Review* Vol. XXXII No. 9, Sep. 1993.
Nigam, R, "Customer Service and marketing Strategies in banking *Indian Banking Today and Tomorrow*, Feb 1988, pp 5-11.
Panda. J, and Lall G.S,A. Critical appraisal on the profitability of Commercial banks, *Indian Journal of Banking and Finance*, Vol. 5, 1991-92.
Toor. N.S, Banking Business Mix and profitability Recent Trends in Nationalized banks, *state Bank of India, Monthly Review*, Vol. 15, Nov. 2 Feb. 1997.
Venkataraman. S, Indian Banking in 1990's*Pigmy Economic Review*, Vol. 37, Nov. 8 March 1992.