



## Evolution of Non-Performing Assets: An Empirical Analysis

\* Dr. Jagdish R. Raiyani \*\* Dr. Gaurav Lodha

\* Assistant Professor, Faculty of Accounting & Finance, Shree Maharshi Dayanand Saraswati MBA College - Tankara

\*\* Director & Dean, Jodhpur Institute of Management, Faculty of Management, Jodhpur National University, Jodhpur

### ABSTRACT

*The NPAs are considered as an important parameter to judge the performance and financial health of banks. The level of NPAs is one of the drivers of financial stability and growth of the banking sector. The study is investigative in nature. It examines the state of NPAs in the private sector banks during the period 2003-04 to 2007-08. To achieve the objectives of the study, the relevant secondary data have been collected. The collected data have been analyzed by using various ratios. The findings of the study are supported by statistical tools. It is found that banks have been efficiently managing its assets over the period of study, however, rise in the NPA ratios over last two years shows that there is scope for further improvement in the recovery mechanism.*

**Keywords :** Indian banking industry, NPAs, Net Advances, CRAR

### Introduction

The Indian Banking Industry has played a pivotal role in the socio-economic augmentation of the country. The Financial Sector Reforms initiated in 1991 have commendably changed the visage of Indian Banking. A Non Performing Asset is an asset or account of borrower, which has been not been serviced by the borrower, and the bank has stated the same as sub-standard, doubtful or loss asset, as per the norms and directions of the RBI. Non-Performing Assets (NPA) have emerged as an alarming threat to the Indian banking industry and their reduction has become synonymous with professional functioning and management of banks. However, NPAs should not be seen as a dilemma but as a challenge for the banking sector. The global recession coupled with consequential slow down in the domestic markets had cast their shadow on the Indian banking sector, resulting in the growth in NPAs in absolute and relative terms since 2005-06. This evoked the researchers' interest to conduct a research on the management of NPAs by the new private sector banks in India.

### Review Of Literature

A synoptic review of the relevant literature on the NPAs issues examined by different researchers is presented as follows:

K. Rajender (2009) stated that the issue of mounting NPAs is a challenge to public sector banks. The study found that the asset wise classification of PSBs is in right direction, and there is significant variation in the recovery of NPAs in the different sectors. The research observed that PSBs should not be loaded with the twin objectives of profitability and social welfare.

R. Jayachandran and T. Nagananthi (2008) conducted a study with the objective to evaluate trends in the non performing assets of State Bank of India and its Associates. The study observed that NPAs for State Bank of India and its

Associate banks has significantly declined over the period of study.

Jain Vibha (2007) examined the status of NPAs in commercial banks. The study found that the problem of gross and net NPAs is more acute in Public Sector Banks. The new private sector banks and foreign banks have also registered an increase in the amount of gross and net NPAs during the period 1997-2003. It concluded that new private sector banks and foreign banks failed to prevent the fresh generation of NPAs in the period whereas, PSBs and old private sector banks were able to reduce it.

K. Kothai (2003) conducted a study on 'Non Performing Assets of Scheduled Commercial Banks in India: An Analysis'. The research observed a decreasing trend in the NPAs of the SCBs over the period of study. It revealed that the level of NPAs has declined mainly due to write off of bad debts and expansion of the total advances over the period of study.

### Nature And Scope Of The Study

The present study is empirical in nature. The private sector banks in India can be classified into old private sector banks and new private sector banks. As at end March 2008, there were 15 old private sector banks and 8 new private sector banks. The scope of the study is confined to examine the state of non performing assets (NPAs) in all the new private sector banks viz. Axis Bank Ltd., Centurion Bank of Punjab Ltd., Development Credit Bank Ltd., HDFC Bank, ICICI Bank, IndusInd Bank Ltd., Kotak Mahindra Bank Ltd., Yes Bank.

### Objectives Of The Study

The objectives of the study are as follows:

1. To study the magnitude and trends of non performing assets in the new private sector banks.
2. To examine the asset quality of new private sector banks.
3. To assess the health of various categories of loan assets i.e., sub-standard assets, doubtful assets and loss

1. To analyze the sector wise non performing assets of the new private sector banks.
2. To evaluate the capital to risk weighted assets ratio of the new private sector banks.

#### Hypotheses Of The Study

1. There is no significant association between gross NPAs and gross advances of new private sector banks.
2. There is no significant association between net NPAs and net Advances of new private sector banks.
3. The average NPAs relating to various asset classes i.e. sub-standard assets, doubtful assets, and loss assets of new private sector banks are uniformly distributed.
4. The mean NPAs relating to priority sector, public sector and non-priority sector of new private sector banks do not differ significantly.
5. There is no significant reduction in the distribution of new private sector banks by ratio of Net NPAs to Net Advances.

#### Methodology

The study is investigative in nature. It examines the state of NPAs in the new private sector banks during the period 2003-04 to 2007-08. To achieve the objectives of the study, the relevant secondary data have been collected from Report on Trend and Progress of Banking in India, Economic Surveys of India, Global Financial Stability Reports and websites of the selected private sector banks. The collected data have been analyzed by using various ratios i.e. Gross NPAs to Gross Advances, Net NPAs to Net Advances, Gross NPAs to Total Assets, Net NPAs to Total Assets. The study examined the trends in Gross NPAs and Net NPAs, causality and association between NPAs to advances/total assets. The findings of the study are supported by statistical tools such as mean, standard deviation, correlation, coefficient of determination, adjusted coefficient of determination, regression, ANOVA, post-hoc Tukey HSD Test.

#### Results And Discussion

The major findings based on the analysis of data are mentioned as under:

##### 1) Trend And Quality Of Gross Non Performing Assets

The Statistical test of Pearson Correlation shows that there is high degree of positive correlation between Gross Advances and Gross NPAs with  $R=0.757$ , and  $p$ -value is 0.069. In the test,  $R^2$  is 0.574 and adjusted  $R^2$  is 0.431. On the basis of Adjusted  $R^2$ , it can be stated that only 43.1 percent of variation in Gross NPAs is explained by variation in Gross advances. Further, the values of one way ANOVA reveal that  $F = 4.036$ , and  $p$ -value is 0.138. Since the  $p$ -value 0.138 is higher than 0.05, hence, the null hypothesis of no significant association between Gross NPAs and Gross Advances of New Private Sector Banks is accepted.

##### 2) Trend And Quality Of Net Non Performing Assets

The Statistical test of Pearson Correlation shows that there is high degree of positive correlation between Net Advances and Net NPAs with  $R=0.849$ ,  $R^2=0.720$ , adjusted  $R^2=0.627$  at  $p$ -value =0.035. Further, the values of one way ANOVA reveal that  $F = 7.718$ ,  $p$ -value = 0.049. Since the  $p$ -value is 0.049 which is less than 0.05, the null hypothesis of no significant association between Net NPAs and Net Advances of New Private Sector Banks is rejected. Hence, it

is safe to conclude that there is significant association between Net NPAs and Net Advances of New Private Sector Banks.

##### 3) Asset Wise Classification Of Npas

NPAs of banks are classified into three categories i.e. sub-standard assets, doubtful assets, and loss assets. All the three categories of NPAs as a percentage of gross non performing assets have registered a decline over the period of study. The results of one way ANOVA revealed that:  $F=5.873$ ,  $p$ -value=0.017. Since the  $p$ -value is less than 0.05, the null hypothesis of no significant difference between average sub-standard assets, doubtful assets, and loss assets is rejected. Hence, it is found that there is significant difference in the average loan assets under different categories. Further, Post Hoc Tukey HSD test for multiple comparisons between various loan assets shows that there is no significant difference between means of sub-standard assets and doubtful assets, however, these two differ significantly from loss assets.

##### 4) Distribution Of New Private Sector Banks By Ratio Of Net Npas To Net Advances

It has been observed that the number of banks falling in the category of net NPAs to net advances ratio upto 2 per cent has increased from 4 to 7 over the period of the study. Hence, it can be stated that the majority of banks have been able to reduce the ratio and now fall in the category of net NPAs to net advances ratio up to 2 per cent. It is found that on the basis of results of one way ANOVA with  $F=28.558$  and  $p$ -value= 0.000 that there is highly significant difference in the average number of banks falling in the four categories of Net NPAs to Net Advances Ratios. Further, the results obtained by performing Tukey HSD procedure shows that on an average, 6 banks have Net NPAs to Net advances ratio in the category of up to 2 percent, and 2 banks have this ratio into the category of above 2 and up to 5 percent. It gives a comprehensible picture that the new private banks have managed to significantly trim down the Net NPAs as a proportion to Net advances in a quite impressive manner.

##### 6) Capital To Risk-weighted Assets Ratio (crar)

It is the bank's capital which ultimately acts as a buffer against losses that a bank may suffer. Capital to Risk-Weighted Assets Ratio (CRAR) is a measure which reflects the capacity of the banking system to absorb unexpected losses. As per guidelines of the Basel Committee on Banking Supervision (BCBS), the minimum capital to risk weighted assets ratio has been recommended at 8 percent level. The CRAR of private sector banks is 10.2 percent, 12.1 percent, 12.6 percent, 12 percent, and 14.4 percent for the years 2004, 2005, 2006, 2007, and 2008 respectively. The overall CRAR of the new private sector banks has improved to 14.4 percent at the end-March 2008 from 10.2 percent at end-March 2004. During the period of study, total CRAR of new private sector banks in India remained well above the Basel norm of 8 per cent and the stipulated minimum norm of 9 per cent for banks in India.

#### Conclusion

The study observed that 7 out of 8 new private sector banks have significantly reduced the Net NPAs to Net advances ratio and now fall in the category of less than 2 per cent class. The new private sector banks have managed to sustain a CRAR above the regulatory framework of Basel II requirements, and are effectively capitalized to meet any credit related stress. It is found that banks have been efficiently managing its assets over the period of study, however, rise in the NPA ratios over last two years shows that there is scope for further improvement in the recovery mechanism.

#### REFERENCES

- Dr K. Rajender, (2009), Management of Non-Performing Assets in Public Sector Banks, The Indian Journal of Commerce, Vol. 62, No. 1. | Mohan, Rakesh (2004), Finance for Industrial Growth, Reserve Bank of India Bulletin, Speech article, March. | Neetu Bala (2007), Economic Reform and Growth of SSI, Deep and Deep Publication Pvt. Ltd. New Delhi. | Rajaraman, Indira, and G. Vasistha, (2002), Non-performing Loans of Public Sector Banks- Some Panel results, Economic and Political weekly, February | RBI Annual Report: 2004 to 2008. | Report on Trend and Progress of Banks in India: 2004 to 2008.