

# “Non-performing assets in Indian public sector banks: an analytical study”

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## Non-performing assets in the Indian public sector banks: an analytical study

### Abstract

A mounting level of non-performing assets (NPAs) in the banking sector can severely affect the economy in many ways. If NPAs are not properly managed, it can cause financial and economic degradation which in turn signals an adverse investment climate. This study highlights on management of non-performing assets in the perspective/viewpoint of the Indian public sector banks under stringent asset classification norms, use of latest technological platform based on Core Banking Solution (CBS), recovery procedures and other bank specific indicators in the perspective of stringent regulatory framework of the Reserve Bank of India. NPA is an important constraint in the study of financial performance of a bank as it results in declining margin and higher provisioning requirement for doubtful debts. Various banks from different categories together provide advances to different sectors like SSI, agricultural, priority sector, public sector and others. These advances need pre-sanctioning evaluation and post-disbursement control to contain rising NPAs in the Indian banking sector. The decline of NPA is essential to improve profitability of banks and fulfil with the capital adequacy norms as per the Basel Accord. For the recovery of NPAs a broad framework has evolved for the management of NPAs under which several options are provided for debt recovery and restructuring. This study traces the movement of the NPAs present in Indian public sector banks by analyzing the financial performance of the banks with respect to key performance indicators and management of the non-performing assets under the purview of new policy actions and regulatory adherence of the Reserve Bank of India.

**Keywords:** non-performing assets, early warning system, performance indicators, regulatory compliance, capital adequacy norms, core banking systems.

**JEL Classification:** G21, G28, G32.

### Introduction

An NPA is defined as a loan asset, which has ceased to generate any income for a bank whether in the form of interest or principal repayment. Banking in India is one of the most prominent sectors fuelling the growth of Indian economy. This sector is the foundation of modern economic development and key player of development strategy. Public sector banks are the ones in which the government has a major holding. They are divided into two groups, i.e., nationalized banks and State Bank of India and its associates. The future of PSB's would be based on their capability to continuously construct good quality assets in an increasingly competitive environment and maintaining capital adequacy and stringent prudential norms. Most banks follow Early Warning Systems (EWS) for recognition of probable NPAs, the actual procedures followed varies from bank to bank. The major mechanisms of a EWS followed by banks in India as brought out by a study conducted by Reserve Bank of India at the instance of the Board of Financial Supervision which included the parameters like designating Relationship Manager/Credit Officer for monitoring account/s, preparation of 'know your client' profile, credit rating system, identification of watch-list/special mention category accounts, monitoring of early warning signals.

As a result of steep fall in the profits because of high provisioning of NPAs it is now linked with

technology. There is a welcome change to curb and track NPAs using technology. This will help the banks to avoid human interference. As the software will flag the defaulting accounts as an NPA thereby diminishing discretionary power of Bank Managers to classify the same. Currently, only Indian Bank and SBI have started calculating NPA under the technological platform called the Core Banking Solution (CBS) system. Most other PSU banks are in the final stages of migrating to CBS and calculating NPAs under the CBS system. The most important challenge the country's financial system faces today is to bring informal loans into the formal financial system. By implementing Basel II norms banks involved significant changes in business model in which prospective economic impacts can be carefully monitored. Since, management quality of credit risk by the banks is a reason for expanding NPAs, banks concerned are continuously monitoring loans to identify accounts that have potential to become non-performing as banks need to maintain have adequate capital to support all the risks. Under the Basel II norms, banks should keep a minimum capital adequacy requirement of 8% of risk assets. All commercial banks in India excluding Regional Rural Banks and Local Area Banks have become Basel II obedient. The Reserve Bank of India has mandated maintaining of 9% minimum Capital Adequacy Ratio (CAR) or Capital to Risk Weighted Assets Ratio (CRAR) for India. For the purpose of making Indian banking business at par with global standards and make it more reliable, transparent and safe the Reserve Bank of India (RBI) has introduced

stringent policy norms. These norms are necessary since India is a developing economy and it is observing increased capital flows from foreign countries and there is increasing international financial and economic transactions.

This research paper is organized as follows. Review of the existing literature is discussed in section 1. The theoretical framework is shown in section 2. Section 3 identifies the methodology used. Data analysis and interpretation of the results is summarized in section 4. Section 5 presents findings. The final section concludes.

## 1. Literature review

“Management of non-performing assets (NPAs) in banks remains an area of concern, particularly, due to the likelihood of deterioration in the quality of restructured advances” (RBI Annual currency report, March 31, 2010). NPAs are an unavoidable burden for each banking industry. The success of banks depends upon methods of managing NPAs and keeping them within tolerance level. Hence, to change the curve of NPAs, there is only one technique that an effective monitoring and control policy should be planned and executed which is aided by proper legal reforms. The problem of NPAs has been studied over the years to bring insight into the problem of NPAs, its cause and solution. There are numerous empirical studies conducted on the issue of NPAs of commercial banks in India as well as abroad. Swamy (2001) premeditated the comparative performance of different bank groups since 1995-96 to 1999-2000 taking parameters like NPAs and capital adequacy norms). The risk of erosion in asset value due to simple default or non-payment of dues by the borrowers is credit risk or default risk (Sarma, 1996). The loss of income from NPAs not only brings down the level of income of the banks but also hampers them from quoting finer Prime Lending Rates (PLR) (Jain and Balachandran, 1997). Banking business is exposed to various risks such as interest risk, market risk, credit risk, operational risk, liquidity risk and management risk. But, credit risk stands out as the most unfavourable of them all (Iyer, 1999) examined NPAs in India in Global context, the similarities, dissimilarities and remedial measure. Mohan (2003) conceptualized ‘lazy banking’ while critically reflecting on banks’ investment portfolio and lending policy. A measured view is that banks’ lending policy could have crucial influence on non-performing loans and crucial issues pertaining to credit of Indian banks (Reddy, 2004). Sathya (2005) examined the effect of privatization of banks on performance and efficiency. Jimenez and Saurina (2006) observed the Spanish banking sector from 1984 to 2003, they provide evidence that NPLs are determined by GDP growth, high real interest rates and relaxed credit terms. This study attributes the latter to disaster myopia, herd behavior

and agency problems that may attract bank managers to lend excessively during boom periods. Banking crisis exists in the country if the level of NPAs strokes 10 percent of GDP (Khan and Bishnoi, 2001). Though the banking reforms organized by the Narasimham Committee have been proceeding in a phased manner in the country, the high level of NPAs creates a serious obstacle for pushing through the reforms (Velayudham, 2001; Pacha Malyadri, S. Sirisha, 2011). This study strives to examine the state of affairs of the NPAs of public sector banks and private sector banks in India with special reference to the weaker sections.

Several studies are based on PSBs and NPA/NPL which also confirmed the conversing impact of NPAs or non-performing loans (NPLs) on the productivity of public sector banks (for example, Ranjan & Dhal, 2003; Misra & Dhal, 2009). These studies support to the usage of panel regression model to the relation between profitability and echelon of non-performing assets.

## 2. Theoretical framework

A common study reveals that “financial crises often extend to the real area of the economy as the extent and nature of banking crises vary considerably” (Peter Spicka, 2008). So, the strength of the overall financial system depends highly on the financial soundness of banks. Under the improved Basel II framework the financial soundness of Indian banks during the year 2009-2010 is analyzed under this study. The Indian banking system bear up the load of the global financial crisis and a factor that facilitated the normal functioning of the banking system even in the face of one of the prime global financial crisis was its strong capital adequacy. The most important measure of the financial strength of any bank is its core CRAR reflecting the paid up capital and reserves. At end of FY 2010, this study indicates that in the case of Indian banks, core capital (measured by Tier I capital) made up about 70 per cent of the total capital. Despite the fact that the capital adequacy of Indian banks remained strong, there were some promising concerns with regard to NPAs. The measures adopted to deal with the infectivity from the global crisis, the risk weights and provisioning recommendations had been relaxed in November 2008 as a counter cyclical measure as part of the policy. On the other hand, in view of the extent of rationalized advances to the commercial real estate sector and huge increase in credit in this sector, the provision required on standard assets in the commercial real estate sector was increased from 0.40 per cent to 1 per cent in November 2009 for building up cushion against likely decline in asset quality. It was determined in October 2009 that banks should enlarge their provisioning cushions consisting of specific provisions against NPAs as well as floating provisions, and make sure

that their total Provisioning Coverage Ratio, including floating provisions, is not less than 70 per cent by September 2010. Sufficient care should be taken by banks to make sure that the compromise settlements are done in a fair and clear manner and in full compliance with the RBI guidelines as they were directed in June 2010 regarding the same. It was also determined that, hereafter, the officer/authority sanctioning a compromise/one time settlement should attach a certificate stating that the compromise settlements are in compliance with the Reserve Bank guidelines.

### 3. Research methodology

The study is based on secondary data which is collected from reports, journals and websites for the latest happenings in the banking sector in India, where a major part of the data is extracted from the tables relating to banks as published by RBI and Report on Trend and Progress of Banking in India 2009-2010. The study mainly emphasizes on the composition, development and management of NPAs in public sector banks and RBI norms on capital adequacy. So, the data used mostly support the study using specific parameters through tables and charts for a logical analysis. Public sector banks in India include seven banks under the State Bank of India group and twenty other nationalized banks.

### 4. Data analysis

It is clear from Table 1, that the average CRAR of public sector banks has been sufficient under Basel I and Basel II framework, at the end of March 2009 and March 2010. Under Basel I norms, there has been an increase in average CRAR of 0.24 per cent that is from 12.0728 per cent at the end of March 2009 to 12.3128 per cent at the end of March 2010 by State bank of India and its associate banks. During the same period, under Basel II norms, this group has also shown a marginal increase in average

CRAR of 0.1657 per cent, i.e, from 13.34 per cent at the end of March 2009 to 13.5057 per cent at the end of March 2010. CRAR requirements of other nationalized banks in the similar period have also improved by 0.0125 per cent under Basel I norms and by 0.0495 per cent under Basel II norms. This indicates that Indian banks under the changed structure have successfully managed to meet the increased capital requirements.

Table 1. Average CRAR of public sector banks under Basel I & Basel II as on March 31, 2009 and March 31, 2010 (in per cent)

| Banks                    | Basel I |         | Basel II |         |
|--------------------------|---------|---------|----------|---------|
|                          | 2009    | 2010    | 2009     | 2010    |
| SBI & its associates     | 12.0728 | 12.3128 | 13.34    | 13.5057 |
| Other nationalized banks | 12.0255 | 12.038  | 13.1380  | 13.1875 |

It is shown in Figure 1, however there has been an increase in CRAR, but this cannot weaken the fact that quality of advances has deteriorated which is shown by increased NPAs of public sector banks in India in recent years. There has been a steady decline in NPAs of public sector banks in India, i.e., from the high of Rs. 544234.4 millions at the end of March 31, 2002 to a low of Rs. 386018 millions at the end of March 31, 2007, i.e., a fall of 29 percent (approx). Further, it improved slightly in the FY 2008 to Rs. 397485.2 millions. However, it is clear from Chart 1 that after 2008 it has steadily increased to Rs. 440424.8 millions in the FY 2009 and jumped to Rs. 573008.8 millions in the FY 2010. There has been similar trend in NPAs in the public sector banks (especially SBI and its associate banks) and other nationalized banks. It implies that the movement in NPAs through the years cannot be related to a particular bank but external factors were also involved in the same.

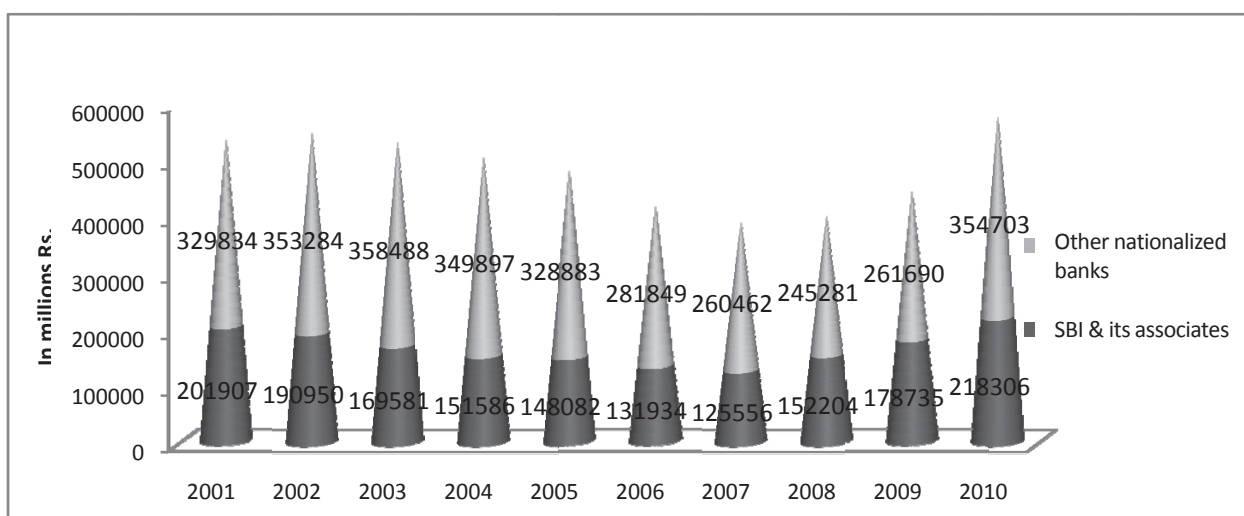


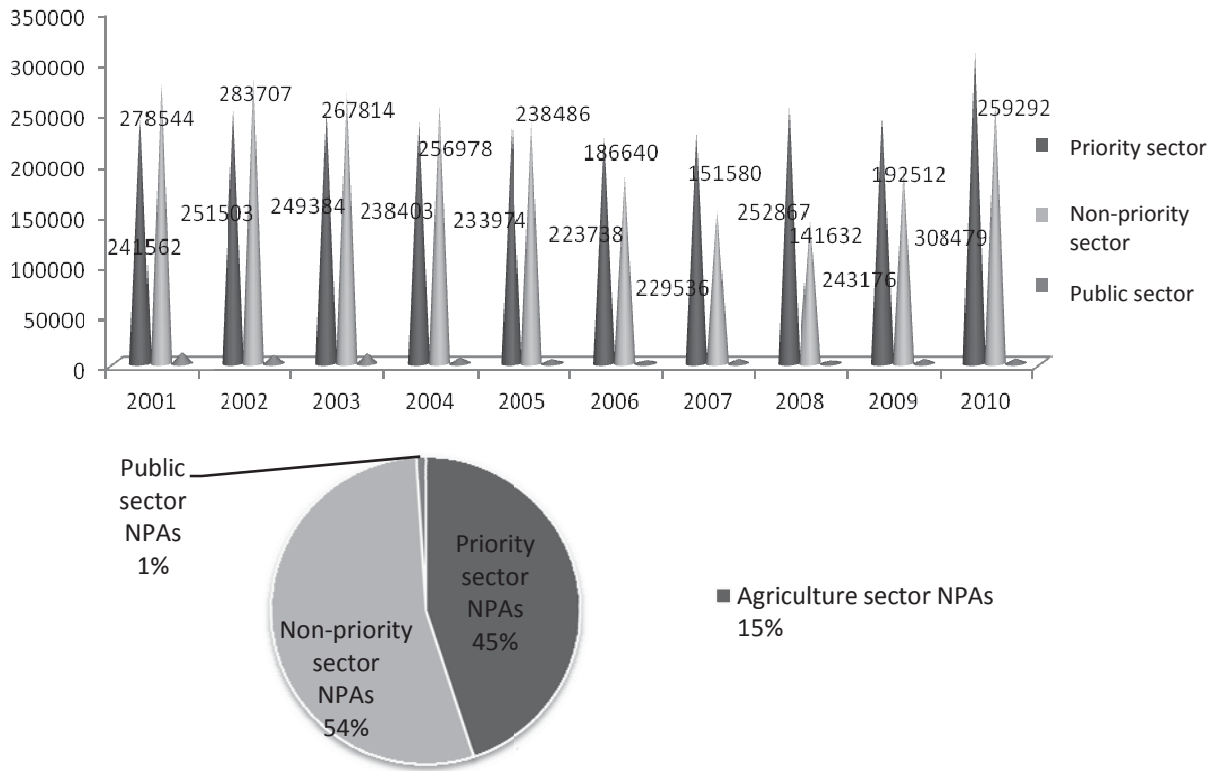
Fig. 1. Non-performing assets of public sector banks from March 31, 2001 to March 31, 2010



It is clear from Figure 2 that the composition of NPAs from FY 2001 to 2010 has shown a rise in the proportion of priority sector NPAs except for FY 2010 which it is almost steady throughout the years. As against it the NPAs in non priority sector have shown a constant decline from a soaring of Rs. 283707.1 millions in the FY 2002 to a low down of Rs.141631.6 millions in the FY 2008, i.e., a fall off 50 per cent (approx). On the other hand, it has gradually improved to Rs.192511.5 millions in the FY 2009 and further enhanced to Rs.

259291.7 millions in the FY 2010. Further it is evident from chart 3 that non-priority sector contributed almost 45 per cent in the total NPAs in the FY 2010 as compared to 54 per cent contributed by the priority sector. In the FY 2010 the contribution of public sector in total NPAs is as low as 1 per cent. Moreover, in FY 2010 a rise in NPA ratio for priority sector is seen though it was lower compared to the rise in non priority sector as shown by the sectoral NPA ratio of public sector banks.

**Fig. 2. Composition of NPAs of public sector banks from March 31, 2001 to March 31, 2010 (in millions Rs.)**



**Fig. 3. NPAs of public sector banks: sector-wise as on March 31, 2010**

Analyzing Gross Non-Performing Assets (GNPA) to Gross Advances Ratio from FY 2005 to FY 2010, it is found that there is considerable improvement in the ratio for Indian public sector banks, compared to SBI & associates and other nationalized banks (see Table 2). The gross NPAs ratio of public sector banks positioned at 5.35 per cent at end-March 2005 had declined

gradually to 2.23 percent at end-March 2008. During the catastrophe year of FY 2009, the gross NPA ratio declined slightly to 2.01 per cent. Conversely, during FY 2010, the gross NPA ratio of public sector banks increased to 2.27 per cent (as shown in Table 2) proving fall in the quality of advances in the previous years.

**Table 2. Gross NPAs to Gross Advances Ratio from March 31, 2005 to March 31, 2010 (in per cent)**

| Banks | SBI & its associates | Other nationalized banks | Public sector banks |
|-------|----------------------|--------------------------|---------------------|
| 2005  | 5.32                 | 5.36                     | 5.35                |
| 2006  | 1.04                 | 3.81                     | 2.89                |
| 2007  | 2.59                 | 2.69                     | 2.66                |
| 2008  | 2.58                 | 2.06                     | 2.23                |
| 2009  | 2.55                 | 1.75                     | 2.01                |
| 2010  | 2.82                 | 2.03                     | 2.27                |

If we look upon to credit growth of banks, it is imperative to note that the growth in NPAs of banks has mainly followed a lagged cyclical pattern. ‘A strong positive impact of credit growth on problem loans with

a lag of three years’ by De Lis et al. (2001). ‘The credit risk as reflected in non-performing loans could be influenced by the business cycle’ by B.M. Mishra and S. Dhal (2010). The creation of NPAs for banks in the

following years is the end result of the pro-cyclical nature of the banking system, in which asset quality can get compromised during periods of high credit growth, to be precise before FY 2009 as given in the study. Gross NPA and Gross Advances of public sec-

tor banks as on March 31, 2010 are shown in Figure 4. The global economic recession period in FY 2008 and its subsequent effects can be attributed to a considerable rise in NPAs by the priority and non-priority sectors throughout FY 2010.

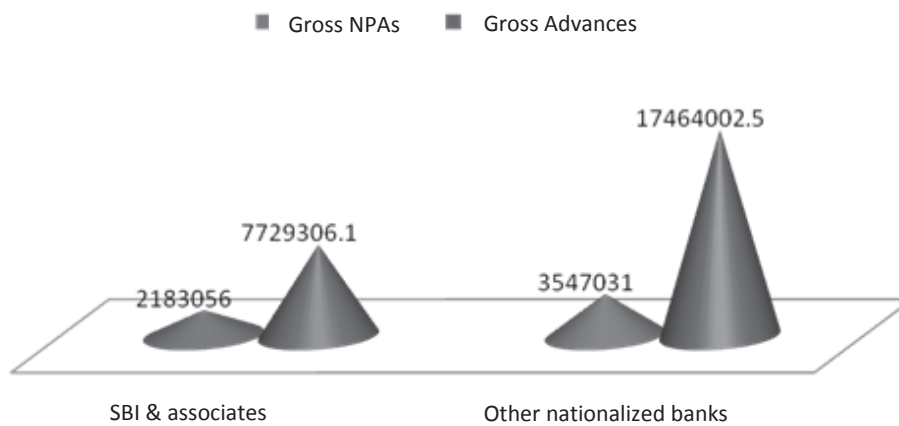


Fig. 4. Gross NPAs and gross advances of public sector banks as on March 31, 2010 (in millions Rs.)

The movement of NPAs in public sector banks from the end-March of 2009 to the end-March of 2010 is depicted in Figure 5. Furthermore it is evident from the chart that from the end of March 2009 to end of March 2010 the Gross NPAs has increased by almost 33.3 per cent. Subsequent to netting out provisions, there was an also significant rise of Net NPAs of public sector banks from end-March of 2009 to end-March of 2010 by 40.1

per cent. Ineffective monitoring and revival procedures in the post-lending years and the poor lending policies taken by the bank in the pre-recession years resulted in the negative movement of NPAs. The lack of proper pre-sanctioning appraisal and post-disbursement control within the public sector banks in India is proved by the incapability of the banks to monitor and control the NPAs in the post-recession years.

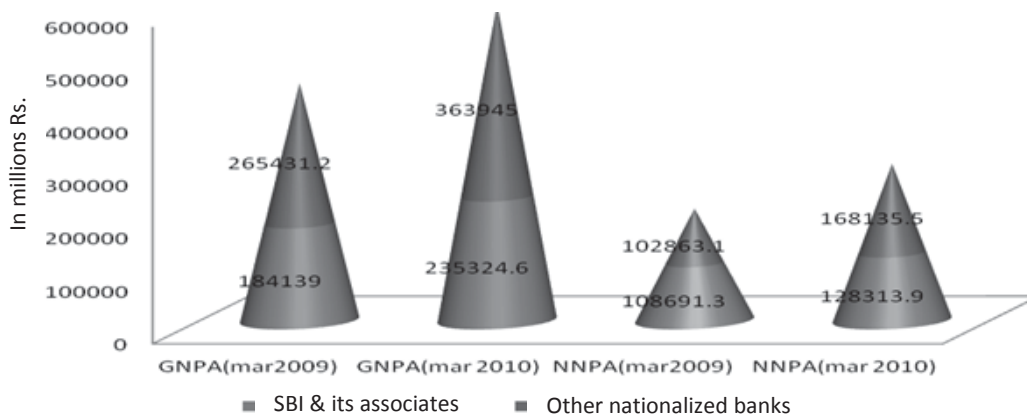


Fig. 5. Movement of NPAs in public sector banks

### 5. Findings

The Indian public sector banks has been constantly maintaining capital adequacy ratio well above Reserve Bank of India (RBI) norm of 9 per cent and the Basel II norm of 8 per cent. Due to aggressive lending policies undertaken by the banks the quality of advances in Indian public sector banks has deteriorated over the years. The economic recession in 2008-2009 resulted in the increase in non-performing assets in the FY 2010. There is requirement of government intervention to curb the misuse of relaxed lending policies specific to the priority sector (including agriculture, SSIs and others) as the amount of NPAs in this sector is not showing any

signs of decline. Sufficient control measures need to be taken to check unconstrained lending during years of high economic growth, although the quality of lending and recovery in non-priority sector has been improving over the years. Because of strict regulatory norms of RBI, public sector banks in India have been able to manage non-performing assets over the years. Despite the fact that the banks have been able to strengthen its capital adequacy requirements, but to improve the overall management of NPAs, improvement in monitoring and recovery procedures is required. Public sector banks in India use the Core Banking Solution (CBS) to regularly monitor the progress of non-performing assets which is without doubt a step in the right direction.

## Conclusion

Nowadays the serious problem faced by banks all over the world is the growth of NPAs. The value of loan-disbursement process is harmed because of non-recovery of loan instalment and the interest on the loan which in turn is the consequence of growth of NPAs which adversely affect the lending activity of the banks. As a result significant importance has been given, to make stronger the capital adequacy requirements like the measure of CRAR to measure the capacity of banks to absorb losses occurring from non-performing assets. Public sector banks in India have been able to manage high level of CRAR to provide sufficient cushion for any unexpected losses, in relation to capital adequacy requirements. Despite the fact, rise of NPAs in recent years remains an area of concern and should be tackled with sincere efforts during the periods of disbursement of loans and recovery of the same. In recent times, the use of the method, in which com-

promise settlements has been effected by banks; certain serious concerns have been articulated from different sections and by the Debt Recovery Tribunals. It was examined that the banks take up different parameter to different borrowers, and agreed for a lesser amount as against claimed amount, regardless of availability of plentiful securities and thus ignoring RBI guidelines. The study finally observes that the prudential and provisioning norms and other initiatives taken by the regulatory bodies has pressurized banks to improve their performance, and consequently resulted into trim down of NPA as well as improvement in the financial health of the Indian banking system. In the nutshell, we can say that, however during the periods of economic slowdown, public sector banks in India have shown flexibility, management of NPAs through better quality of advances and recovery procedures is essential for banks to maintain their continued existence and expansion.

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