Loan Recovery And Asset Quality Of Commercial Banks: An Empirical Analysis

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INTRODUCTION

The recovery performance of commercial banks is the *sine qua non* for their liquidity of funds. Loan recovery is the main the factor which determines the quality of loan assets of banks. The mounting overdues lead to high level of non performing assets (NPA) and thereby deteriorate the asset quality. It consequently restricts the banks' lending capacity and stands in the way of dilution of funds to developmental activities and hence, the socio economic development of the area gets impacted. Thus, improving the quality of loan assets is the true test of improved efficiency of the banking system.

The NPA of banks is an important criterion to assess the financial health of the banking sector. It reflects the asset quality, credit risk and efficiency in the allocation of resources to productive sectors. Since the reform regime, there have been various initiatives to contain growth of NPAs of banks to improve the asset quality of the banking sector. Commercial banks have envisaged the greatest renovation in their operation with the introduction of new concepts like income recognition, prudential accounting norms and capital adequacy ratio etc. which placed them in a new platform. The growing competition from internal and external constituents and sluggish growth in economy coupled with poor credit deposit ratio, the large volume of NPAs in the balance sheet and lack of automation and professionalization in operation have been flaring up the banking situation in the country. High level of NPAs in banks and financial institutions are a cause of worry to the public as bank credit is the catalyst for the economic growth and any bottleneck in the smooth flow of credit is bound to create adverse effect on economic development due to mounting NPAs (Sinha, 2006)[1]. The management is seriously concerned about the growing NPA menace, which is taking its toll on efficiency and profitability. NPAs are serious strain on the profitability because the banks cannot book income on such accounts. Further, they are required to charge the funding cost and provision requirement to their profits. High levels of NPAs adversely affect the financial strength of banks and enforce the government to recapitalize the weak banks from time to time. On the other hand, the banks have failed to conform to stringent international standards.

The Narasimham Committee has rightly expressed concern over the erosion in the quality of assets of which non-performing advances constitutes the bulk. The fund lock up in the NPAs is not available for productive use. When banks write them off, it becomes a charge on their profits. In order to write off NPAs, banks are compelled to charge higher rate of interest on productive loans. In the present scenario, NPAs have been the most vexing problem faced by public sector banks (Reddy et al., 2006)[2]. The Govt. of India and Reserve Bank of India have initiated various measures to control NPAs in the post reform years. But the commercial banks are still unable to solve the dilemma. This needs to be remedied. With this backdrop, an attempt has been made to study the loan recovery and treatment of NPA of commercial banks in Barak Valley of Assam

PREVIOUS STUDIES ON ASSET QUALITY

There exist some cross country studies on financial health and asset quality of banks. The recessions cause banking crisis studied by Hardy and Pazarbasioglu (1999)[3] and Kaminsky and Reinhart (1999)[4]. Salas and Saurina (2002)[5] established the significant role of economic slump in increasing loan problem in Spanish banks. Meyer and Yeager (2001)[6] found that the loan quality of local banks in U.S. is affected by local economic slowdowns. Shu (2002)[7] observed that bad loans as a proportion to total loans of banks decrease with high economic growth in Hong Kong. Gambera (2000)[8] used a bivariate VAR technique and found that firm income and state annual product have significant influence on bank loan quality in US. Recently, some studies investigated the feedback effect from the banks to the real economy. Marcucci and Quagliariello (2005)[9] validated the cyclicality of write-offs to total loans for Italian banks. Hoggarth, Sorensen and Zicchino (2005)[10] observed cyclicality of aggregate write-offs in UK banks. Baboucek and Jancar (2005)[11] found no corroboration of the cyclicality of NPAs but conform pro-cyclicality for banks in Czech economy.

In Indian milieu, there have been large empirical literatures on the causes of NPAs in the Indian banking sector.

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However, some studies relating to NPAs are mentioned to pinpoint the importance of the study. Rangarajan (1991)[12] pointed out that improving the quality of loan assets is the true test of improved efficiency of banking system. Ramala and Nagi (1994)[13] suggested proper end-use of loans to the entrepreneurs that could only ensure economic development of the area and the country as a whole. Taori (2000)[14] dealt with the NPA management of banks and stated that surest way of containing NPAs is to prevent their occurrences. He suggested that proper risk management, strong and effective credit monitoring, co-operative working relationship between banks and borrowers etc. should be tenets of NPA management policy. The similar opinion has been echoed in more recent work by Battacharya (2002)[15]. In order to root out the NPA problem, Banmali (2001)[16] suggested a multi-frontal attack for the problem, involving all the concerned staff members in the field up to the grass root level as well as in the controlling points. A number of studies viz, Ranjan and Dhal (2003)[17], Harpreet and Parricha (2004)[18], Ramkrishna and Bhargavi (2004)[19], Singh (2007)[20] etc. agreed that the asset quality of commercial banks has improved considerably due to reform packages. Raul (2004)[21] suggested that an appropriate set of substantial financial sector regulation clarity including changes in tax laws is imperative for the banking system to get rid off NPAs as well as QIBs to look forward to the investment opportunity. Ghosh (2006)[22] studied the management of NPAs with reference to Mugberia Central Co-operative Banks and Tamluk Ghatal Central Co-operative Bank Ltd. They found that these banks were not successful in restricting the level of NPAs and suggested for changing the character from NPAs to Performing Assets. Ahmed (2007)[23] examined non performing assets of public sector commercial banks in Indian milieu. He observed that PSBs have been committed towards the reduction and management of NPAs. The quality of asset portfolio has improved quite impressively over the period. In order to survive and compete with private and foreign banks, it is crucial for the PSBs to clean up their balance sheets by increasing the equity capital. Rajender and Suresh (2007)[24] in a case study examined the quality of loan assets of Indian banking and suggested some of the practical strategies to make Indian banks more viable by managing the level of NPAs. An assessment on the causes and consequences of NPAs of commercial banks, by Rajesham and Rajender (2007)[25], concluded that a strong political will only be able to find satisfactory solution to the problem of mounting NPAs.

NON-PERFORMING ASSETS OF COMMERCIAL BANKS IN INDIA

High level of NPAs are prevalent in the Indian financial sector and reflect the country's poor bankruptcy laws. The gross NPA of the banking system amounted to Rs. 60,841 crores for 2000-01, a little over 16 per cent of the total assets of nationalized banks. During 2001-02, nationalized banks have recorded a collective growth of 130 per cent in net profits besides fresh NPAs were added during the year that were more than double of those added in the previous fiscal. The gross NPAs of scheduled commercial banks in absolute term reduced to Rs. 50,486 crores in March 2007 from Rs. 50,519 crores in March 2006. The net NPAs of banks in 2006-07 stood at Rs. 20,100 crores compared to Rs. 18,265 crores in 2005-06 and Rs. 17,435 crores in 1999-00. This has been largely possible because of the huge provisioning that most of these banks could make as a result of growth in treasury income and, therefore, profits.

An observation of the data collected from RBI, Trend and Progress of Banking in India showed that non-priority sector is considerably adding fresh NPAs over the years. On the other hand, the higher NPAs in priority sector advances have pushed up the overall proportion of NPAs by three to four percent. The reasons of higher proportion of NPAs in priority sector advances at the national level may be attributed to: the directed and pre-approval nature of loans sanctioned under sponsored programmes, lack of effective follow up due to large number of small accounts, non-cost effective legal recovery measures, vitiation of the repayment culture consequent to the loan waiver schemes, willful defaulters and so on.

A bank group wise comparison of NPAs commercial banks viz., public sector banks, private banks and foreign sector banks are presented in Table – 1.

TABLE - 1: NON-PERFORMING ASSETS OF COMMERCIAL BANKS (END MARCH)

(Amount in Rs. crores)

Year	Public Sector Banks			Private Sector Banks			Foreign Banks			All Commercial Banks		
	NPAs Rs.	Advances Rs.	NPA as % to Advances	NPAs Rs.	Advances Rs.	NPAs as % to Advances	NPAs Rs.	Advances Rs.	NPA as % to Advances	NPAs Rs	Advances Rs	NPA as % to Advances
1997	43577	244214	17.8	2542	29959	8.5	1181	27525	4.3	473.00	301698	15.7
1998	45653	284971	16.0	3186	36753	8.7	1976	30972	6.4	50815	352696	14.4

1999	51710	325328	15.9	4643	44492	10.4	2201	31433	7.6	58555	401253	14.6
2000	53291	380077	14.0	4761	58249	8.2	2615	37432	7.0	60841	475758	12.8
2001	54774	442134	12.4	6078	71149	8.5	3111	45396	6.9	63963	558679	11.4
2002	56507	509368	11.1	11667	120883	9.7	2780	50618	5.5	70954	680869	10.4
2003	54089	577812	9.4	13333	144953	9.2	2892	53743	5.4	70314	776508	9.1
2004	51541	661975	7.8	10343	177419	5.8	3013	62632	4.8	64897	902026	7.2
2005	46597	870851	5.4	8691	225139	3.9	2257	75220	3.0	57545	1171210	4.9
2006	41358	1134724	3.7	7710	316761	2.4	1928	98965	1.9	51097	1551378	3.3
2007	38968	1464493	2.7	9256	420145	2.5	2263	127872	1.8	50486	2012510	2.2
b	3003.0	49094.6	–	856.9	10387.2	–	441.3	42193.8	–	4319.2	63719.8	–
Cgr	120.078	15.288	–	22.24	23.738	–	22.19	12.589	–	7.773	15.972	–

Source: *Trend and Progress of Indian Banking, 1998-99, pp-72 and 1995-2006* & RBI, Statistical Tables Relating to Banks in India, 2006-2007.

The table depicts that during the period 1997-2007, NPAs as percentage of advances has been declining significantly in case of PSBs. It has slipped to 2.7 per cent in March 2007 from 17.8 per cent in March 1997. The foreign banks and private banks witnessed swelling of NPAs both in percentage and absolute term. The same for private banks reduced from 8.5 pc to 2.5 pc and for foreign banks 4.3 pc to 1.8 pc during the period. The bank group-wise compound growth rate (cgr) analysis revealed that the growth of NPAs of public sector banks during the period is 20.08 per cent which is 22.45 per cent for private sector banks and 22.19 per cent for foreign banks. One point worth nothing in this respect is that the growth of NPAs of PSBs is higher than the growth of advances whereas, private banks experienced almost a uniform growth rate of both NPAs and advances. Thus, the problem of NPA is multidimensional and unless the same is checked and the NPA level is brought down to the international standards, it is bound to weaken the banking system. A major stumbling block for the banks to reduce their NPAs has been the prevailing legal system in the country.

The foregoing analysis aptly demonstrates that the malady of high level of NPAs eroding the profitability of banks is not confined to public sector banks alone, but it is equally present in the private sector banks too. The RBI in this respect proposed prompt corrective action (PCA) mechanism for arresting the menace of NPAs and has introduced various measures like credit risk management models, Compromise Settlement methods, effective use of debt recovery tribunals (DRT's), Asset Reconstruction Companies (ARC) and Recovery of Debts[26], Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SRFAESI) Act-2002[27], Circulation of information on defaulters, Corporate Debt Restructuring (CDR), lokadalats etc. to arrest unbridled virus of non-performing assets of commercial banks. With a view to provide an additional option and developing a healthy secondary market for NPAs, the guideline relating to sale/ purchase of NPAs were issued in July 2005, covering the procedure for purchase/ sale of NPAs by banks valuation aspects, prudential norms. The guidelines were partly modified in May 2007, whereby it was stipulated that atleast 10 per cent of the estimated cash flows should be realised in the first year and atleast 5 per cent in each half year thereafter subject to full recovery within three years.

EMPIRICAL STUDY: THE ANALYSIS OF DATA

It has been observed from the foregoing discussion that there may be a number of factors causing NPAs which became a great concern for the planners in the context of the country as a whole. However, during the reform era, there has been a declining proportion of NPAs in the asset portfolio of commercial banks in India. Now, the reason for NPAs may be studied in the backward area particularly to find out the growth trend of NPAs and to identify whether similar factors are amounting to NPAs. In this respect, we have conducted an empirical study on the loan recovery and asset quality of commercial banks in order to have an in-depth analysis of the problem.

OBJECTIVES OF THE STUDY

The key objective of the paper is to analyse the loan recovery and asset quality of commercial banks. The specific objectives of the study are –

1. To study the recovery performance of commercial banks in the study area.
2. To study the nature and growth of NPAs of banks in backward areas over the years.
3. To identify factors affecting the growth of NPAs in the area under study.
4. To study whether branch expansion has led to accretion in the volume of NPAs.

For this purpose, commercial banks operating in the study area have been considered. An attempt has also been made to do the cross-section analysis of NPAs of bank branches pertaining to 10 years i.e., 1998 to 2007. The data prior to the period has also been considered in some cases to comprehend the background of the banks in the study area. The relevant data have been collected from both primary and secondary sources. The sources of secondary data are financial statements compiled by the regional offices of the banks operating in the study area, Lead Bank statements, Directorate of economics and statistics, various reports, surveys. The survey cum interview method has been used for assessing the work system, recovery system, processing loan applications and other impeding factors associated with the loan portfolio. The statistical and financial techniques have been used to examine the asset quality of banks.

THE BACKGROUND OF COMMERCIAL BANKS IN THE STUDY AREA

The Barak valley comprised of three districts viz., Cachar, Karimganj and Hailakandi of south Assam. The rate of growth of flow of institutional finance in the valley has not shown significant rise. The valley has 12.5 per cent of the total bank offices of the state of Assam. At present, 12 public sector banks, 1 regional rural bank and 3 private banks are operating with a network of 147 branches. The district Cachar is bestowed with 72 branches (51 public sector banks, 19 RRBs and 2 private banks), while the district Karimganj has got 52 branches (32 public sector banks, 17 RRBs and 3 private banks) and 12 branches (13 public sector banks, 8 RRBs and 2 private banks) in the district of Hailakandi are taking the care of banking activities (GoA, 2005)[28]. The growth performance of banks in the area under study in the national scenario has been summarized on the basis of parameters as presented in the Table-2.

TABLE-2: PERFORMANCE OF BANKS IN BARAK VALLEY VIS-À-VIS INDIA

	Performance Indicators	Barak Valley			All India average		
		1991	1999	2007	1991	1999	2007
1	Number of Commercial Banks	13	15	15	272	298	183
2	Branch expansion of banks(number)	140	140	149	60646	67868	73836
3	Population served per office (‘000)	29100	37800	40000	14000	15000	16000
4	Total deposits (Rs. in crores)	233.94	457.72	1391.91	201199	607268	2608309
5	Deposit per branch (Rs. in crores)	2.72	8.95	15.3	3.34	14.50	36.75
6	Total advances (Rs. in crores)	91.25	125.12	313.72	105524	261279	1928913
7	Advances per branch(Rs in crores)	1.06	1.69	2.8	2.02	6.53	27.57
8	Credit-deposit ratio	38.6	20.8	19.3	54.2	55.8	73.5

Source: Figures for March compiled and computed from:

(i) Basic statistical Returns, Reserve Bank of India, Mumbai

(ii) Lead Bank offices of the region, United Bank of India

It has been observed that during 1991, population served per branch at all India average was 15,000, that rose to 16,000 in March 2007. The same increased to 40,000 in December 2007 from 29,100 in 1991 in the study area. The deposits per branch were far behind the national level. The absolute figures were Rs. 2.72 crores in 1991, Rs. 8.95 crores in 1999 and Rs.15.3 crores in 2007. During the period 1991-2007, deposits per office in the districts increased by 7 times in contrast to 11 times increase in the country as a whole. On the other hand, the advances per branch in the districts remain low than that of the national level. The net results of discrepancies were reflected in the credit deposit (C/D) ratio. It slipped to 19.3 per cent in 2007, from 38.6 per cent in 1991 in the context of the national average, which increased from 54.2 per cent in 1991 to 55.8 per cent in 1999 and further, a noteworthy increase to 73.5 per cent in 2007.

Apart from this, the branches of banks in the districts are getting computerized (which is a starting point of technological initiatives) at a very slow rate. Only 10 per cent of the total bank branches are fully computerized and a very negligible fraction of bank branches are under core banking solution (UBI, 2007)[29]. As of today, only State Bank of India has ATM facilities in the area. The RBI has been encouraging banks to use technology based solutions for increased financial inclusion. Credit delivery in rural areas is expensive for banks with a large number of small accounts. Thus, information technology enabled methods (being best alternative for rural credit delivery) can reduce the cost of delivery. But unfortunately, the process of computerization and implementation of IT methods is being adopted very slowly in the area under study.

RECOVERY FACADE AND ASSET QUALITY OF BANKS: THE ANALYSIS

RECOVERY PERFORMANCE OF COMMERCIAL BANKS

The recovery performance of commercial banks' is the *sine qua non* for their liquidity of funds. The lower recovery indicates erosion of banks' profitability and blocking up bank credit meant from developmental project of the area. It consequently restricts the banks lending capacity and stands in the way of dilution of funds and thereby slows down the developmental activities and hence affects the socio economic development of the area. The recovery position of banks in the area is quite unsatisfactory, and is presented in Table-3. It has been observed that the recovery position was very much poor in almost all the sectors in the area under study. In December 1990, it was 14.9 per cent in agriculture and allied activities followed by 28.4 per cent in small sector and 19.9 per cent in trade and service sector for Karimganj district while 16.3 per cent, 22.9 per cent and 46.9 per cent in the respective sectors for Cachar district as on end June 1989. The recovery position in agriculture and allied activities is relatively discouraging to other priority sectors in three districts under consideration.

The lower recovery indicates erosion of banks' profitability and blocking up bank credit from developmental project of the area. The gravity of the situation will be clear when we found Rs. 250.0 lakhs (35.5 per cent) was realized against the total outstanding dues of Rs. 599.1 lakhs under agriculture sector in Karimganj district as on 30-03-08. While in Cachar district, Rs. 314.7 lakhs (32.7 per cent) was realized against the total dues of Rs. 915.8 lakhs in 30-03-08 and in Hailakandi district, Rs. 290.8 lakhs (26.5 per cent) was realized against total dues of Rs. 970.8 lakhs in 30.06.08. Similar trend was noticed in small sector and service sector in the districts. However, the recovery position of small sector (46.0 per cent) is relatively better that that of agriculture (26.5 per cent) in 2008. The service sector has experienced a recovery of 49.8 per cent as on June 2008.

TABLE- 3: SECTORWISE RECOVERY POSITION OF BANKS IN BARAK VALLEY

(Amount Rs. in Lakhs)

Year	Agriculture & Allied			Small Sector & Rural Artisans			Trade & Service		
	Demand	Recovery	Overdue	Demand	Recovery	Overdues	Demand	Recovery	Overdues
Karimganj District									
31-12-90	292.3 (100)	43.8 (14.9)	248.5 (85.1)	92.3 (100)	26.3 (28.4)	66.0 (71.6)	1025.2 (100)	204.3 (19.9')	820.9 (80.1)
30-09-96	363.2 (100)	98.2 (27.0)	265.0 (73.0)	143.0 (100)	45.2 (31.6)	97.8 (69.4)	1530.8 (100)	345.6 (22.5)	1185.2 (77.5)
30-03-99	458.8 (100)	15.81 (25.2)	343.0 (74.8)	206.3 (100)	92.6 (44.8)	113.7 (55.2)	1960.3 (100)	558.2 (28.4)	1402.1 (71.6)
30-03-05	543.2 (100)	231.1 (27.9)	320.9 (72.1)	245.7 (100)	110.8 (43.6)	134.2 (56.4)	2134.0 (100)	602.8 (27.6)	1432.0 (72.4)
30-03-08	599.1 (100)	250.0 (35.4)	349.1 (65.6)	287.4 (100)	140.2 (45.8)	147.2 (55.2)	2359.0 (100)	879.0 (29.9)	1480.0 (70.1)
Cachar District									
30-06-89	325.6 (100)	53.3 (16.3)	272.3 (83.7)	118.3 (100)	27.7 (22.9)	90.5 (77.1)	524.6 (100)	246.3 (46.9)	278.3 (53.1)
31-12-94	638.3 (100)	113.0 (17.7)	525.3 (82.3)	299.2 (100)	45.8 (15.8)	253.4 (84.7)	853.2 (100)	424.6 (49.7)	428.6 (50.3)
31-03-98	758.6 (100)	215.6 (28.4)	543.0 (71.6)	345.2 (100)	96.2 (27.8)	249.0 (72.2)	1022.8 (100)	511.2 (49.9)	511.6 (50.1)
31-03-05	875.9 (100)	298.7 (27.9)	576.5 (72.1)	398.5 (100)	100.5 (32.1)	298.0 (67.9)	2563.9 (100)	1263.8 (48.1)	1300.1 (51.9)
30-03-08	915.8 (100)	314.7 (32.7)	601.1 (67.3)	450.5 (100)	210.2 (35.1)	240.3 (64.9)	3290.3 (100)	1687.0 (50.9)	1603.3 (49.1)
Hailakandi District									
31-12-91	192.0 (100)	20.2 (10.5)	171.8 (89.5)	62.8 (100)	19.2 (30.5)	43.6 (69.5)	302.7 (100)	145.6 (48.1)	157.1 (55.9)
31-03-94	258.3 (100)	45.0 (17.4)	213.3 (82.6)	85.3 (100)	41.6 (48.7)	43.7 (51.3)	512.6 (100)	213.9 (41.7)	298.7 (58.3)
31-12-99 (100)	482.9 (21.3)	102.9 (78.7)	380.0 (100)	90.6 (49.8)	45.2 (50.2)	45.4 (100)	418.2 (52.3)	219.0 (47.7)	199.2

31-03-05	879.6 (100)	278.6 (25.3)	601.0 (74.7)	201.6 (100)	95.3 (47.4)	106.3 (52.3)	657.2 (100)	321.1 (49.1)	336.1 (50.9)
30-06-08	970.8 (100)	290.1 (26.5)	680.7 (73.5)	234.8 (100)	103.5 (46.0)	131.3 (54.0)	879.4 (100)	432.1 (49.8)	445.3 (50.2)

Figure in the parenthesis indicates percentage to total.

Source: *Lead Bank statements (LBS), Lead Bank Office, Cachar, Karimganj and Hailakandi districts of Assam*

A significant feature of banks lending is that, despite mounting over dues in each year, the agriculture and allied sectors enjoy relatively major portion of bank credit. The agriculturists and poor people of the area could not repay the loans because they spend their loan on consumption purposes rather than productive purposes without bothering about the liability of making repayment because of illiteracy. They are provided loans for buying buffaloes, cows, pigs, to buy auto-rickshaw, to rear hen, and for purchasing different machines for small scale industries. Indeed, they get subsidy by government on this loan. But they do not use the loan for productive activities. So, the loanee is unable to return the loan. Constant failure of monsoon, natural calamities such as famine flood etc, willful default, deficiencies in lending policies are the chief reasons for non-recovery of loans. The reasons for poor recovery may also be attributed to various other factors such as lack of supervision of end use of fund owing to lack of vehicle and paucity of staffs, defective processing of loan applications, political interferences, communication gap between banker and customer etc.

The loan sanctioning authority begin to take undue advantage of such people. No effort is made for recovery of such loan. The local leaders do not encourage them to pay it back. They assure them that govt. will exempt it. Consequently, the loan is never recovered in future; it becomes difficult to pay it back due to heavy amount. As a result, the mounting over-dues restrict the banks' lending capacity. Therefore, an immediate action from appropriate authority to accelerate the recovery position in all sectors is necessary.

ASSET CLASSIFICATION OF BANKS IN THE STUDY AREA

As per present asset classification norms, assets of commercial banks are classified into four categories viz., standard assets, substandard assets, doubtful assets and loss assets. The following Table- 4 presents the nature of assets available with the banks in the study area. The total NPAs of banks, in absolute term, increased to Rs. 5143.0 Lakhs in March 2007 from Rs. 538.2 lakhs in March 1998 recording a 9.5 times increase, while the percentage of NPAs to total advance was hovering around a minimum level of 5.7 per cent. It was 4.3 per cent in March 1998, increased to 7.3 per cent in March 2002 and after that gradually reduced to 4.2 per cent in March 2007. The same have been much lower than the national level until March 2004. The all India average percentage of the same was 19.4 per cent in March 1995 which decreased to 7.8 per cent in March 2004 and further 2.7 per cent in March 2007 (RBI, 2006-07)[30].The proportion of both doubtful assets and sub-standard assets has been around 2 per cent throughout the period, while the loss assets constituted around 0.5 per cent of total advances.

TABLE-4: CLASSIFICATION OF NPAs OF BANKS IN BARAK VALLEY AS IN MARCH (1998-2007)

(Amount Rs. in lakhs)

Asset classification	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Advances	12380 (100)	12943 (100)	12918 (100)	15132 (100)	15779 (100)	18213 (100)	20967 (100)	23687 (100)	26786 (100)	34210 (100)
A. Standard Assets	11841.8 (95.7)	12243.2 (94.6)	12156.2 (94.1)	14302.1 (94.5)	14624.1 (92.7)	17196.8 (94.4)	18970.0 (93.4)	20087.1 (94.0)	23809.8 (93.9))	29067.0 (95.8)
B. NPAs	538.2 (4.3)	699.8 (5.4)	761.8 (5.9)	829.9 (5.5)	1154.9 (7.3)	1016.2 (5.6)	1997.5 (6.6)	3686.9 (6.0)	2976.2 (6.1)	5143.0 (4.2)
i) Sub-Standard assets.	245.1 (1.9)	298.6 (2.3)	412.6 (3.2)	314.2 (2.1)	458.9 (2.9)	530.8 (2.9)	832.5 (2.6)	1786.4 (2.9)	1523.7 (3.0)	3051.5 (2.6)
ii) Doubtful Assets	219.6 (1.7)	305.4 (2.4)	299.1 (2.3)	425.0 (2.8)	411.0 (2.6)	398.2 (2.2)	613.1 (2.1)	1209.2 (2.0)	945.0 (1.5)	1397.5 (1.1)
iii) Loss assets	75.5 (0.5)	9.5.8 (0.7)	50.1 (0.3)	90.7 (0.5)	285.0 (1.8)	87.2 (0.4)	346.0 (0.8)	691.3 (0.7)	345.5 (0.7)	697.0 (0.8)

Figures in the parentheses indicates percentage to total advances.

Source: *Compiled from the data collected from Zonal Offices of the Study Area.*

Further, the table demonstrated that NPAs in absolute figure recorded at 9.5 times increase, while 1.43 time increase at the national level during the same time span. This does not reflect the national level NPAs reduction tempo. However, the significant reduction of NPAs as per cent of advances may be due to the definitional change introduced by the RBI in 1995-96 and shyness on the part of the banker while granting fresh loan.

The profile of assets portfolio and the extent of NPAs of banks have improved during 1998-2007. The supervisory strategy of the banks has undergone a change during this period, moving from opacity towards transparency. A positive externality of the reform process has been building up the institutional architecture in terms of market, and creation of enabling environment through technological and legal infrastructure and improving managerial competence etc.

To assess the interrelationship between the advances and NPAs, we have employed co-relation analysis. The following table-5 exhibits the matrix of co-relation co-efficient among the components of NPAs and advances.

TABLE-5: MATRIX OF CORRELATION CO-EFFICIENT

	Advances	**NPAs**	**Sub-standard Assets**	**Doubtful Assets**	**Loss Assets**
Advances	1.00				
Non Performing Assets	0.82(2.867)*	1.00			
Sub-Standard Assets	0.80(2.667)	0.84(3.099)*	1.00		
Doubtful Assets	0.86 (3.373)*	0.85(3.231)*	0.89 (3.912)*	1.00	
Loss Assets	0.71(2.017)	0.87(3.529)*	0.74 (2.202)	0.85 (3.231)*	1.00
* Significant at 5 pc level.					

Figures in the parentheses indicate respective‘t’ values.

The analysis discerns that with the increase in the advances, the total NPA has increased at the same proportion. The positive correlation between advances and NPAs (0.82) is statistically significant at 5 per cent level of significance. The ‘r’ value of advances with doubtful assets (0.86) is also significant, while with substandard and loss assets is not statistically significant. This indicates that with the increase in advances, doubtful assets also increased but the increasing rate for sub-standard assets and loss assets is not followed by the rate of increase of advances. The correlation coefficient between NPA components and their respective‘t’ values reveal that high positive correlation exists between NPA components that are significant at 5 per cent level except in the substandard and loss assets.

NON-PERFORMING ASSETS: BANK WISE ANALYSIS

It is found that in absolute terms, NPAs of all commercial banks have increased except for Vijaya Bank (having only one branch) in the area under study. It is also clear that throughout the period, SBI holds maximum share of NPAs to total advances followed by United Bank of India (UBI), Punjab National Bank (PNB), Allahabad Bank (AB), Vijaya Bank (VB), Punjab and Sind Bank (P & S) respectively where the Central Bank of India (CBI), United Commercial Bank (UCo.), Indian Banks (IB) hold a very small percentage of NPA of total advances. The fact has been summarized in the following Table-6.

(TABLE-6:) BANK GROUPWISE NPAs OF BANKS IN BARAK VALLEY AS IN MARCH

(Amount Rs. in lakhs)

Sl.No	Name of the banks	1998	1999	2000	2001	2002	2003	2004	2005	2006	agr	cv
1.	State Bank of India (SBI)	206.3 (12.6)	252.8 (11.1)	318 (12.2)	211.2 (9.8)	498.3 (10.6)	426.7 (9.1)	510.9(9.8)	967.5(9.7)	907.7(8.7)	11.5	34.4
2.	United Bank of India (UBI)	200.1 (9.1)	264.0 (8.6)	286.0 (10.6)	431.0 (9.5)	439.1 (9.6)	379.0 (8.2)	410.6(8.9)	839.7(9.0)	967.6(9.7)	9.8	26.7
3.	Allahabad Bank (AB)	21.6 (7.2)	18.2 (6.9)	24.8 (7.1)	21.2 (5.8)	19.6 (3.8)	24.6 (4.3)	27.5(4.4)	75.0(4.7)	110.6(4.5)	2.3	11.1
4.	Panjab National Bank (PNB)	10.8 (8.6)	8.9 (6.2)	15.6 (7.1)	12.3 (7.2)	27.2 (4.9)	28.6 (5.6)	31.1(5.1)	35.6(5.2)	76.4(5.0)	17.2	45.3
5.	Central Bank of India (CBI)	17.2 (5.2)	19.0 (5.1)	22.3 (3.6)	28.6 (3.5)	35.2 (2.0)	26.9 (2.1)	27.6(2.2)	76.4(2.9)	101.6(3.7)	6.5	24.6
6.	Indian Bank (IB)	5.2 (2.6)	7.9 (5.5)	7.0 (4.8)	9.6 (4.2)	7.8 (2.8)	8.9 (3.8)	9.7(3.2)	23.5(3.4)	54.2(2.9)	7.9	18.2
7.	Union Banks (UB)	23.2 (7.6)	37.8 (9.1)	24.1 (5.2)	27.9 (6.8)	33.2 (7.7)	30.8 (6.8)	28.6(6.6)	56.7(6.3)	97.5(7.0)	4.3	17.3
8.	Panjab & Sind Bank (PSB)	NA	7.8 (8.9)	7.6 (7.2)	12.8 (7.1)	10.6 (6.2)	11.3 (5.2)	9.6(5.7)	17.8(5.9)	42.6(6.0)	5.8	20.2
9.	Bank of Boroda (BB)	21.6 (4.5)	36.7 (6.2)	19.0 (7.1)	25.6 (6.3)	30.0 (5.2)	31.6 (6.1)	37.4(6.5)	56.7(6.0)	98.7(6.0)	6.1	22.0
10.	Uco Bank (Uco)	NA	NA	8.1 (4.1)	7.2 (0.7)	7.6 (0.4)	5.6 (0.7)	7.9(0.8)	23.9(0.9)	75.9(1.9)	– 8.7	13.1
11.	Canara Bank (CB)	8.2 (4.0)	9.6 (3.9)	7.8 (3.6)	12.6 (5.1)	11.2 (6.7)	9.0 (4.9)	15.6(5.4)	40.9(5.7)	103.7(4.9)	1.4	17.3
12.	Vijaya Bank (VB)	24.0 (8.6)	37.1 (10.6)	20.9 (5.7)	29.9 (6.7)	35.1 (6.8)	33.2 (5.6)	38.7(5.7)	97.2(5.9)	167.3(5.5)	5.1	19.5
	All Banks	**538.2 (4.3)**	**699.8 (5.4)**	**761.8 (5.9)**	**829.9 (5.5)**	**1154.9 (7.3)**	**1016.2 (5.6)**	**1997.5(6.6)**	**3686.9(6.0)**	**2976.2(6.1)**	**9.6**	**24.3**

Figures in the parentheses indicate percentage to total advances.

Source: 1. *Statement of Recovery of NPA Accounts of the respective banks*
2. *Zonal office, file registers of respective banks.*

The position as well as extent of growth is revealed by cv and average annual growth rate (agr) of NPAs of individual bank. The table unfolds that the growth of NPAs in Punjab National Bank is highest (17.2) followed by State Bank of India (11.5), United Bank of India (9.8), Indian Bank (7.9), Central Bank of India (6.5), Bank of Baroda (6.1), Punjab and Sind Bank (5.8), Vijaya Bank (5.1), Union Bank of India (4.3), Allahabad Bank (2.3) and Canara Bank (1.5). During the period under consideration, the United Commercial Bank has witnessed negative growth rate (agr = - 8.7). In regard to the variation in the volume of NPAs, Allahabad Bank is well placed (cv = 11.1), as others have attained higher volume of NPAs as fresh accretion over the years. This can further be analyzed with the help of frequency distribution of NPAs.

GROWTH OF ADVANCES AND NPAs

A comparison of growth of standard assets, non performing assets and advances per branch is presented in the following Table - 7. For this purpose, total advances, NPAs and standard assets per office and their growth rate has been analysed with compound growth rate (cgr). The analysis discerns that volume of NPA registered a higher growth (cgr = 14.9) in contrast to the growth of advances (cgr = 10.9) and standard assets (cgr = 12.1) during 1998-2007. Further, NPAs per office recorded a higher growth rate (cgr = 14.6) than that of advances per office (cgr =7.9) and standard assets per office (cgr = 7.8).

TABLE- 7: POSITION OF ADVANCES, STANDARD ASSETS, NON-PERFORMING ASSETS OF BANKS

(Amount Rs in lakhs)

Year	Advances (Rs)	Standard Assets (Rs)	NPAs (Rs.)	Advances per branch (Rs.)	Standard Asset per branch (Rs.)	NPA per branch (Rs.)
1998	12380	11841.8	538.2	136.0	130.1	5.9
1999	12943	12243.2	699.8	139.2	131.6	7.5
2000	12918	12156.2	761.8	138.9	130.7	5.8
2001	15132	14302.1	829.9	156.3	150.5	5.5
2002	15779	14624.1	1154.9	166.0	153.9	12.1
2003	18213	17196.8	1016.2	191.8	181.0	10.6
2004	20967	18970.0	1997.5	201.8	177.8	22.0
2005	23687	20087.1	3686.9	229.0	198.6	30.6
2006	26786	23809.8	2976.2	242.9	213.7	28.5
2007	34210	29067.0	5143.0	298.6	227.0	48.4
Cgr	**10.9**	**12.1**	**14.9**	**7.92**	**7.8**	**14.6**

Source: *Self calculated and self compiled from the data collected from lead bank offices and zonal offices of the banks*

Thus, the higher growth of NPAs over the years revealed the inefficient profile of the asset portfolio of the bank. This may be due to the failure on the part of the banker for building up market based institutional devise and inappropriate managerial strategy. An appropriate strategy for the purpose of containing the microbes of non performing assets of banks is warranted based on the need and requirement of an exacting situation.

An attempt has been made to determine whether growth of advances per branch is associated with growth of NPAs per branch. In this connection, we have used co-efficient of correlation (r) between advances per branch and NPAs per branch. The 'r' value is found as under -

r = 0.857

't' value (cal) = 3.729

't' value (tab) at 8 df,

1 pc = 2.896

5 pc = 1.860

The analysis manifests that the high positive correlation is significant at 5 pc and 1 pc level at their 8 d f. This implies that there exists a positive relationship between advances per branch and NPAs per branch. In other words, it can be argued that high volume of advances led to increasing in the volume of NPAs. Thus it can be said that with the expansion of bank branches, the banks have acquired high volume of deposit, and at the same time, the volume of NPAs grew considerably over the years.

IDENTIFICATION OF DETERMINANTS OF NPAs OF COMMERCIAL BANKS

In order to assess the factors affecting the NPAs of commercial banks in the districts under study, regression analyses have been employed. For this purpose, various bank specific factors like priority sector lending, credit deposit ratio, NPA to advances, capital adequacy ratio are considered as independent variables and NPAs as dependent variable in the regression model. The rationale to choose bank specific parameters was that they might have a significant impact of NPAs. The priority sector advances are generally considered as a major cause of NPAs which were included in the model to understand the actual impact of priority sector on NPAs. The C/D ratio reflects the credit culture of banks which has been considered in this model to observe how the credit culture can impact NPAs. The capital adequacy ratio is the parameter to reflect the financial soundness of banks which might cause higher NPAs. The NPA to total advances indicates the extent of growth of NPAs, so this has also been included in this model.

The regression equation have been fitted over the data pertaining to the period of 8 years, 2000-2007, exhibited in the Table – 8. In order to assess the interdependency among the factors, we have used the following multi regression model.

$NPA= b_o + b_1\ PSL_t + b_2(C/D)_t + b_3\ (CAR)_t + b_4(N/A)_t + U_t$

where,

NPA = Non Performing assets

PSL = Priority Sector Advances

C/D = Credit-Deposit ratio

ADR = Capital Adequacy Ratio

N/A = NPA to Advances

b_o = Intercept

and b_1 = (i = 1,2, …….4) = Co-efficient of regression parameters.

TABLE - 8: VARIABLES CONSIDERED FOR IDENTIFICATION OF DETERMINANTS OF NPA OF A BANK

Year	NPAs (Lakhs)	Priority Sector Advances (Lakhs) (PS)	C/D ratio (percent)(C/D)	Capital Adequacy ratio (CAR)	NPAs to Advance (N/A)
March 2000	761.8	8310	23.1	11.1	5.9
March 2001	829.9	8720	22.9	11.4	5.5
March 2002	1154.9	9135	22.5	12.0	7.3
March 2003	1016.2	9753	25.8	12.7	5.6
March 2004	1997.5	9980	20.0	12.9	6.6
March 2005	3686.9	12780	20.9	12.8	6.0
March 2006	2976.2	14328	19.5	12.3	6.1
March 2007	5143.0	16453	19.0	12.3	4.2

The linear regression equation is obtained as –

NPA= 210.156 + 0.320 PS - 190.349 C/D + 355.851 CAR - 304.307 N/A
SE [6372.220] [0.178] [167.927] [418.878] [383.996]

The ANOVA of dependent variable shows that F ratio is not statistically significant indicating that the independent variables considered may not be the magnificent determinants for the high level of NPAs of banks.

ANOVA OF A DEPENDENT VARIABLE

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.7E+07	4	4226990	12.115	0.034[a]
Residual	1046722	3	348907.3		
Total	1.8E+07	7			

The regression coefficients are as under-

REGRESSION COEFFICIENTS

Variables	b	't' value	Sig.	R^2	Adjusted R^2	SE.
β_o(Constant)	–	0.33	0.976			
Priority Sector lending (PS)	0.596	1.803	0.169*			
Credit deposit ratio (C/D)	-0.271	-1.134	0.339	0.942	0.864	590.6837
Capital Adequacy Ratio (CAR)	0.151	0.850	0.459*			
NPA to advances (N/A)	-0.171	-0.792	0.486			

* Statistically significant

Dilating upon the table, it is revealed that variation in the dependent variable viz. non performing assets of banks in the districts is explained by about 94 per cent by independent variables (R^2=0.942). However, the F ratio is not statistically significant. This implies that independent variables viz. priority sector lending, credit deposit ratio, capital adequacy ratio and NPA to advances may not be considered as perfect determinants of dependent variable ie, NPA in the study area. This may be due to data coverage as only 8 years ie. 2000-2007. However β (beta) value of each of the independent variables indicates some different results. The priority sector lending and capital adequacy ratio have turned to be statistically significant which indicates that non performing assets of commercial banks in the study area have been mounted due to bank exposure to priority sector lending and capital adequacy. This has bestowed the message of inability or incapacity of banks to take risks and to absorb losses. The credit deposit ratio and ratio of NPA to advances may not affect much in increasing the quantum of NPAs. Thus, an urgent step is warranted to arrest the unbridled virus of NPAs made by the banks in the study area over the period under consideration.

Having analyzed various lacunas of accumulation of NPAs in the loan portfolio of banks, it may be observed that commercial banks have been committed towards the reduction and management of NPAs. The quality of asset portfolio has improved quite impressively over the period under consideration due to reform measures. However, a number of factors have been responsible for increasing the volume of NPAs of banks in the districts. These are poor credit appraisal system, lack of foresightedness while sanctioning credit limits, lack of proper monitoring, reckless advances to achieve the budgetary targets, lack of sincere corporate culture, inadequate legal provisions on foreclosure and bankruptcy, change in economic policies/environment at the macro level, non transparent accounting policy and poor auditing practices, lack of coordination between banks and their customers.

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26The committee on banking sector reforms (Narasimham Committee, 1998) suggested for constitutions of Asset Reconstruction Companies (ARC) for taking over the NPAs of banks which carry high NPA portfolio. The ARC is wrapped up in considerable ambiguity. It is to be noted that Indian banking system suffers from lack of inappropriate legal system for quick recovery of bank dues. The DRTs were set up to expedite disposal of high value claims of banks. The performance of ten DRTs currently working may also not be considered satisfactory. Out of Rs. 8900 crores transferred to DRTs by March 1997, only a sum of Rs. 178 crores has been recovered. The suggestion of ARC is itself debatable and it hardly provides any solution to the bulging problem of NPA.

27 The problem of NPA is multidimensional and unless the same is checked and its level is brought down to international standard of 2-3 pc of total loan assets the whole banking sector will definitely loose its grip in the competitive market. In this respect, the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 is an important landmark in Indian banking scenario. With the passage of the Act, the banks and the financial institution (FIs) have been quick to initiate action against the defaulters on loans. About 9000 notices have been issued for the recovery of the loan amounting to Rs. 70 billion as on March 2003. Furthermore, the banks and the FIs are empowered to take over the assets of the defaulting borrowers. The SRFAESI Act 2002, has given the much strong weapon to the bankers, to fight the menace of NPAs and redress a historic imbalance between lenders and borrowers.

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