

An Empirical Analysis on Asset Quality of Indian Banking Industry - Non-performing Assets to Advances

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Abstract

The banking is the life blood of the economy acting as a catalyst in the regulation and monitoring of financial activities and contributes for economic growth. They play a crucial role as manufacturers and purveyors of money in effective allocation of idle savings to productive utilisation. As a fiduciary it provides leverage by bring money and money related assets to the access of needy borrowers or for any other developmental activities. In this process banks are prone to risk of loss due to the uncertainties of counterparty. The increase in default is leading to rise in Non-Performing Assets, impairing the profitability and quality assets in financial statements of banking industry. The present paper examines status of quality assets of Indian banking industry in relation to Non-Performing Assets to advances of all Scheduled Commercial Banks for 12 years from 2001-02 to 2012-13 based on secondary source of information retrieved from "Handbook of Statistics on the Indian Economy 2013-2014". The study observed that there is major penetration of advances from Public Sector Banks indicating higher share among all Scheduled Commercial Banks and there is tremendous increase in advances over the period of study, nevertheless the decline trend in NPAs shown improvement in the asset quality of Scheduled Commercial Banks of India.

Keywords: Non-performing asset; Advances; CAGR; Asset quality; Scheduled commercial banks

Introduction

The banking business is the life blood of economy, which has gained significance in regulating financial and economic aspects of the economy. The banking system forms the core of the financial sector of an economy meeting the financial needs of trade and industry and also to satisfy the institutions of the country. The role of banking and financial institutions is particularly important in underdeveloped countries. Banks are both manufacturers of money and purveyors of money. Through mobilization of resources and their better allocation, banking and financial institutions play an important role in the development process of underdeveloped countries. They play intermediation function in a fiduciary capacity and provide leverage to the accumulated funds through credit creation. Availing credit to borrowers is one means by which banks contribute to the growth of economies.

In the process of attainment of balanced regional developmental, banks promote social objectives by offering lending and investment activities in those regions or part of the country which are less developed. Even banks offer attractive saving schemes, ensuring safety of deposits and here by help in transforming idle savings/unproductive resources into effective and productive one. Banks also acts as a facilitator in generation of employment opportunities by lending money to priority sectors of the economy such as agriculture, MSMEs, retail traders, small borrowers, self-employed and etc.

Status of non-performing assets of BRICS nations-2015

The statistics were clearly explained at Table 1 [1]. *Parenthesis indicate previous year:* According to the statistics of World Bank among BRICS nations Russia stood at first position with 7.4% of NPA due followed by India 4.2%.

Research gap and implications

The 1991 Liberalisation policy opened doors to industrialists

and entrepreneurs to setup new business and expand the operational efficiencies. To meet these requirements, the Indian Banking Sector was at the fate to finance the credit. In the global economic scenario, the vulnerability of Indian business houses has been expanded its operations. But due to various reasons Indian banking sector is evincing the increasing growth rate of Non-Performing Assets due to increase in non-payment of loan amount form individuals, entrepreneurs, industrialists and other borrowers. This is not only limited to the public sector banks but even by other scheduled commercial banks. Hence the present study is carried to study the trend level and to compare the NPA percent of various scheduled commercial banks.

Statement of problem

As lending is considered as the most important function banks exist to provide financial intermediation services while at the same time endeavour to maximize profit and shareholders' value. Even though loan is major source of banks income and constitutes their major

Country	NPA Ratio (%)
Brazil	3.1
Russia	7.4
India	4.2
China	1.2
South Africa	3.2

Table 1: Non-performing assets [1].

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assets, it is riskier, due to uncertainty of counterparty the quality of loans are deteriorating and impairing the profits of the banks. This is leading to the increase of loss of loan assets or Non-Performing Assets.

Review of Literature

Comprehensive and exhaustive studies have been conducted on increase in the menace of Non-Performing Assets. A brief explanation of literature review is presented below.

Bhattacharaya [2], "Banking strategy, Credit Appraisal and Lending Decision", In the study researcher opined the fact that in an increasing rate regime, quality borrowers may tend to other avenues like capital markets, internal accruals to meet their credit requirements. In such context the banks may dilute the quality of borrowers there by increasing the probability of generation of NPAs.

Reddy [3] in his research paper on the topic, "A comparative study of Non Performing Assets in India in the Global context examined the similarities and dissimilarities, remedial measures", Financial sector reform in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve requirements, barriers to entry, prudential norms and risk-based supervision. The study reveals that the sheltering of weak institutions while liberalizing operational rules of the game is making implementation of operational changes difficult and ineffective. Changes required to tackle the NPA problem would have to span the entire gamut of judiciary, polity and the bureaucracy to be truly effective. This paper deals with the experiences of other Asian countries in handling of NPAs. It further looks into the effect of the reforms on the level of NPAs and suggests mechanisms to handle the problem by drawing on experiences from other countries.

Das [4], "Management of Non Performing Assets in Indian Public Sector Banks with special reference to Jharakhnad", in this study researcher rightly pointed the fact that expansion of credit is a must for a country like India. It was found that high credit growth may lead to high NPAs. He opined that the effective and regular follow-up of the credit sanctioned is necessary to ascertain any embezzlement or diversion of funds.

Malyadri [5], "A Comparative Study of Non Performing Assets in Indian Banking Industry", The study observed that during 2004-2010 the asset quality management of Indian Public sector and Private sector banks have improved in NPA management by the implementation of prudential regulations of accounting, income recognition, provisioning and exposure, introduction of CAMELS supervisory rating system and reduction of NPA's and up gradation of technology. But in order to bring on par international level the government should formulate bank specific policies and should implement these policies through Reserve Bank of India enhancement of Public Sector Banks. The researcher noticed that NPA percentage has decline during their period of study i.e. From 2004 to 2010 as percentage of advances to weaker sections from 18.9% to 3% in case of public s to sector banks and from 12.15% to 0.5%

Srivastava [6], "A Study of trends of Non-Performing Assets in Private Banks in India", The share of public sector banks is almost 2/3rd shares of total advances in the economy in Indian banking industry. Substandard Assets showed increase from 1.1% in 2006-07 to 2.0% in 2008-09 but further decrease from 1.5% in 2009-10 to 0.6% in 2011-12. Doubtful Assets showed a reduction from 1.0% in 2006-07 to 0.9% in 2007-08 but further increase 1.5% in 2010-11 and also further decrease to 1.2 in 2011-12. Loss Assets showed increase from 0.2% in 2006-07 to 0.4% in 2010-11 and decrease to 0.3 in 2011-12. This indicates a up and

down trend of financial soundness of private sector banks.

Balasubramaniam [7], "Non-Performing Assets and Profitability of commercial Banks In India: Assessment and Emerging Issues", The conceptual study revealed that in the competitive world bank are facing a challenges in their business operations with introduction of NBFC's and foreign banks and by following the Basel III norms to be introduce would make banks to bring financial stability in their performance.

Mohnani [8], "A Study of Non-Performing Assets on Selected Public and Private Sector Banks", The study suggested that banks should appoint a committee to review the credit appraisal of banks through well documented loan policy and review should be done weekly basis in order to curtail the increase of new accounts of NPA's. The researchers considered SBI, PNB, ICICI and HDFC and analysed the position of NPAs during 2003 to 2012. It was found that there has been marginal decrease in NPAs level over the period in all selected banks. SBI from 11.95% to 3.28%, PNB from 11.38% to 1.79%, HDFC from 3.18% 1.06% and ICICI position is about 5.08%.

Mahajan [9], "Trends of NPAs in Indian Banking Sector", the researcher focused compare the status of Indian banking NPAs with BRICS nations. In his study it was identified the APEC countries consider a loan as non performing only after it has been in arrears for at least six months whereas in India it is considered as NPA if it is due for 90 days, but the recovery process in India is time taking process compared to developing countries. So finally the study concluded that magnitude of India banking NPAs are high compared to developing countries.

Sharma [10], "NPA:-A Comparative Study Of Public Sector And Private Sector Commercial Banks", The researcher studied trends in NPAs of public sector banks during 2001 to 2013 and analyzed the data using statistical tools. The research resulted showing there is constant rise in values of Gross NPA and Net NPA from 2000-2004 and decline trend from 2004-2008 and after that it is increasing at constant. Whereas the private sector banks it was observed that Gross NPA and Net NPA is in increased trend from 2000 to 2003 and decline trend up to 2006 and thereafter it showed increased trend.

Objectives of Study

An empirical attempt is made in the current paper to analyze Non Performing Assets based on following objectives.

- 1) To study the trend level of NPAs in Indian banking industry.
- 2) To compare Schedule Commercial Banks NPAs and Public Sector Banks NPAs.
- 3) To compare between Public Sector Banks NPAs, Private Sector Banks NPAs and Foreign Banks NPAs.

Methodology of Study

The source of information for the study is retrieved from Handbook of Statistics on the Indian Economy 2013-2014 [11].

Period of study

For the present study 12 years of period from 2001-02 to 2012-13 has been considered to compare and analyse the trends of NPAs in Scheduled Commercial Banks.

Tools for data analysis

The data is analyzed and tested with the statistical tool such as Geometric Progression Ratio CAGR (Compound Annual Growth

Rate) and percentages to examine the status of quality asset of Indian banking industry in relation to year-over-year growth in percentage of NPAs to advances.

$$CAGR (t_o, t_n) = [V (t_n) / V (t_o)]^{1/t_n - t_o} - 1$$

Where t_o = Beginning Value

t_n = Ending Value

$t_n - t_o$ = Number of Years

Data Analysis and Interpretation

The Table 2 and Figure 1 depicts that there is a steady increase in Advances of both Scheduled Commercial Banks and Public Sector Banks from 2001-02 to 2012-13 [11]. The study observed that the movement of absolute NPAs has a mixture of increasing and decreasing trends. The NPAs CAGR of the Scheduled Commercial Banks and Public Sector stood at 8.87 and 10.23 respectively, which indicates that the major part of NPAs in Scheduled Commercial Banks is from Public Sector Banks. In contrast to that the percent of NPAs CAGR of Scheduled Commercial Banks is -9.32 and Public Sector Banks is -8.49 [12].

The Table 3 and Figure 2, studies the quality of assets in relation of NPAs to advances of Public Sector Banks, Private Sector Banks and Foreign Sector Banks [11]. The empirical comparison of advances of Public Sector Banks, Private Sector Banks and Foreign Banks have increased. This acknowledges that all the banks at their capacity improved in penetration of advances. The percent CAGR is near to each other between Public Sector Banks and Private sector Banks as 20.43 and 20.96 respectively. The foreign Sector Banks stood at 15.11 which is less compared to the other sector banks. The study examines that the absolute values of NPAs in Public Sector Banks has mixed trend upto 2007-08 and later it increased. The absolute values of NPAs in Private Sector Banks possess mixed trend all over the period of study. The study also observed that the percent NPAs of Foreign Sector Banks cautiously slid up to maximum of 1.9 and minimum of 0.6 and stood as 1 by the end of 2012-13. The percent NPAs CAGR is performing good as -5.21 compared to -8.49 and -18.06 of Public Sector Banks and Private Sector Banks. The reason can be attributed as existence of Foreign Sector Bank operations are fewer when compared to others [13].

From the Table 4, Figures 3a and 3b on thorough observation of statistical information portrayed that over the period of study

Years	Scheduled Commercial Banks			Public Sector Banks		
	Advances	NPAs	% NPAs	Advances	NPAs	% NPAs
2001-02	6458.59	355.54	5.5	4806.81	279.58	5.8
2002-03	7404.73	296.92	4	5493.51	248.77	4.5
2003-04	8626.43	243.96	2.8	6313.83	193.35	3.1
2004-05	11156.63	217.54	2	8489.12	169.04	2.1
2005-06	15168.11	185.43	1.2	11062.88	145.66	1.3
2006-07	19812.37	201.01	1	14401.46	151.45	1.1
2007-08	24769.36	247.3	1	17974.01	178.36	1
2008-09	29999.24	315.64	1.1	22592.12	211.55	0.9
2009-10	34970.92	387.23	1.1	27013	293.75	1.1
2010-11	42987.04	417	1.1	33056.32	360	1.2
2011-12	50735.59	652	1.3	38773.07	593	1.5
2012-13	58797.03	986	1.7	44727.74	900	2
CAGR%	20.21	8.87	-9.32	20.43	10.23	-8.49

Source: RBI, Handbook of Statistics on the Indian Economy 2013-2014 [11].

Table 2: Comparison between scheduled commercial banks and public sector banks - (amount in INR billions).

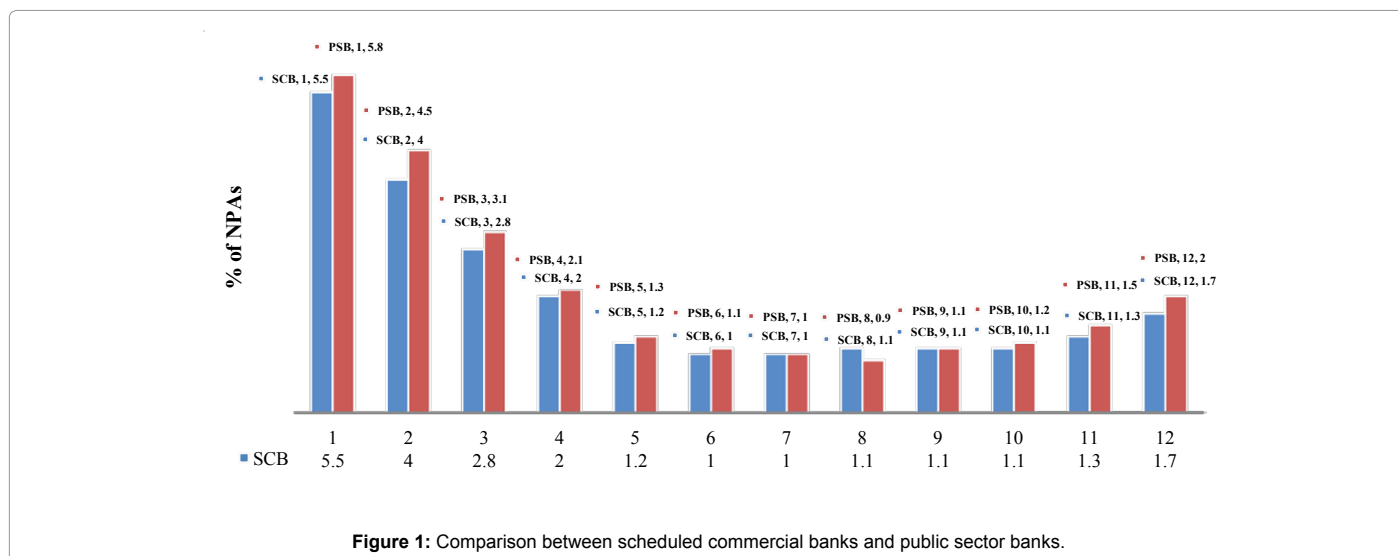


Figure 1: Comparison between scheduled commercial banks and public sector banks.

Years	Public Sector Banks			Private Sector Banks			Foreign Sector Banks		
	Advances	NPAs	% NPAs	Advances	NPAs	% NPAs	Advances	NPAs	% NPAs
2001-02	4806.81	279.58	5.8	1164.73	66.76	12	487.05	9.2	1.9
2002-03	5493.51	248.77	4.5	1389.51	39.63	6.7	521.71	9.03	1.7
2003-04	6313.83	193.35	3.1	1707.54	41.28	5.5	605.06	9.33	1.5
2004-05	8489.12	169.04	2.1	1913.97	42.12	4.6	753.54	6.39	0.8
2005-06	11062.9	145.66	1.3	3129.62	31.71	2.5	975.62	8.08	0.8
2006-07	14401.5	151.45	1.1	4147.52	40.28	2	1263.4	9.27	0.7
2007-08	17974	178.36	1	5184.03	56.47	1.9	1611.3	12.47	0.8
2008-09	22592.1	211.55	0.9	5753.28	74.11	2.3	1653.9	29.96	1.8
2009-10	27013	293.75	1.1	6324.94	65.05	1.9	1632.6	29.77	1.8
2010-11	33056.3	360	1.2	7975.33	43	1.1	1955.4	12	0.6
2011-12	38773.1	593	1.5	9664.02	43	1	2298.5	14	0.6
2012-13	44727.7	900	2	11432.48	59	1.1	2636.8	26	1
CAGR%	20.43	10.23	-8.49	20.96	-1.02	-18.06	15.11	9.04	-5.21

Source: RBI, Handbook of Statistics on The Indian Economy 2013-2014 [11].

Table 3: Comparison between public sector banks, private sector banks and foreign sector banks NPAS (amount in INR billions).

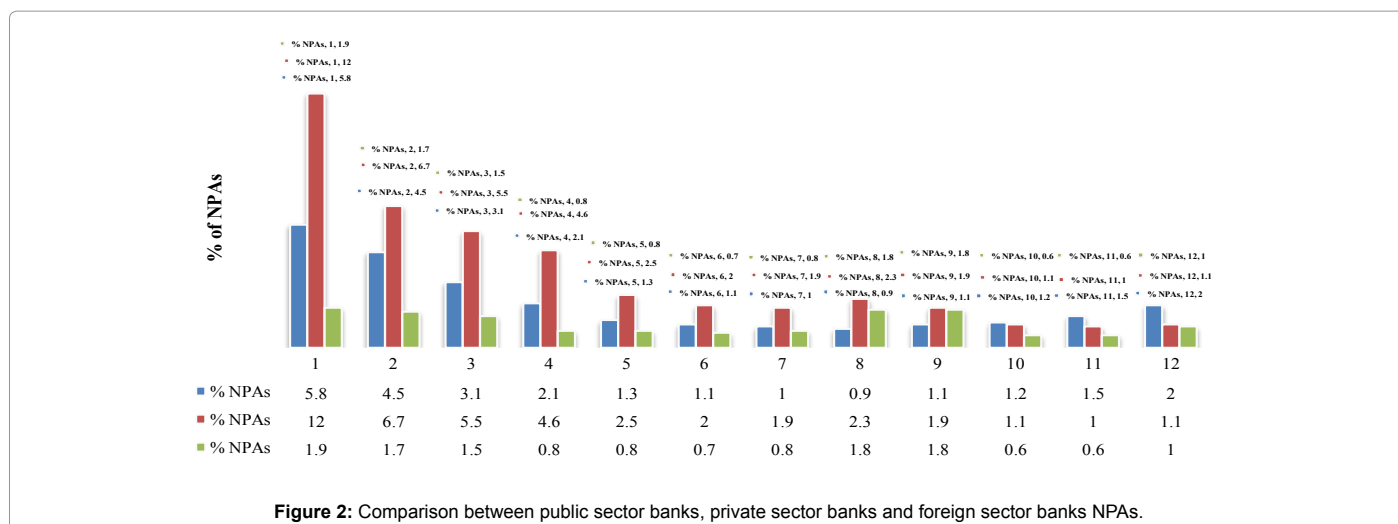


Figure 2: Comparison between public sector banks, private sector banks and foreign sector banks NPAs.

Years	Public Sector Banks		Private Sector Banks		Foreign Banks		Scheduled Commercial Banks	
	Advances	NPAs	Advances	NPAs	Advances	NPAs	Advances	NPAs
2001-02	4806.81 (74.4)	279.58 (78.6)	1164.73 (18)	66.76 (18.8)	487.05 (7.5)	9.2 (2.9)	6458.59 (100)	355.54 (100)
2002-03	5493.51 (74.2)	248.77 (83.8)	1389.51 (18.8)	39.63 (13.3)	521.71 (7.04)	9.03 (3.04)	7404.73 (100)	296.92 (100)
2003-04	6313.83 (73.2)	193.35 (79.6)	1707.54 (19.8)	41.28 (16.9)	605.06 (7.01)	9.33 (3.9)	8626.43 (100)	243.96 (100)
2004-05	8489.12 (76.1)	169.04 (77.7)	1913.97 (17.6)	42.12 (19.7)	753.54 (6.8)	6.39 (2.9)	11156.6 (100)	217.54 (100)
2005-06	11062.88 (72.9)	145.66 (78.6)	3129.62 (20.6)	31.71 (17.1)	975.62 (6.4)	8.08 (4.4)	15168.1 (100)	185.43 (100)
2006-07	14401.46 (72.7)	151.45 (75.3)	4147.52 (20.9)	40.28 (20)	1263.39 (6.4)	9.27 (4.6)	19812.4 (100)	201.01 (100)
2007-08	17974.01 (72.6)	178.36 (72.1)	5184.03 (20.9)	56.47 (22.8)	1611.33 (6.5)	12.47 (5.04)	24769.4 (100)	247.3 (100)
2008-09	22592.12 (75.3)	211.55 (67)	5753.28 (19.1)	74.11 (23.8)	1653.85 (5.5)	29.96 (9.5)	29999.2 (100)	315.64 (100)
2009-10	27013 (77.2)	293.75 (75.9)	6324.94 (18.1)	65.05 (16.8)	1632.6 (4.7)	29.77 (7.7)	34970.9 (100)	387.23 (100)
2010-11	33056.32 (76.8)	360 (86.3)	7975.33 (18.6)	43 (10.3)	1955.39 (4.54)	12 (2.9)	42987 (100)	417 (100)
2011-12	38773.07 (76.4)	593 (90.9)	9664.02 (19)	43 (6.6)	2298.49 (4.53)	14 (2.1)	50735.6 (100)	652 (100)
2012-13	44727.74 (76.1)	900 (91.3)	11432.5 (19.4)	59 (6)	2636.8 (4.48)	26 (2.6)	58797 (100)	986 (100)

Source: RBI, Handbook of Statistics on the Indian Economy 2013-2014 [11].

Table 4: Share of public sector banks, private sector banks and foreign sector banks in total scheduled commercial banks advances and NPAs (amount in INR billions).

the Public Sector Banks have higher share in NPAs and advances of Scheduled Commercial Banks on comparison with Private Sector Banks and Foreign Sector Banks.

Findings

The empirical observations primarily revealed that the performances of NPA in terms of absolute value are high from Public Sector Banks in

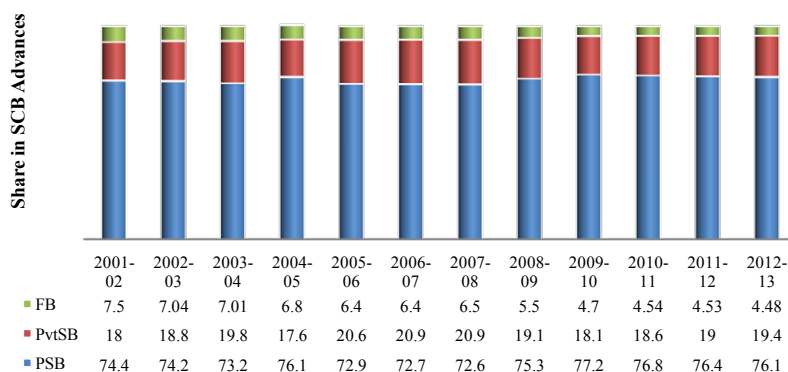


Figure 3a: Share of public sector banks, private sector banks and foreign sector banks in total scheduled commercial banks advances.

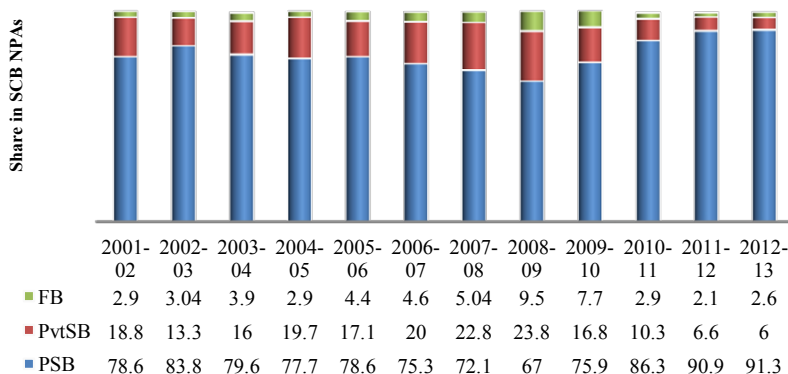


Figure 3b: Share of public sector banks, private sector banks and foreign sector banks in total scheduled commercial banks NPAs.

total of Scheduled Commercial Banks. The examination of the data over the 12 years period of study from 2001-02 to 2012-13 has found that the asset quality of all sectors banks made a consistent improvement in asset quality. This can be acknowledged through trend in the percentages of NPAs of absolute value of NPAs i.e., trend ratio of NPAs to advances of Public Sector Banks from 5.8% to 2%, Private Sector Banks from 12% to 1.1% and Foreign Sector Banks from 1.9% to 1%. By end period of study as the percent of NPAs to advances are in decline trend says that all Scheduled Commercial Banks are consistently trying to reduce the cost of creation of NPAs and to improve the asset quality. The study even revealed that there is major penetration of advances from Public Sector Banks indicating higher share among all Scheduled Commercial Banks [14].

Conclusion

The study observed that there is tremendous increase of advances over the 12 years period of study, nevertheless the decline trend in NPAs shown improvement in the asset quality of Scheduled Commercial Banks of India. The success in enhancement of asset quality and improving the financial health of Scheduled Banks can be accredited to the respective banks management in compliance with the prudential norms, income recognition norms and provisioning norms.

However in order to reduce the menace and intensity of NPA banks should develop efficient management information system and should

employ the specialized and trained staff who can use their expertise and deal the situations cautiously. Frequent review of statements of outstanding advances, defaulters, identifying the reasons for rise in NPAs, timely action can trim down the rise in NPAs and can improve the asset quality of banking industry.

Further Scope for Research

- 1) An in-depth analysis of asset quality can be done by analyzing individual banks performance.
- 2) Analysis of NPAs based on sectorial performance can be dealt to give accurate results of asset quality of Scheduled Commercial Banks.

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