

# **Research Paper**

Commerce

# COMPARATIVE STUDY ON NPAs (With Special Reference to Scheduled Commercial Banks, Public Sector Banks and Foreign Banks in India)

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# ABSTRACT

Due to greater emphasis on developmental and social banking, the quality of loan is affected. The quality of loan portfolio is very critical for the health of a bank. Contaminated loan portfolio is definitely a bane for any bank. It puts a severe dent on the profitability of a bank where it is out of proportion. Managing NPAs should be pro-active function ex. As management of Non-performing assets has direct bearing on the bottom lines of banks, it needs highly focused

than a reactive response. As management of Non-performing assets has direct bearing on the bottom lines of banks, it needs highly focused and professional approach.

The main objectives of the study are to analyse the impact of NPAs of Scheduled Commercial Banks, Public Sector Banks and Foreign Banks in India. The data for the present study are collected from secondary sources. Twelve years of Gross NPAs, Net NPAs, Gross NPAs as Percentage of Gross Advances, Net NPAs as Percentage of Net Advances, Gross NPAs as Percentage of Total Assets, Net NPAs as Percentage of Total Assets data from 2002-03 to 2013-14 of Scheduled Commercial Banks, Public Sector Banks and Foreign Banks in India been collected from the official websites of Reserve Bank of India (rbi.org.in) and various other reports like magazines, journals, published books. The data collected for the study has been analysed logically and meaningfully to arrive at meaningful conclusions. The statistical tools applied for data analysis is descriptive and inferential statistics. E-views are used. Based on the objectives, the hypotheses formed for analysis.

To sum up, Compound Annual growth rate of Gross NPAs and Net NPAs of all banks under study are not less than 12% during the study period. They have maintained consistency in their growth since their coefficient of variation is less than one. Hence, NPAs should be arrested on warfooting otherwise, it will have disastrous effect on its survival and sustenance.

# KEYWORDS : CAGR and coefficient of variation (C.V.)

### Introduction:

Mounting overdues are closely linked with credit management. For better credit management, there is an important need to follow what can be called a "Damage Containment Approach". The financial health of banks as portrayed was far from true and fair. To remove the anomalies that existed in the system, RBI issued guidelines on Comprehensive Prudential Norms on Income Recognition, Asset Classification and Provisioning (IRAC ) which have compelled banks in India to show for better transparency / disclosures, improved efficiency and competitiveness, better financial health, to ensure sound and uniform accounting practices and to take corrective steps for improving their loan portfolio.

Due to greater emphasis on developmental and social banking, the quality of loan is affected. The quality of loan portfolio is very critical for the health of a bank. Contaminated loan portfolio is definitely a bane for any bank. It puts a severe dent on the profitability of a bank where it is out of proportion. Managing NPAs should be pro-active function than a reactive response. As management of Non-performing assets has direct bearing on the bottom lines of banks, it needs highly focused and professional approach.

The main objectives of the study are:

- 1. To appraise the impact of NPAs of Scheduled Commercial Banks, Public Sector Banks and Foreign Banks; and
- 2. To provide findings based on analysis.

### **Research methodology:**

The data for the present study are collected from secondary sources. Twelve years of Gross NPAs, Net NPAs, Gross NPAs as Percentage of Gross Advances, Net NPAs as Percentage of Net Advances, Gross NPAs as Percentage of Total Assets, Net NPAs as Percentage of Total Assets data from 2002-03 to 2013-14 of Scheduled Commercial Banks, Public Sector Banks and Foreign Banks in India been collected from the official websites of Reserve Bank of India(rbi.org.in) and various other reports like magazines, journals, published books. The data collected for the study has been analysed logically and meaningfully to arrive at meaningful conclusions. The statistical tools applied for data analysis is descriptive and inferential statistics. E-views are used. Based on the objectives, the hypotheses formed for analysis are:

 $\mathbf{H_{o}1}$ : There are no differences among various classes of issues in terms of number and amount Assumptions:

The data is randomly selected and

they are independent

#### Finding/Results:

### Scheduled Commercial Banks:

- Gross NPAs of Scheduled Commercial Banks has an Annual Arithmetic mean of Rs. 1002.41 million ranging from Maximum of Rs. 2641.95 Mns. and minimum of Rs. 504.86 Mns. during the study period. It has CAGR of 14% over the study period and annual growth rate/ year to year growth rate registering the highest of 46% in 2011-12 and the lowest of -14% in 2005-06. It has consistency (C.V.) of 0.67.
- Net NPAs of Scheduled Commercial Banks has an Annual Arithmetic mean of Rs. 464.8125 million ranging from maximum of Rs. 1426.57 mns. and minimum of Rs. 185.43 mns. during the study period. It has CAGR of 12.10% over the study period and annual growth rate/ year to year growth rate registering the highest of 140% in 2008-09 and the lowest of -60% in 2010-11. It has consistency (C.V.) of 0.81.
- 3. Its mean is higher than median which means that the data is right-skewed indicating most of the value is in the lower portion of the distribution. The kurtosis of 4.48 indicates a distribution that is more peaked than a normal distribution and peaked tail and caused by there are some unusually large values.
- Gross NPAs as percentage of Gross Advances is an average of 3.8% recording the highest of 8.8% in 2002-03 and the least of 2.3% in 2007-09 during the study period.
- Gross NPAs as percentage of total Assets is an average of 2.06% recording the highest of 4.10% in 2002-03 and the lower of 1.3% in 2007-09 during the study period.
- Net NPAs as percentage of Net Advances has an average of 1.7 % recording the highest of 4% in 2002-03 and the least of 1% in 2007-09 over the study period.
- 7. Net NPAs as percentage of total Assets is an average of 0.89% incorporating the maximum of 1.80% in 2002-03 and the minimum of 0.60% in 2006-10 during the study period.

#### **Public Sector Banks:**

 Gross NPAs of Public Sector Banks has an annual arithmetic mean of Rs. 804.84 million ranging from Maximum of Rs. 2280.74 mns. and minimum of Rs. 389.68 mns. during the study period. It has CAGR of 12% over the study period and annual growth rate/ year to year growth rate registering the highest of 58% in 2011-12 and the lowest of -15% in 2005-06 and 2003-04. It has consistency (C.V.) of 0.75.

- Net NPAs of Public Sector Banks has an annual arithmetic mean of Rs. 396.04 mn ranging from maximum of Rs. 1306.24 mns. and minimum of Rs. 145.66mns. during the study period. It has CAGR of 18.54% over the study period and annual growth rate/ year to year growth rate registering the highest of 127% in 2013-14 and the lowest of -35% in 2010-11. It has consistency (C.V.) of 0.91.
- 3. Since mean is higher than median, the data is right-skewed indicating most of the values is in the lower portion of the distribution. The kurtosis of 4.37 indicates a distribution that is more peaked than a normal distribution and peaked tail and it is Leptokurtic.
- Gross NPAs as percentage of Gross Advances is an average of 4.09% recording the highest of 9.4% in 2002-03 and the least of 2% in 2008-09 during the study period.
- Gross NPAs as percentage of total Assets is an average of 2.22% recording the highest of 4.20% in 2002-03 and the lower of 1.2% in 2008-09 during the study period.
- Net NPAs as percentage of Net Advances has an average of 1.87% recording the highest of 4.50% in 2002-03 and the least of 0.90% in 2008-09 over the study period.
- Net NPAs as percentage of total Assets is an average of 1% incorporating the maximum of 1.90% in 2002-03 and the minimum of 0.60% in 2006-08 during the study period.

#### Foreign Banks In India:

- Foreign Banks has an Annual Arithmetic mean of Rs. 49.53 million gross NPAs ranging from maximum of Rs. 115.79 mns. and minimum of Rs. 19.28 mns. during the study period. It has CAGR of 13% over the study period and annual growth rate/ year to year growth rate registering the highest of 125% in 2008-09 and the lowest of -30% in 2010-11. It has consistency (C.V.) of 0.61.
- Foreign Banks has an annual arithmetic mean of Rs. 16.58 million Net NPAs ranging from maximum of Rs. 31.72 mns. and minimum of Rs. 6.39 mns. during the study period. It has CAGR of 15.33% over the study period and annual growth rate/ year to year growth rate registering the highest of 56% in 2011-12 and the lowest of -18% in 2003-04. It has consistency (C.V.) of 0.59
- 3. Its mean is higher than median which means that the data is right-skewed indicating most of the value is in the lower portion of the distribution. The kurtosis of 1.58 indicates a distribution that is more peaked than a normal distribution and peaked tail and caused by there are some unusually large values.
- Gross NPAs as percentage of Gross Advances is an average of 3.2% recording the highest of 5.3% in 2002-03 and the least of 1.8% in 2006-08 during the study period.
- Gross NPAs as percentage of total Assets is an average of 1.38% recording the highest of 2.40% in 2002-03 and the lower of 0.8% in 2006-08 during the study period.
- Net NPAs as percentage of Net Advances has an average of 1.10% recording the highest of 1.80% in 2008-10 and the least of 0.60% in 2010-12 over the study period.
- Net NPAs as percentage of total Assets is an average of 0.47% incorporating the maximum of 0.80% in 2002-03 and the minimum of 0.20% in 2011-12 during the study period.

#### **Comparative Analysis:**

On comparison of All India Scheduled Commercial Banks, All India Public Sector Banks and Foreign Banks In India under parameters of Compound Annual Growth Rate (CAGR), Year to Year Growth, Coefficient of Variation (C.V.), volatility and mean, it is found that Foreign Commercial Banks stands first rank in reducing and arresting NPAs followed by All India Public Sector Banks and All India Scheduled Commercial Banks respectively.

On hypotheses testing of ANOVA and Welch 'F' test, they are evident that Gross NPAs and Net NPAs prob. values of 0.0002 & 0.0001 and 0.002 & 0.0004 respectively are very much lesser than those of 0.05 at 95% confidence level and hence, there are significant differences of gross NPAs and Net NPAs of All India Public Sector Banks and All India Scheduled Commercial Banks.

#### **Conclusion:**

From the analyses it is witnessed that Compound Annual growth rate of Gross NPAs and Net NPAs of all banks under study are not less than 12% during the study period. They have maintained consistency in their growth since their coefficient of variation is less than one. Their Gross NPAs as a percentage of Gross Advances is not less than 1.8% and not more than 9.4% and total assets is 0.8% and 4.2% respectively.

Hence, it is concluded that NPAs should be arrested on war-footing otherwise, it will have disastrous effect on their survival and sustenance.









#### **Appendix-1: Descriptive Statistics**

Descriptive Statistics	Gross NPAs			Net NPAs		
	FBIN	PSBN	SCBN	FBIN	PSBN	SCBN
Mean	49.53	804.84	1002.41	16.58	396.04	464.81
Median	39.47	528.14	685.23	12.24	230.16	306.28
Maximum	115.79	2280.74	2641.95	31.72	1306.24	1426.57
Minimum	19.28	389.68	504.86	6.39	145.66	185.43
Std. Dev.	30.00	599.73	670.89	9.86	363.31	380.96
Skewness	0.84	1.57	1.51	0.61	1.62	1.64
Kurtosis	2.81	4.15	4.04	1.59	4.37	4.48
Jarque-Bera	1.44	5.56	5.11	1.75	6.20	6.46
Probability	0.49	0.06	0.08	0.42	0.05	0.04
Sum	594.31	9658.06	12028.92	198.94	4752.44	5577.75
Sum Sq. Dev.	9903.17	3956438.00	4951098.00	1069.68	1451954.00	1596443.00
Observations	12.00	12.00	12.00	12.00	12.00	12.00
C.V.	0.61	0.75	0.67	0.59	0.92	0.82
CAGR	0.13	0.12	0.14	0.15	0.19	0.12

### Appendix-2: Ranking of Banks

Parameters of Comparison	SCBN	PSBN	FBIN	SCBN	PSBN	FBIN
CAGR	0.14	0.12	0.13	1.00	3.00	2.00
C.V.	0.67	0.75	0.61	2.00	1.00	3.00
Volatility	4.23	4.85	5.01	3.00	2.00	1.00
Mean	1002.41	804.84	49.53	1.00	2.00	3.00
Y-Y Growth Min.	-0.14	-0.15	-0.30	1.00	2.00	3.00
Y-Y Growth Max.	0.46	0.58	1.25	3.00	2.00	1.00
Total Points				11.00	12.00	13.00
Ranks	·				11	1

## Appendix-3: Test for Equality of Means between Series of Gross NPAs and Net NPAs

Test for Equality of Means Between Series of Gross NPAs and Net NPAs

Date: 02/18/16 Time	me: 21:41 Sample: 1 12						
Included observatior	ns: 12	Gross NPAs			Net NPAs		
Method		Df.	Value	Probability	Df.	Value	Probability
Anova F-test		(2, 33)	7.57	0.00	(2, 33)	11.23	0.00
Welch F-test*		(2, 14.6873)	14.19	0.00	(2, 14.7325)	20.59	0.00
*Test allows for unequal cell variances							
Appendix-3: Test for Equality of Means between Series of Gross NPAs and Net NPAs							
Source of Variation		Df.	Sum of Sq.	Mean Sq.	Df.	Sum of Sq.	Mean Sq.
Between		2.00	1398530.00	699265.20	2.00	6070079.00	3035040.00
Within		33.00	3049466.00	92408.06	33.00	8917439.00	270225.40
Total		35.00	4447996.00	127085.60	35.00	14987518.00	428214.80
Category Statistics							
Variable	Count	Mean	Std. Dev.	STD. Error of Mean	Mean	Std. Dev.	Std. Error of Mean
FBIN	12.00	16.58	9.86	2.85	49.53	30.00	8.66
PSBN	12.00	396.04	363.31	104.88	804.84	599.73	173.13
SCBN	12.00	464.81	380.96	109.97	1002.41	670.89	193.67
All	36.00	292.48	356.49	59.42	618.92	654.38	109.06

#### REFERENCE

- Anantharam Iyer.T.N, (1999), "Bank supervision and the management of Non Performing Advances", The Journal of the Indian Institute of Bankers, p.7-9
- Mittal. D.M. (2008), "Money, Banking, International Trade and Public Finance "(Eleventh Edition), Himalaya Publishing House.
- Meenakshi Rajeev and H P Mahesh (2012) banking sector reforms and NPA: a study of Indian commercial banks, working paper 252, institute for social change and economic change, Bangalore, ISBN 978-81-7791-108-4

 Rajaraman, I.,S.Bhaumik, and N. Bhatia (1999), "NPA Variations Across Indian Commercial Banks: Some Findings," Economic and Political Weekly, Vol.37, No. 3 and 4, pp. 16-23.

- Rajaraman I & Vashishta G (2002). "Nonperforming Loans of Indian Public Sector Banks Some Panel Results", Economic and Political Weekly.
- Rajni Saluja and Roshan Lal (2010), "Comparative Analysis on Non Performing Assets (NPAs) of Public Sector, Private Sector and Foreign Banks in India", International Journal of Research in Commerce & Management (JJRCM), vol 1, issue no. 7 (November) ISSN 0976-2183.
- Raju D.N.M., (2009), "Evaluation of the Performance of State Bank of India with special reference to Non-Performing Assets (NPAs)", Finance India, Indian Institute of Finance, Vol. XXIII, No.3, Pages 985-989.
- Ramesh.K.V, Sudhakar.A, "NPA Management in Public Sector Banks: A Study of Canara Bank and State Bank of India", International Journal of Research in Commerce & Management, Vol. 3(11), 2012, pp 44-49, ISSN 0976-2183
- Sandeep Aggarwal, Parul Mittal (2012) "Non Performing Assest: Comparative Position of Public and Private Sector Banks in India", International Journal of Business and Management Tomorrow Vol. 2 No.1, pp 1-7.
- Sharma, Meena, (2002), "Managing Non-Performing Assets through Asset Reconstruction Companies", Ed.Book, Economic Reforms in India, from First to Second Generation and beyond, Deep and Deep Publications, New Delhi
- 11. Vibha Jain (2007), "Non Performing Assets in Commercial banks", Regal Publications, New Delhi
- Vivek Srivastava1 Deepak Bansal (2012) " A Study of trends of Non-Performing Assets in Private Banks in India" SHIV SHAKTI International Journal in Multidisciplinary and Academic Research (SSIJMAR) Vol. 2, No. 2, March-April (ISSN 2278 – 5973)
- 13. www.rbi.org.in