

ANALYSIS OF LOAN ASSETS IN SCHEDULED COMMERCIAL BANKS OF INDIA

Dr. Narpal Yadav*
Dr. Deepak Gupta**
Ms. Sarla***
Dr. Asha Pahwa****
Dr. Mamta Sharma*****
Dr. Satish Kumar*****
Dr. Rajesh Gahlawat*****

ABSTRACT

The economy of India is facing a massive threat and the name of that threat is non-performing loan (NPLs). The present study examines the analysis of loan assets in SCBs of India. The secondary data have been used from the year 2010 to 2019. The results reveal that the growth of NPLs has substantially enhanced. The increasing trend of sub-standard, doubtful and loss assets proved that SCBs is giving more importance of NPLs in its loan assets structure. The results of chi-square test reveal that loan assets are increasing over the periods of the study. Therefore, it needs to properly scrutinize the advances. Otherwise, it will continue increasing, erode the overall return on assets and enhanced the threat of insolvency risk. So, SCBs should be more aware while granting loan so as to escape the happening of NPLs. Hence, NPLs judges the financial health of banks and the economy. The paper is also useful to bankers and government for the future development of banking industry.

Keywords: Standard Loan, Sub-Standard Loan, Doubtful Loan and Loss Loan.

Introduction

The problem of NPLs is not limited to only any particular nation's banks, but it prevails in the entire banking industry in the world. NPLs badly affect the health of the banking sector and also the economy of the nations. It likes a blunt weapon in the banking sector. The credit growth is one of the major drivers in economic growth. The loan assets generate the income expected from it called performing assets whereas, it stops to create income for the bank is known as NPLs.

Terms Explained

- **Standard Assets**

These assets do not entail any problem and do not carry more than normal risk annexed to a business organization. It is credit facility, which is not classified as non-performing assets.

- **Sub-Standard Assets**

With effect from March 31, 2005, it is classified as non-performing assets which periods less than or equal to twelve months. The borrower's net worth is not enough to confirm the recovery of dues to the banks in full.

* Associate Professor of Commerce, Ahir College, Rewari, Haryana, India.

** Associate Professor, Department of Commerce, Indira Gandhi University, Meerpur, Rewari, Haryana, India.

*** Assistant Professor, Department of Commerce, Indira Gandhi University, Meerpur, Rewari, Haryana, India.

**** Assistant Professor, Department of Commerce, Indira Gandhi University, Meerpur, Rewari, Haryana, India.

***** Assistant Professor, Department of Commerce, Kishan Lal Public College, Rewari, Haryana, India.

***** Assistant Professor, Department of Economics, Indira Gandhi University, Meerpur, Rewari, Haryana, India.

***** Associate Professor of Commerce, Sh. L.N. Hindu College, Rohtak, Haryana, India.

- **Doubtful Assets**

An asset would be classified as doubtful which remained in the sub –standard category for 12 months with effect from March 31, 2005. Doubtful loan has all the weaknesses inherent in assets with the added characteristics that the weaknesses make liquidation in full on the basis of currently known facts which are highly questionable and improbable.

- **Loss Assets**

A loss asset is identified by the bank or internal or external auditors or RBI inspection, but the amount of loss assets has not been written off wholly. Although there may be some salvage or recovery value.

Objectives of the Study

- To assess the growth of loan assets in SCBs of India.
- To analysis the trend in proportion of standard, sub - standard, doubtful and loss assets in its total loan assets structure in SCBs of India.
- To test whether the various loan assets i.e. standard, sub –standard, doubtful and loss assets are increasing or not in SCBs of India.

Hypothesis of the Study

H0₁: The amount of standard assets is not increasing over the periods of the study.

H0₂: The amount of sub –standard assets is not rising under the study periods.

H0₃: The amount of doubtful assets is not increasing during the periods of the study.

H0₄: The amount of loss assets is not increasing for the periods of ten years study.

Methodology

Secondary data in the present study have been employed for analysis. The data have been procured from RBI website and publication. The total scheduled commercial banks of India are taken in the study. The evaluation of first objective requires index value and co-efficient of variation to assess the growth of loan assets. To confirm the trend in proportion of loan assets in its total loan assets structure in the second objective, least square method of time series and 't'-test (significance of mean) employed in the study. To identify the third objective and to check whether loan assets are increasing or not, chi-square test is used in the study.

Review of Relevant Studies

Rama and Ramchandra (2012) examined the trend of NPAs of Andhra Bank in compared to with public sector banks and nationalized banks for periods from 2002 to 2011. The results revealed that NPAs increased over the periods of the study and the major portion of NPAs found in the form of doubtful assets.

Kumar and Singh (2012) found that both private and public sector banks are facing the problem of rising NPAs in India. The level of recovery is better in case of individual small borrower but it is slow in case of corporation and institutional borrowers.

Vadivalagan and Selvarajan (2013) focused on the components of NPAs such as sub–standard, doubtful and loss assets and found that bank should pay more attention to the fresh NPAs in the form of sub - standard assets have been increasing at a higher rate, whereas, there is control on doubtful and loss assets. It is resulted that net NPAs explained an increase because of less provisioning on sub –standard assets.

Selvarajan and Vadivalagan (2013) compared the performance of Indian bank with public sector banks and highlighted that NPAs management of Indian bank was preferable than that of the public sector banks as a whole.

Shalini (2013) studied the difficulties faced by Indian farmers paying back the borrowed amount. The paper examined the effect of various variables on the non –payment of loan and interest by using Chi –square test. In the study found that variables i.e. age, educational status, marital status, family size, caste, money lender wealth status, guarantor, land security, gold security, experience, land suitability to crop, farming type, facility of irrigation, any other source of income and subsidy affected the performance of the farmers.

Uppal, R.K., Khanna Parul (2015) examined that the profitability of the banks is directly affected by the increasing NPAs levels. So, it is indeed challenging for the entire banking industry to obtain its twin objective i.e. customer satisfaction and profit maximization.

Analysis and Discussion

Table 1: Growth of Loan Assets of Scheduled Commercial Banks in India

(Rs. in Billion)

Year	Standard Assets	Index	Sub-Standard Assets	Index	Doubtful Assets	Index	Loss Assets	Index
2010	34603	100.00	426	100.00	334	100.00	87	100.00
2011	42596	123.09	414	97.18	461	138.02	104	119.54
2012	50168	144.98	695	163.14	617	184.73	109	125.29
2013	57951	167.47	909	213.38	900	269.46	123	141.38
2014	66138	191.13	1087	255.16	1374	411.37	170	195.40
2015	72391	209.20	1186	278.40	1861	557.19	182	209.20
2016	75668	218.67	2254	529.11	3603	1078.74	260	298.85
2017	76804	221.96	2082	488.73	5503	1647.60	317	364.37
2018	82300	237.84	2509	588.96	7248	2170.05	604	694.225
2019	93535	270.31	1888	443.19	6578	1969.46	870	1000.00
Mean	65215.4		1345.0		2847.9		282.6	
C.V.	0.27		0.55		0.89		0.86	

Source: Department of Supervision, RBI

Table 1 depicts the growth analysis of loan assets for periods of ten year. Growth of standard assets in SCBs has raised 2.7 times. The coefficient of variation value 0.27 shows considerable growth. The sub –standard assets have been risen 4.4 times with c.v. value 0.55. The c.v. value 0.55 has shown moderate fluctuation. The growth of doubtful assets recorded to be 19.7 times with c.v. value 0.89. The co –efficient of variation of 0.89 has explained that there is high variation in the rise in doubtful assets in its loan assets structure. The loss assets have grown to be 10.0 times with c.v. value 0.86. The c.v. value 0.86 proves high variation in the growth of loss assets. It can be inferred that growth of NPAs has substantially enhanced under the study periods and major growth found in the form of doubtful assets. Therefore, it needs to properly scrutinize the advances.

Table 2: Proportionate Composition of Loan Assets in Scheduled Commercial Banks of India

(Rs. in Billion)

Year	Standard Assets		Sub -Standard Assets		Doubtful Assets		Loss Assets		
	%	Trend	%	Trend	%	Trend	%	Trend	%
2010	97.6	99.13	1.2	1.09	0.9	-0.17	0.2	.07	100
2011	97.8	98.13	1.0	1.25	1.1	0.63	0.2	.13	100
2012	97.3	97.13	1.4	1.41	1.2	1.43	0.2	.19	100
2013	96.8	96.13	1.5	1.57	1.5	2.23	0.2	.25	100
2014	96.2	95.13	1.6	1.73	2.0	3.03	0.2	.31	100
2015	97.7	94.13	1.6	1.89	2.5	3.83	0.2	.37	100
2016	92.5	93.13	2.8	2.05	4.4	4.63	0.3	.43	100
2017	90.7	92.13	2.5	2.21	6.5	5.43	0.4	.49	100
2018	88.8	91.13	2.7	2.37	7.8	6.23	0.7	.55	100
2019	90.9	90.13	1.8	2.53	6.4	7.03	0.8	.61	100
Mean	94.63		1.81		3.43		0.34		
C.V.	.04		0.33		0.73		0.64		
't' Value	0.69		1.22		0.78		1.43		

Source: Department of Supervision, RBI

Table 2 highlights the proportionate composition of various loan assets in SCBs of India. The proportion of standard assets to total loan recorded to 94.63% with coefficient of variation value .04. The trend values depicted downward. The 't' value 0.69 is insignificant at 95 percent level of confidence. It proves that a standard asset of SCBs matches to industry position. The composition of sub –standard assets to total loan reported to 1.81% with coefficient of variation value 0.33. The upward trend values

illustrated during the study periods with annual growth rate i.e. 0.16. The 't' value 1.22 is statistically insignificant at 95 percent level of confidence which proves that bank's performance is similar to industry position. The proportion of doubtful loan to total loan assets happened to 3.43% with coefficient of variation value 0.73 which shows the high fluctuation. Upward trend values noticed in doubtful assets. The 't' value 0.78 is insignificant at 95 percent level of confidence. Proportion of loss assets to total loan observed 0.34% with coefficient of variation value 0.64. It proves the high fluctuation in loss assets. Trend figures indicated a rising trend with annual growth rate i.e. .06 over the periods of the study. The 't' value 1.43 is statistically insignificant at 95 percent level of confidence. It proves that loss assets of SCBs matches to industry position. It may be inferred that SCBs is giving more importance to NPLs in its loan structure. Rising trend of non-performing assets pointed to be taken care of coming years, the increasing trend of NPAs can lead to bank closer and ultimately financial crises.

Table 3: Analysis of Standard Assets in SCBs of India

(Rs. in Billion)

Year	O	E	(O-E)	(O-E) ²	(O-E) ² /E
2010	34603	65215.4	-30612.4	937119033.8	14369.6
2011	42596	65215.4	-22619.4	511637256.4	7845.3
2012	50168	65215.4	-15047.4	226424246.8	3471.9
2013	57951	65215.4	-7264.4	52771507.4	809.2
2014	66138	65215.4	922.6	851190.8	13.1
2015	72391	65215.4	7175.6	51489235.4	789.5
2016	75668	65215.4	10452.6	109256846.8	1675.3
2017	76804	65215.4	11588.6	134295649.9	2059.3
2018	82300	65215.4	17084.6	291883557.2	4475.7
2019	93535	65215.4	28319.6	801999744.2	12297.7
	$\Sigma O=65215.4$				$\chi^2=47806.6$

Source: Author's Calculation

Where, O=Observed Frequencies

E= Expected Frequencies

Table 3 portrays the depiction in standard assets of SCBs of India under study periods of ten year. The table value of chi -square test (χ^2) at 5% and at 1% level of significant is 16.92 and 21.67 respectively. The results drawn from the table is more than tabulated value. The null hypothesis (H01) is rejected. It proves that standard assets of SCBs are rising over the periods of the study. It can be said that increasing of standard assets reflect the positive signal and the quantum of performing assets is occupying the advances that reduces the losses.

Table 4: Depiction of Sub - Standard Assets in SCBs of India

(Rs. in Billion)

Year	O	E	(O-E)	(O-E) ²	(O-E) ² /E
2010	426	1345	-919	844561	627.9
2011	414	1345	-931	866761	644.4
2012	695	1345	-650	422500	314.1
2013	909	1345	-436	190096	141.3
2014	1087	1345	-258	66564	49.5
2015	1186	1345	-159	25281	18.8
2016	2254	1345	909	826281	614.3
2017	2082	1345	737	543169	403.8
2018	2509	1345	1164	1354896	1007.4
2019	1888	1345	543	294849	219.2
	$\Sigma O=13450$				$\chi^2=4040.7$

Source: Author's Calculation

The analysis discerns from the table 4 that tabulated value of chi -square test at 5 % and at 1% level of significance in sub -standard assets is 16.92 and 21.67 respectively. The calculated value of chi-square test is more than tabulated value. Null hypothesis (H02) is rejected. It proves that sub-standard assets are growing over the entire periods of the study. It may be concluded that sub-standard assets witnessed an upward trend from 2011 to 2018 so that SCBs should make less provisioning of sub-standard loan.

Table 5: Depiction of Doubtful Assets in SCBs of India

(Rs. in Billion)

Year	O	E	(O-E)	(O-E) ²	(O-E) ² /E
2010	334	2847.9	-2513.9	6319693.2	2219.1
2011	461	2847.9	-2386.9	5697291.6	2000.5
2012	617	2847.9	-2230.9	4976914.8	1747.6
2013	900	2847.9	-1947.9	3794314.4	1332.3
2014	1374	2847.9	-1473.9	2172381.2	762.8
2015	1861	2847.9	-986.9	973971.6	341.9
2016	3603	2847.9	755.1	570176.0	200.2
2017	5503	2847.9	2655.1	7049556.0	2475.4
2018	7248	2847.9	4400.1	19360880.0	6798.3
2019	6578	2847.9	3730.1	13913646.0	4885.5
	$\Sigma o=28479$				$\chi^2=22763.6$

Source: Author's Calculation

Table 5 has shown the analysis of doubtful assets in SCBs of India over the periods often years. The table value of Chi –square test at 5% and at 1% level of significance is 16.92 and 21.67 respectively. The result of chi- square test is more than tabulated value. Hence, the null hypothesis (H03) is rejected. It means that doubtful assets of SCBs have shown upward trend. It may be inferred, increasing directions has been noticed from 2010 to 2019. So that bank should conduct awareness program from time to time.

Table 6: Analysis of Loss Assets in SCBs of India

(Rs. in Billion)

Year	O	E	(O-E)	(O-E) ²	(O-E) ² /E
2010	87	282.6	-195.6	38259.36	135.38
2011	104	282.6	-178.6	31897.96	112.87
2012	109	282.6	-173.6	30136.96	106.64
2013	123	282.6	-159.6	25472.16	90.14
2014	170	282.6	-112.6	12678.76	44.86
2015	182	282.6	-100.6	10120.36	35.81
2016	260	282.6	-22.6	510.76	1.81
2017	317	282.6	34.4	1253.16	4.43
2018	604	282.6	321.4	103297.96	365.53
2019	870	282.6	587.4	345038.76	1220.94
	$\Sigma o=2826$				$\chi^2=2118.41$

Source: Author's Calculation

Table 6 reports the analysis of loss assets in SCBs of India from the study periods 2010 to 2019. The table value of chi –square test at 5% and at 1% level of significant is 16.92 and 21.67 respectively. The computed value of test is more than table value. Null hypothesis (H04) is rejected. It proves that loss assets in SCBs of India have been up warding over the periods of the study. As results of this loss assets witnessed an increasing trend. It reflects the negative signal for the banks. So, SCBs should take suitable action to more reform in the loan recovery mechanism.

Table 7: Summary of the Results

Hypothesis	Tabulated Value		Degree of Freedom n-1 (10-1=9)	Expected Value	Results
	.01	.05			
H01	21.67	16.92	9	47806.6	Reject
H02	21.67	16.92	9	4040.7	Reject
H03	21.67	16.92	9	22763.6	Reject
H04	21.67	16.92	9	2118.4	Reject

Table 7 portrays that loan assets are tested with the help of chi –square test and found that loan assets are increasing over the periods of ten years study. Hence, null hypothesis i.e. H01, H02, H03 and H04 rejected. It can be inferred that recovery mechanism developed by SCBs in India is not geared to task. It gives warning signal to the banking system. Therefore, it needs to be checked forth with in coming years also otherwise it will continue increasing, erode the overall return on assets and enhance the threat of insolvency risk.

Findings and Suggestions

A loan asset is one of the major threatening issues on banking business faced by Indian banking sector. The growth of NPAs has substantially enhanced during the study periods. In the composition of loan assets, SCBs are giving more importance to NPLs in its loan structure. Chi –square test value is more than the tabulated value at 5% and 1% level of significance. The null hypothesis i.e. H01, H02, H03 and H04 are rejected. It proves that loan assets are increasing over the periods of the study. Therefore, it needs to properly scrutinize the advances. Otherwise, it will continue increasing, erode the over return on assets and enhance the threat of insolvency risk. The increasing trend of NPAs can lead to bank closer and ultimately financial crises. On the whole, the time has come that RBI should set - up a cell to regularly monitor the function of funds and non- funds activities of SCBs. So, that intentional or unintentional irregularities taking place in the domain of SCBs could be timely scrutinized for the healthy growth. Otherwise, it will difficult to get ridoff the insolvency risk.

Directions for Future Research

Researchers can study the recovery performance, determinants of NPAs, impact of regulatory capital on insolvency risk and impact of NPAs on banking business.

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