

MEASURING ASSETS QUALITY OF NATIONALIZED PUBLIC SECTOR BANKS IN INDIA

Sukhdev Dangi*

ABSTRACT

Despite of legal frame work and regulatory have been appointed still nonperforming assets (NPAs) exist. As the current period is for regaining the faith of various sectors on the banking system there is need to prepare the detailed policies in respect of NPA in different banks so that level of NPA can be doped significantly. Many of the researchers studied the related topic only on Commercial banks or separately on Private Banks. It is necessary to do the comparative analysis on all the sectors to get a fair view of these related issues. This current work is to measure the NPA's in the public sector banks in Indian Territory by using data of five financial years i.e. from 2013-18. In this research it has been found that there is a significant correlation between total assets and NPA levels. Further it has found that means that the increase in the Gross and Net NPS is similar to the total assets changes and the level of NPA's have not significantly reduced despite of the changes.

KEYWORDS: Non-performing Assets (NPA), Commercial Banks, Public Sector Banks, Total Assets.

Introduction

Scheduled banks and non-scheduled banks both exist in banking sector in India. These are classified as nationalized banks and private banks (GoI, 2015). The term commercial bank refers to both scheduled and non-scheduled commercial banks regulated under the Banking Regulation Act, 1949 (RBI, 2015). Generally banking in India is reasonably established in terms of contributing for the growth of rural India. AS the GoI has taken new proposal to address the issue of NPA's through the State Bank of India it is therefore essential to revisit the level of the NPA's in Government owned banks. The state owned banking sector has undergone a sea change after the first phase of monetary liberalization in 1991 and applicability of Basel rules. Further the quality of Asset was not major state of concern in public sector banks till 1991, and the focus was for reaching with all the part of the country with wide banking networks, develop rural areas, improve priority sector lending, superior employment making, etc. While the major purpose of banks is to let somebody borrow funds as loans to a particular segment such as industry, agriculture, housing loans personal loans, etc., but in current era the banks have become very vigilant in lengthen loans. The reason being getting higher NPAs and it is the major concerns for banks in India. An elevated level of NPAs advocates less probability of a huge figure of credit defaults that have an effect on the profitability and net-worth and also wear away the value of the asset. In present scenario NPAs are at the core of financial problem of the banks. In India NPAs are one of the main concerns for banks. Hence the success of a bank depends upon methods of managing NPAs.

The objectives of the papers are as under:

- To analyze the nature, extent and magnitude of NPAs of the selected public and private sector banks.
- To study the Correlation between NPA and Net Profit.
- To analyze the impact of NPAs on the financial presentation of the all public sector banks.

Reviews of Literature

Ghosh, S. (2012) revealed that banks come into view to impact the maturity of credit portfolio of domestic banks. Finally, as consequences also bear the detail those foreign banks typically charge lower interest rates as compared to domestic banks. Poghosyan, T. and Poghosyan, A. (2010) revealed that the bank has less promoted its authority relative to domestic and foreign greenfield banks.

* Student, M. Com. (EAFM), UCCMS, Mohanlal Sukhadia University, Udaipur, Rajasthan, India.

Egley, P.V., Escobari, D. & Johnk, D.W. J Econ Finan (2016), found positively impacts bank liquidity across all bank samples. Banks have become more liquid in the post-crisis period, especially the larger banks (large and money center banks). Balasubramanyan, L., Thomson, J.B. & Zaman, S. J (2016) revealed that credit information and explicitly controlling for structural breaks in the sample corresponding to the financial crisis. Fu X.M., Lin Y.R., Molyneux P. (2015) revealed that the banks have incessantly subjugated financial systems across the Asian region and acted as major change maker's role in regional economic expansion. Tighter capital and liquidity requirements under Basel III may constrain bank lending and economic development. Therefore, the effectiveness of the Basel III changes is unclear. Kumar(2013) revealed that NPA's have become a trouble for the Indian banking sector for the precedent several years. A main concern demanding the performance of commercial banks in the late 90's adversely affecting was the gathering of enormous NPAs. Selvarajan & Vadivalagan (2013) found that the expansion of Indian Bank's lending to Priority sector is more than that of the Public Sector Banks as a whole. Singh (2013) revealed that revival of NPAs in Indian banking system is the main problem of burgeoning NPA's lies in the system of credit risk management by the banks. Gupta (2012) concluded that each bank should have its own self-governing body for credit rating that can be improved by reducing the NPA's.

Research Methodology

The research methodology accounts for this research work includes the following points:

- **Data Source**

The data for the current research paper was collected by using secondary sources of RBI publication so that the authenticity of data can be ensured. For this purpose the data of all public sector Banking companies were gathered.

- **Type of Sample**

The sample includes 20 banking companies with the data from the period of 2013 to 2018 were gathered.

- **Universe of Study**

The total numbers banks operating in India including public, Private and foreign banks are included in the universe of the current study.

- **Sample Size**

For the purpose of current study a health sample of all 20 public sector banks having over 80% of the control over the banking system were selected on the basis of the convenient sampling method.

- **Data Analysis Tools**

The statistical tools & techniques used during the study include correlation analysis and multiple regressions.

Table 1: Total Assets of Public Banks

Nationalized Banks	2013	2014	2015	2016	2017	2018
Allahabad Bank	2,04,373	2,20,434	2,27,096	2,39,825	2,37,038	2,52,714
Andhra Bank	1,46,299	1,67,341	1,85,170	1,99,962	2,23,099	2,42,171
Bank of Baroda	5,47,135	6,59,505	7,14,989	6,71,376	6,94,875	7,20,000
Bank of India	4,52,603	5,73,190	6,18,698	6,09,914	6,26,309	6,09,575
Bank of Maharashtra	1,16,953	1,36,320	1,46,019	1,60,957	1,59,324	1,56,329
Canara Bank	4,12,343	4,91,922	5,48,001	5,52,961	5,83,519	6,16,886
Central Bank of India	2,68,130	2,89,496	3,11,940	3,05,466	3,33,402	3,26,225
Corporation Bank	1,93,442	2,22,048	2,25,993	2,34,864	2,47,891	2,21,891
Dena Bank	1,13,440	1,24,863	1,29,921	1,33,442	1,29,531	1,20,860
Indian Bank	1,62,823	1,87,327	1,92,836	2,03,710	2,18,233	2,52,716
Indian Overseas Bank	2,44,656	2,74,905	2,85,637	2,74,437	2,47,167	2,47,968
Oriental Bank of Commerce	2,00,697	2,20,303	2,30,514	2,39,768	2,53,065	2,33,344
Punjab & Sind Bank	80,478	94,509	97,753	1,02,581	96,643	1,13,759
Punjab National Bank	4,78,948	5,50,420	6,03,334	6,67,390	7,20,331	7,65,830
Syndicate Bank	2,15,122	2,51,861	3,03,135	3,07,967	2,99,073	3,23,977
UCO Bank	1,98,651	2,39,125	2,45,917	2,44,883	2,31,340	2,16,056
Union Bank of India	3,11,861	3,53,781	3,81,616	4,04,696	4,52,704	4,87,406
United Bank of India	1,14,615	1,25,105	1,23,028	1,29,432	1,41,053	1,44,749
Vijaya Bank	1,10,982	1,37,359	1,42,643	1,45,409	1,54,882	1,77,632
State Bank of India (SBI)	15,66,211	17,92,748	20,48,080	23,57,618	27,05,966	34,54,752

Table 2: Gross NPA of Public Banks

Nationalized Banks	2013	2014	2015	2016	2017	2018
Allahabad Bank	5,137	8,068	8,358	15,385	20,688	26,563
Andhra Bank	3,714	5,858	6,877	11,444	17,670	28,124
Bank of Baroda	7,983	11,876	16,261	40,521	42,719	56,480
Bank of India	8,765	11,869	22,193	49,879	52,045	62,328
Bank of Maharashtra	1,138	2,860	6,402	10,386	17,189	18,433
Canara Bank	6,260	7,570	13,040	31,638	34,202	47,468
Central Bank of India	8,456	11,500	11,873	22,721	27,251	38,131
Corporation Bank	2,048	4,737	7,107	14,544	17,045	22,213
Dena Bank	1,452	2,616	4,393	8,560	12,619	16,361
Indian Bank	3,565	4,562	5,670	8,827	9,865	11,990
Indian Overseas Bank	6,608	9,020	14,922	30,049	35,098	38,180
Oriental Bank of Commerce	4,184	5,618	7,666	14,702	22,859	26,134
Punjab & Sind Bank	1,537	2,554	3,082	4,229	6,298	7,802
Punjab National Bank	13,466	18,880	25,695	55,818	55,370	86,620
Syndicate Bank	2,979	4,611	6,442	13,832	17,609	25,759
UCO Bank	7,130	6,621	10,265	20,908	22,541	30,550
Union Bank of India	6,314	9,564	13,031	24,171	33,712	49,370
United Bank of India	2,964	7,118	6,553	9,471	10,952	16,552
Vijaya Bank	1,533	1,986	2,443	6,027	6,382	7,526
State Bank of India (SBI)	51,189	61,605	56,725	98,173	1,77,866	2,23,427

Table 3: NET NPA of Public Banks

Nationalized Banks	2013	2014	2015	2016	2017	2018
Allahabad Bank	4,127	5,722	5,979	10,293	13,434	12,229
Andhra Bank	2,409	3,342	3,689	6,036	10,355	12,637
Bank of Baroda	4,192	6,035	8,069	19,406	18,080	23,483
Bank of India	5,947	7,417	13,518	27,996	25,305	28,207
Bank of Maharashtra	393	1,807	4,127	6,832	11,230	9,641
Canara Bank	5,278	5,965	8,740	20,833	21,649	28,542
Central Bank of India	4,988	6,649	6,807	13,242	14,218	17,378
Corporation Bank	1,411	3,181	4,465	9,160	11,692	14,077
Dena Bank	917	1,819	3,014	5,230	7,735	7,839
Indian Bank	2,384	2,764	3,147	5,419	3,856	5,558
Indian Overseas Bank	4,027	5,658	9,813	19,213	19,749	20,400
Oriental Bank of Commerce	2,903	3,904	4,816	9,932	14,118	14,283
Punjab & Sind Bank	1,110	1,919	2,266	2,949	4,375	4,608
Punjab National Bank	7,237	9,917	15,397	35,423	32,702	48,684
Syndicate Bank	1,125	2,721	3,844	9,015	10,411	13,239
UCO Bank	4,069	3,556	6,331	11,444	10,703	14,082
Union Bank of India	3,353	5,340	6,919	14,026	18,832	24,326
United Bank of India	1,970	4,664	4,081	6,111	6,592	10,316
Vijaya Bank	910	1,262	1,660	4,277	4,118	5,021
State Bank of India (SBI)	21,956	31,096	27,591	55,807	96,978	1,10,855

Data Analysis

As per the objective of measuring the correlation of profitability and the Gross and Net NPA, the correlation coefficient of Pearson is calculated for both public and private sector selected banks. For this purpose the SPSS-19 software is used. For testing the following hypothesis is made:

H₁: The correlation between Total assets and Gross and net NPAs in government owned banks (public sector banks) is insignificant.

To test the hypothesis the correlation is calculated between the profitability and the NPA variables. The results were shown in table-2 for public sector banks as under:

Table 4: Net NPA'S of Public Sector Banks

Descriptive Statistics			
	Mean	Std. Deviation	N
TA	397013.2250	497021.13248	120
GNPA	21381.5750	29742.32380	120
NNPA	11782.4833	15385.24697	120

Correlations				
		TA	GNPA	NNPA
TA	Pearson Correlation	1	.887**	.876**
	Sig. (2-tailed)		.000	.000
	N	120	120	120
GNPA	Pearson Correlation	.887**	1	.993**
	Sig. (2-tailed)	.000		.000
	N	120	120	120
NNPA	Pearson Correlation	.876**	.993**	1
	Sig. (2-tailed)	.000	.000	
	N	120	120	120

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3 revealed significant correlation between Total assets, Gross NPA and Net NPA ($r = .877$ & $.876$) were found. Thus we can reject the null hypothesis and revealed that the correlation between Total assets and NPAs for government owned banks (public sector banks) is significant. Further to measure that whether there is significant change in the Total assets of the public sector banks during the period of 2013 to 2018. The following hypothesis is being made:

H₁: The differences in the distribution of Total assets and Gross and net NPAs in government owned banks (public sector banks) is significant.

To check the above hypothesis related sample Friedman's two way ANOVA is being used and the results are as under:

Table 5: Result of Hypothesis Testing
Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of TA_1, TA_2, TA_3, TA_4, TA_5, TA_6, GNPA_1, GNPA_2, GNPA_3, GNPA_4, GNPA_5, GNPA_6, NNPA_1, NNPA_2, NNPA_3, NNPA_4, NNPA_5 and NNPA_6 are the same.	Related-Samples Friedman's Two-Way Analysis of Variance by Ranks	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

The result of the Friedman's two way ANOVA revealed that the null hypothesis is being rejected and it can be revealed that there is a significant differences in the values of the Total assets, Gross and Net NPA.

Conclusion

Banking system is the main section for Indian economic sector and proceeds as strength of character of economic progress. Banks are theoretically straighter and completely related to the evaluation of the economy. Public sector banks are the main components for development of economy. Major risk to banking sector is occurrence of NPAs. It is the best indicator for the strength of the banking industry and it replicate the appearance of banks. They are the crucial needle of credit risk. NPAs are an predictable load on the banking industry. Hence the success of a bank depends upon methods of managing NPAs. This study concluded that the in the past 6 years the level of total assets is significantly correlated with the NPA levels and further significant differences in the values of the Total assets, Gross and Net NPA were found that means that the increase in the Gross and Net NPS is similar to the total assets changes and the level of NPA's have not significantly reduced despite of the changes.

References

- ❖ Rai, Kamini (2012), "Study on Performance of NPAs of Indian Commercial Banks" Asian Journal of Research Banking and Finance, Volume 2, Issue 12, December.
- ❖ Ramu, N. (2009), "Dimensions of Non-performing Assets in Urban Cooperative Banks in Tamil Nadu", Global Business Review, July/December, vol. 10 Issue 2.
- ❖ Reddy, Prashanth K (2002), "A comparative study of Non Performing Assets in India in the Global context - similarities and dissimilarities, remedial measures," Oct, IIM Ahemdabad, India.

- ❖ Richard Barker, Sebastian Schulte, Representing the market perspective: Fair value measurement for non-financial assets, In *Accounting, Organizations and Society*, Volume 56, 2017, Pages 55-67
- ❖ Sáez, L. (2001), Banking reform in India and China. *Int. J. Fin. Econ.*, 6: 235–244.
- ❖ Sarker, P.C. and Das, Abhiman (1997): 'Development of Composite Index of Banking Efficiency: The Indian Case', Reserve Bank of India Occasional Papers.
- ❖ Sathye, Milind (2007) Research Paper Presented- Efficiency of Banks in a Developing Economy: The Case of India
- ❖ Shankar, Rashmi (2007), "Financial Sector Reform and Bank Efficiency in India", August.
- ❖ Shinde, S.R., (1999), "Risk Management: ROE as a measure of Bank Performance" Vinimaya, Vol xix, No.4-NIBM publication.
- ❖ Siraj K.K. and P. Sudarsanan Pillai (2012), "A Study on the Performance of Non-Performing Assets (NPAs) of Indian Banking during Post Millennium Period", *International Journal of Business and Management Tomorrow*, Vol. 2, Issue 3, March.
- ❖ Skala, D. (2015), Saving on a Rainy Day? Income Smoothing and Procyclicality of Loan-Loss Provisions in Central European Banks. *Int Finance*, 18: 25–46.
- ❖ Skala, D. (2015), Saving on a Rainy Day? Income Smoothing and Procyclicality of Loan-Loss Provisions in Central European Banks. *Int Finance*, 18: 25–46.
- ❖ Staikouras, P. K. (2012), A Theoretical and Empirical Review of the EU Regulation on Credit Rating Agencies: In Search of Truth, Not Scapegoats. *Financial Markets, Institutions & Instruments*, 21: 71–155.
- ❖ Tan Y. (2016) The Reforms and Structure of the Chinese Banking Sector. In: *Investigating the Performance of Chinese Banks: Efficiency and Risk Features*. Palgrave Macmillan Studies in Banking and Financial Institutions. Palgrave Macmillan, London, 13-51
- ❖ Tomás F. Espino-Rodríguez, Pei Chun-Lai, Antonía M Gil-Padilla, Does outsourcing moderate the effects of asset specificity on performance? An application in Taiwanese hotels, In *Journal of Hospitality and Tourism Management*, Volume 31, 2017, Pages 13-27, ISSN 1447-6770
- ❖ Umar, M. & Sun, G. (2016) Non-performing loans (NPLs), liquidity creation, and moral hazard: Case of Chinese banks, *China Financ. and Econ. Rev.* 4, 10.
- ❖ Vouldis, A.T. & Louzis, D.P. (2017). Leading indicators of non-performing loans in Greece: the information content of macro-, micro- and bank-specific variables. *Empir Econ* 1-28
- ❖ Walter, I. (1999), The Global Asset Management Industry: Competitive Structure and Performance. *Financial Markets, Institutions & Instruments*, 8: 1–78.
- ❖ Weill, L. (2003), Banking efficiency in transition economies. *Economics of Transition*, 11: 569–592.
- ❖ Xidonas, P., Flamos, A., Koussouris, S. et al. (2007) On the appraisal of consumer credit banking products within the asset quality frame: A multiple criteria application, *Oper Res Int J*, Volume 7, Issue 2, pp 255–283
- ❖ Yüksel S. (2017) Determinants of the Credit Risk in Developing Countries After Economic Crisis: A Case of Turkish Banking Sector. In: Hacıoğlu Ü., Dinçer H. (eds) *Global Financial Crisis and Its Ramifications on Capital Markets* pp 401-415.

