A critical review of non-performing assets in the Indian banking industry

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Received 21 August 2019
Accepted 4 September 2019

Abstract

Purpose – The level of non-performing assets (NPAs) best indicates the soundness of the banking sector of a country. The purpose of this study is an effort to look into the contribution of the different banks individually to the NPA in the industry by looking into its growth pattern during the period 2010-2017. Further, the study is made to look into the effect of different groups of banks, namely, State Bank of India (SBI) and its associates, nationalised banks and private sector banks on the banking industry in this regard.

Design/methodology/approach – The individual private sector banks, nationalised banks and SBI and its associates have been considered for the purpose of the study. The analysis is based on secondary data collected from the Reserve Bank of India website for the period 2010-2017. The geometric mean has been used as a statistical tool for arriving at the mean growth rate of gross NPAs. Further, refinement of the result is done by comparing the growth of gross NPAs of individual banks with that of the average growth rate.

Findings – The assessment of private sector banks reveals that the growth rate of NPAs is low as compared to the nationalised banks, as well as the SBI and its associates. The nationalised banks and the associate banks of SBI failed to handle the issue of poor loans effectively due to which the growth in such loans has been phenomenally high.

Originality/value – The research is interesting as the study period follows the financial crisis. There is no such previous study that has looked at the perspective of banking from this angle. The research is valuable from two angles. Firstly, it brings to light the situation of the different categories of banks with regard to NPAs. Secondly, the information can be useful for investors as the issue of poor loans is a relevant one for them because it has an impact on the profitability of banks and thereby the future prospects.

Keywords Nationalized banks, Non-performing assets, Private sector banks, SBI and its associates

Paper type Research paper

1. Introduction

The banking sector is a keystone of any financial system. The smooth functioning of the banking sector ensures the healthy condition of an entire economy. In the process of accepting deposits and lending, loans banks create credit. The funds received from the borrowers by way of interest on loan and repayments of principal are recycled for raising resources. However, building up of non-performing assets (NPAs) disrupts this flow of

The authors would like to express their deep gratitude to Dr Abhijit Sinha for mentoring and guiding us in the research work and all the other teachers of the Department of Commerce, Vidyasagar University for their support and encouragement.

Rajagiri Management Journal
Vol. 13 No. 2, 2019
pp. 12-23
Emerald Publishing Limited
0972-9968
DOI 10.1108/RAMJ-08-2019-0010

credit. It hampers credit growth and affects the profitability of the banks as well. NPAs are the leading indicators to judge the performance of the banking sector. As per Reserve Bank of India (RBI) reports on November 2018, the gross amount of poor quality loans is in excess of Rs 9 lakh crores, which shows the severe impact it has on lending practices of banks and their liquidity positions. This growth is a result of quadrupling during the past five years, which shows the poor practice of banks with regard to lending.

The main source of income of banks is through the interest earned on loans and advances and repayment of the principal. If such assets fail to generate income, then they are classified as non-performing assets (NPA). According to the Reserve Bank of India, NPA is defined as a credit facility in respect of which the interest and/or instalment of principal is "past due" for a specified period. Generally, if the loan payments have not been made for a period of 90 days, the asset is classified as non-performing asset. On the basis of how long the asset has been non-performing, banks are required to sort the non-performing assets in one of the following categories:

- *sub-standard asset*: If an asset has been non-performing for less than 12 months;
- *doubtful asset*: If an asset has been non-performing for more than 12 months; and
- *loss assets*: Assets where losses have been identified by the bank, auditor or inspector and have not been fully written off.

The generation of poor loans in the books of banks is not a favourable event for the banking industry as it affects the size and soundness of the balance sheet. There is an unfavourable impact on the level of return on assets as well. Large amount of profits have to be provisioned against the doubtful and bad loans, which reduces profitability. Banks are even burdened with the increasing level of carrying costs of NPA accounts, which could have been used for any other profitable purpose. The financial institutions are also desired to maintain a certain capital adequacy level to strengthen their net worth. Though this issue is bad news for the banking industry, in recent times from the newspaper reports, it is evident that this problem has taken a serious toll on the banking space. The RBI has been taking measures to control the NPA menace. Some legal measures such as debt recovery tribunals (DRTs), Lok Adalats, the SARFAESI (Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest) Act and the Insolvency and Bankruptcy Code, 2016 have been introduced for the resolution of NPAs. Recapitalisation of public sector banks, setting up of stressed asset management verticals are some other steps taken by the RBI. In recent years, a few concepts like special mention accounts (SMA) and creating categories such as SMA 0, SMA 1 and SMA 2 have been added. Moreover, the regulator has also imposed restriction on eleven public sector banks by imposing the prompt corrective action (PCA) on them. Because of these developments, the present paper aims to find out which banks have contributed to the growing menace and what has been the trend in the banking industry with regard to these poor quality loans.

2. Literature review

The issue of NPAs has been a major area of concern for the lenders and the policymakers. Various research studies have been made to understand the causes contributing to the rise in NPAs, measures that should be taken to resolve the issue in its nascent stage and reforms that have come into effect to reduce the piling up of NPAs. Some of the relevant studies are arranged in a chronological sequence. Karunakar *et al.* (2008) discuss the various factors that boost NPAs, their size, their effect on Indian banking operations and suggest measures to control the curse on the banking industry. Use of suitable credit assessment and risk management methods is the key to solve the problem of NPA accumulation. Rajeev and Mahesh (2010), in their article deal with the issue of NPAs after the global financial crisis. They suggest that mere recognition of the problem and self-monitoring can help to manage the NPA problem to a great extent. Self-help groups can also play an important role in the recovery of the loans. Barge (2012) examines that early monitoring and management of lent funds is the necessity of the hour. The study suggests several measures like better supervision of end use of funds, information about the credit history of the borrower and assisting the borrowers to develop entrepreneurial skills to ensure that the asset does not convert into a non-performing asset. Gupta (2012) makes a comparative study of the position of NPAs of State Bank of India (SBI) and associates and other public sector banks. The researcher concludes that for evaluation of the solvency of borrowers each bank should set up a separate credit rating agency. It also suggests the need for a committee comprising of financial experts to supervise and monitor the issue of NPAs. Shalini (2013) has analysed the causes and suggested remedies for reducing NPAs in Indian public sector banks with special reference to the agricultural sector. The analysis of the different problems faced by the Indian farmers deduces the conclusion that banks should follow some measures before lending the loan. Prior collection of reports regarding the goodwill of the farmers, post sanction inspection, educating the farmers regarding the effects and consequences of defaulting are some of the suggested measures. Singh (2013) in the investigation on the position of Indian commercial banks with regard to NPAs finds that these poor quality loans are a major problem for the public sector banks, which show a consistent rise over the years. The main contribution comes from the loans directed at the micro sector and for poverty alleviation programmes. Bhaskaran *et al.* (2016) in their paper have compared the NPAs of public sector banks and private sector banks over a period of ten years (2004-2013). From their study, it is evident that private sector banks are performing better than public sector banks in reducing the level of NPAs. The authors propose that banks should be proactive in adopting structured NPAs management policy where prevention of NPAs receive priority. Thomas and Vyas (2016) in a recent study on loan recovery strategy of Indian banks suggests two measures, preventive and corrective. The paper also discusses several corrective measures – legal, regulatory and non-legal that are to be taken to recover the non-performing loans. Singh (2016) in another recent study on NPAs and recovery status find that the problem is more severe for the public sector banks compared to the private sector banks. The academic review points to the need to have strict lending policies for speedy recovery of loans. Meher (2017) in the post-demonetisation period looks into the impact of the government's notebandi decision on the NPA of Indian Banks. The researcher finds both positives and negatives of the event on the banking industry. Sengupta and Vardhan (2017) have compared the two banking crisis episodes post-liberalisation- one that took place in the late 1990s and the other that commenced after the 2008 global financial crisis that raised the issue of NPAs. The authors are of the view that strong governance, proactive banking regulations and a strong legal framework for resolution of NPAs would assist in solving the problem of NPAs. On the other hand, regulatory forbearance would adversely affect the banking crisis. Mittal and Suneja (2017) have analysed the level of NPAs in the banking sector in India and the causes that have led to the rise in NPAs. They have proposed that though the government has taken a number of steps to reduce the problem of NPAs, bankers should also be proactive in adopting well-structured policies to manage NPAs. The loan should be sanctioned after considering the return on investment of a proposed project and the credit-worthiness of the customers. Sahni and Seth (2017) study the different causes responsible for rising NPAs and the impact it has on the operation of banks. The authors have mentioned several preventive and curative measures to control the NPAs. They have suggested that proper assessment regarding the credit-worthiness of the borrower should be done to ensure the speedy recovery of loans. Mishra and Pawaskar (2017) have recommended that banks should have a good credit appraisal system so as to avoid NPAs. They point out that the problem of NPAs can be solved if there is a proper legal structure to support the banks in recovery of debt. Banerjee *et al.* (2018) have examined the status of gross NPAs and net NPAs in private sector banks and public sector banks to study their effect on the asset quality of the banks. Deliberate loan defaults, poor credit management policies, sanctioning of loans without analysing the risk-bearing capacity of the borrowers are the main reasons for piling up of NPAs. The banks should stress on better strategy formulation and its proper execution as well. Stringent provisions by the government could help in reducing the level of NPAs. Mukhopadhyay (2018), in his paper, has discussed about finding solutions to India's NPA woes. He has suggested that to resolve the problems of NPAs the RBI should not abide by a single model, instead, an innovative and flexible approach is needed for each affected bank, which should differ on case-by-case basis. Kumar (2018), in her study has found that NPAs have a serious negative impact on the profitability and liquidity of the banking sector. According to her if the issue of NPAs is managed efficiently, then many microeconomic issues such as poverty, unemployment, imbalances of balance of payments can be reduced, the money market can be strengthened, and thus, the image of Indian banking system can be improved in the international market. Sharma (2018) emphasises the role of the banking sector as an instrument of economic growth and development. The paper discusses how banks are burdened due to growing NPAs especially in case of public sector banks. The author states a number of preventive measures that would curtail the level of NPAs. Viable regulatory standards and timely implementation of them could pave the way for a strong financial sector in India. Dey (2018) in a very recent research paper looks at the recovery aspect of recovery of poor loans of the Indian commercial banks. The author finds the role of DRTs to be much better compared to the recovery through Lok Adalats and SARFASEI Act. Kumar *et al.* (2018) make an interesting study to find out the main reasons behind accumulating NPAs. They find the main reasons to be industrial sickness, change in government policies, poor credit appraisal system, wilful defaults and defect in the lending process.

2.1 Research gap

Thus, an overview of the above literature shows that there are quite a few studies in the field of non-performing assets in the banking industry. However, there are no studies that look at the data till 2017, which is important and pertinent because the major piling up has been taking place after 2011 in the aftermath of the financial crisis of 2008. Moreover, the major focus of the paper is not only on groups of banks but also individual banks. This is done to identify those banks, which have been contributing more to the NPA menace in the banking space. Hence, the article is not only relevant but also addresses a contemporary issue like NPAs. The research adds new knowledge to the banking literature, which will help readers to comprehend the position of banks in a better way.

3. Objectives of the study

The following are the objectives of the study:

- to determine the mean growth rate for different groups of banks and individual banks; and
- to make comments relating to the growth pattern of Gross NPAs.

Table I.
Year on year growth rate in gross NPAs in private sector banks

Year	2010-2011 (%)	2011-2012 (%)	2012-2013 (%)	2013-2014 (%)	2014-2015 (%)	2015-2016 (%)	2016-2017 (%)	GM (%)
Axis Bank	21	13	33	31	31	48	250	49
Catholic Syrian Bank Ltd	29	−5	15	58	42	−6	34	22
City Union Bank Limited	20	10	40	69	15	52	33	33
DCB Limited	−17	−8	−11	−36	34	6	29	−3
Dhanlaxmi Bank	−13	55	265	28	15	−18	−31	22
Federal Bank	40	13	19	−30	−3	58	4	11
HDFC Bank	−7	18	17	28	15	28	34	18
ICICI Bank	6	−6	1	9	44	74	61	24
Indusind Bank	4	31	32	36	−9	38	36	22
Jammu and Kashmir Bank Ltd	12	0	25	22	253	58	37	44
Karnataka Bank Ltd	28	−2	−7	31	13	25	34	16
Karur Vysya Bank	−3	41	−11	−2	143	−25	190	30
Kotak Mahindra Bank Ltd	−21	2	23	40	17	129	26	25
Lakshmi Vilas Bank	−51	95	49	19	−17	−14	64	10
Nainital Bank	−8	45	117	−9	27	54	38	32
RBL	−22	54	−22	200	43	87	72	44
South Indian Bank	9	16	62	0	49	143	−26	27
Tamilnadu Mercantile Bank Ltd	23	26	21	100	−26	31	55	28
Yes Bank Ltd	34	4	12	85	79	139	170	65
Private Sector Banks	*6*	*3*	*13*	*16*	*37*	*59*	*72*	*27*

Source: Computed by the researchers

4. Research design

This is a very important area of research as it lays the foundation for the proposed work. The correctness and robustness of the findings depend on the design that is laid. For the present study, the components of the design are as follows:

- *Sample*: the individual private sector banks, the nationalised banks and SBI and its associates have been considered.
- *Data period*: the analysis is based on data for the period 2010-2017.
- *Nature of the data and source*: The investigation is based on secondary data, which is collected from the RBI website.
- *Variable of interest*: gross NPAs.
- *Research methods*: in this article, the statistical tool that the researchers have used is the geometric mean for arriving at the mean growth rate and then the growth of individual banks has been compared with the average growth rate.

5. Analysis and findings

The details of the analysis are presented in the sub-section below.

5.1 Assessment of private sector banks

The position of the private sector banks with regard to the movement of gross NPAs during the study period is discussed below.

5.1.1 Assessment at the individual level. An examination of the gross NPA position of the banks in the private sector shows that the growth rate (calculated using Geometric Mean) is quite low in the initial years of the study period (the lowest being 3 per cent in the year 2011-2012), but it goes on increasing thereafter. The overall position of NPAs of the private sector goes up to a maximum of 72 per cent in the year 2016-2017. Majority of the private sector banks show a sharp rise in the NPA growth rates after the year 2015-2016. This sudden rise may have been the result of "asset quality review" conducted by the RBI in the year 2015. The inspection carried out by the RBI highlighted the under-reporting of NPAs in the private sector banks. Big lenders like Axis Bank, Yes Bank and ICICI Bank reveal high growth rate of NPAs during the latter years of the study period. Axis Bank experienced a

Growth more than average (27%)	(%)	Growth less than average (27%)	(%)
Yes Bank Ltd	65	South Indian Bank	27
Axis Bank	49	Kotak Mahindra Bank Ltd	25
Jammu and Kashmir Bank Ltd	44	ICICI Bank	24
RBL	44	Catholic Syrian Bank Ltd	22
City Union Bank Limited	33	Dhanlaxmi Bank	22
Nainital Bank	32	Indusind Bank	22
Karur Vysya Bank	30	HDFC Bank	18
Tamilnad Mercantile Bank Ltd	28	Karnataka Bank Ltd	16
		Federal Bank	11
		Lakshmi Vilas Bank	10
		DCB Limited	−3

Source: Computed by the researchers

Table II.
Private sector banks

Table III.
Year on year growth rate in gross NPAs in state bank of India and its associates

Year	2010-2011 (%)	2011-2012 (%)	2012-2013 (%)	2013-2014 (%)	2014-2015 (%)	2015-2016 (%)	2016-2017 (%)	GM (%)
State Bank of Bikaner And Jaipur	37	98	28	29	8	22	196	50
State Bank of Hyderabad	77	74	59	83	–14	32	176	61
State Bank of India	30	57	29	20	–8	73	14	28
State Bank of Mysore	45	74	38	35	–24	70	173	49
State Bank of Patiala	37	37	30	53	16	55	164	51
State Bank of Travancore	30	78	18	76	–23	36	176	45
State Bank of India and its associates	*32*	*59*	*30*	*27*	*–8*	*66*	*46*	*34*

Source: Computed by the researchers

significant rise in the gross NPAs of close to 250 per cent in 2016-2017 followed by Karur Vysya Bank (190 per cent) and Yes Bank (170 per cent) (Table I).

5.1.2 Comparing performance against the mean. If we consider the growth rates of NPAs of each private sector bank with respect to the average growth rate of the banks in the private sector as a whole, we find that most of the banks have a growth rate less than the average growth rate (27 per cent). The performance of DCB is a commendable one as it shows an overall decline in the level of poor loans, which is an exception in the banking landscape. It points to a sound NPA management process in the bank. On the other hand, Yes Bank, which is among the big brands in the industry recorded the highest growth rate of 65 per cent followed by Axis Bank (49 per cent) (Table II).

5.2 Performance assessment of SBI and its associates

5.2.1 Assessment at the individual level. Next, we analyse the position of SBI and the SBI Group as a whole (note that the SBI Associates do not separately exist now as they have been merged with SBI in 2017). An analysis of the gross NPA position shows that the initial spurt in NPA growth took place in 2011-2012 followed by 2015-2016. This observation is the same as what is seen in the case of the nationalised banks. Of the entire SBI Group the State Bank shows the minimum average growth of 28 per cent. The associate banks show a poor performance in terms of the overall rise in NPAs during the period. Calculations show that State Bank of Hyderabad shows a growth of 61 per cent, which is closely followed by State Bank of Patiala (51 per cent), State Bank of Bikaner and Jaipur (50 per cent), State Bank of Mysore (49 per cent) and State Bank of Travancore (45 per cent). It is evident from the computations that with the SBI giving more focus towards NPA management rather than business expansion, fruitful results are reflected in 2016-2017 with respect to the previous year, a rise of only 14 per cent. For the remaining associate banks, it seems that the top management has not taken the issue of NPAs very seriously, due to which in 2016-2017 the year on year growth rate exceeds 160 per cent for all the banks. This might be the possible reason apart from generating economies of scale behind mergers of the associate banks with the parent bank (Table III).

5.2.2 Comparing performance against the mean. The table below gives an idea about the growth position in NPAs of the individual banks against the average performance of the group (Table IV).

5.3 Performance assessment of nationalised banks

5.3.1 Assessment at the individual level. As per the computation, the position of Gross NPAs with respect to the growth rate during the period 2010-2011 and 2016-2017 is

Growth more than average (34%)	(%)	Growth less than average (34%)	(%)
State Bank of Hyderabad	61	State Bank of India	28
State Bank of Patiala	51		
State Bank of Bikaner And Jaipur	50		
State Bank of Mysore	49		
State Bank of Travancore	45		

Source: Computed by the researchers

Table IV.
SBI and its associates

extremely bad, which is the reason behind the growing worry of the apex bank. If we look into specific banks and look at the growth rate during the study period we find the banks, which show the maximum rate are Andhra Bank, Punjab and Sindh Bank and IDBI Bank, which show the mean growth rate (in terms of geometric mean) to be 67, 63 and 55 per cent, respectively. In fact, the overall position of the nationalised banks taken together shows that the growth rate has risen at a high pace after the financial crisis started showing its effect in 2010. Of the 20 nationalised banks, 40 per cent show a mean growth rate of atleast 50 per cent. If we compare the growth rate of banks with respect to the average growth rate of the nationalised banking group taken together, it is evident that 50 per cent of the banks grow at a rate, which is more than the mean rate of 46 per cent. Some of the prominent names include Punjab National Bank, Andhra Bank, IDBI Bank (in which LIC has recently taken a stake of 51 per cent). For those banks in which the NPA rose by less than the average, the geometric mean lies in the range of 30 per cent (for Vijaya Bank) and 46 per cent (for Bank of Maharashtra).

If we analyse the pattern of growth (year-on-year), we find that there has been a spurt in the NPA growth of nationalised banks during 2011-2012 and 2013-2014. The second shock in terms of poor quality norms took place in 2015-2016 when the overall nationalised banks grew 104 per cent over the previous year. After the RBI came up with the concept of prompt corrective action, and looked at the problem with more diligence, some positive results (though not satisfactory) is seen in 2016-2017. It is evident from the calculations that the growth of NPAs in 2016-2017 is 21 per cent, which is the least during the study period (Table V).

5.3.2 Performance of banks against average. The table below shows the categorisation of the banks into two categories, which are “more than average” and “less than average” (Table VI).

6. Conclusion

The overall findings point to a worrisome situation for the banking sector as a whole. An analysis of the growth rate in the NPA level shows that the problem is evident not only with small-sized banks but also with big names in the banking space. Hence, the entire sector is gripped in the crisis. The poor asset for the banks is a problem because as per the guidelines, given by the RBI, banks are required to keep some amount as provision depending on their asset quality thereby leading to declining profitability of the banks. Hence, it impacts not only the profitability level of these banks but also affects the shareholders’ wealth. Thus, the time is apt that the RBI has been coming up with very stringent norms so that the growth in these assets can be put under control. The Insolvency and Bankruptcy Code of 2016 is playing an important role with regard to recovery of assets of those creditors whose case has been filed with the National Company Law Tribunal. In fact, figures are given by the RBI point to a declining phase in the NPA growth rate, which is a positive development. But, there is still a lot to be done. Only time will say how successful has the RBI been in controlling the NPA growth in the sector. It is necessary to pull the trigger hard as these poor loans are having a severe impact on the liquidity position of banks and even the banks have been asked to go slow with regard to lending, which is ultimately having an impact on the economic growth, which has been slow during the past few quarters.

Table V. Year on year growth rate in gross NPAs in nationalised banks

Year	2010-2011 (%)	2011-2012 (%)	2012-2013 (%)	2013-2014 (%)	2014-2015 (%)	2015-2016 (%)	2016-2017 (%)	GM (%)
Allahabad Bank	35	25	149	57	4	84	34	50
Andhra Bank	104	81	107	58	17	66	54	67
Bank of Baroda	31	42	79	49	37	149	5	51
Bank of India	−1	34	44	38	72	125	4	40
Bank of Maharashtra	−3	11	−12	151	124	62	66	46
Canara Bank	21	29	55	21	72	143	8	45
Central Bank of India	−3	204	16	36	3	91	20	41
Corporation Bank	21	61	61	131	50	105	17	59
Dena Bank	31	14	52	80	68	95	47	53
IDBI Bank Ltd	31	63	42	54	27	96	80	55
Indian Bank	45	150	93	28	24	56	12	53
Indian Overseas Bank	−14	27	69	37	65	101	17	38
Oriental Bank of Commerce	31	86	17	34	36	92	55	48
Punjab and Sind Bank	106	80	101	66	21	37	49	63
Punjab National Bank	36	99	54	40	36	117	−1	50
Syndicate Bank	30	22	−6	55	40	115	27	36
UCO Bank	89	30	74	−7	55	104	8	45
Union Bank of India	36	50	16	51	36	85	39	44
United Bank of India	−1	61	36	140	−8	45	16	35
Vijaya Bank	27	36	−11	30	23	147	6	30
Nationalised banks	*22*	*57*	*47*	*45*	*38*	*104*	*21*	*46*

Source: Computed by the researchers

Table VI.
Nationalised banks

Growth more than average (46%)	(%)	Growth less than average (46%)	(%)
Andhra Bank	67	Bank of Maharashtra	46
Punjab and Sind Bank	63	UCO Bank	45
Corporation Bank	59	Canara Bank	45
IDBI Bank Limited	55	Union Bank of India	44
Dena Bank	53	Central Bank of India	41
Indian Bank	53	Bank of India	40
Bank of Baroda	51	Indian Overseas Bank	38
Punjab National Bank	50	Syndicate Bank	36
Allahabad Bank	50	United Bank of India	35
Oriental Bank of Commerce	48	Vijaya Bank	30

Source: Computed by the researchers

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Further reading

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