Vol. 13(4), pp. 128-137, 28 February, 2019
DOI: 10.5897/AJBM2018.8683
Article Number: 9CF53DC60095
ISSN: 1993-8233

http://www.academicjournals.org/AJBM

African Journal of Business Management

Full Length Research Paper

Impact of non-performing assets on the profitability in Indian scheduled commercial banks

Kavitha Nachimuthu[1*] and Muthukrishna Veni[2]

[1]Department of Rural Development and Agricultural Extension, College of Agriculture and Rural Transformation, University of Gondar, Ethiopia.
[2]Department of Management Studies, Velalar College of Engineering and Technology, Erode, Tamilnadu, India.

Received 4 October, 2018; Accepted 10 December, 2018

Banking in modern times is the kingpin of all economic activities. It is instrumental in shaping the economic destiny of a country. Banks are considered as the nerve-centres of economics and finance of any nation and the barometer of its economic prospective. Since the banks have stupendous investment potential, they can make a significant contribution in eliminating poverty and problem of unemployment. It can bring about a progressive reduction in inter-regional/ state, inter-sectoral and inter-personal disparities in India. The banking sector is facing the problem of rising NPAs at present. The purpose of the study is to measure the impact of NPAs on the profitability of Indian scheduled commercial banks for the period of ten years. The study discusses the impact of NPA on the profitability in India scheduled commercial banks for the past ten years from 2007-2008 to 2016-2017. The ratio analysis, regression analysis, tests of equality of means, cross correlogram with the help of E-Views 10 software were used to identify the variables pertaining to NPAs on the profitability of the banking sector. There is an increasing trend of NPAs of Scheduled commercial banks in India.

Key words: Gross NPA, Net NPA, gross advances, net advances, total assets and profitability.

INTRODUCTION

Commercial banks play an important role in the development of a country. A sound, liberal and dynamic banking system is an essential requirement for economic development of any nation. As an important sector of an economy, commercial banks act as the backbone of economic growth and wealth by acting as a substance in the process of development of nation. They instruct the habit of saving and mobilize funds from several small households and business firms feast over an extensive geographical area. The funds so mobilized are used for productive purposes in agriculture, industry, trade and commerce. In this present scenario, non-performing assets become very serious problem for the banks while extending loans.

The increase in the profitability of a bank is always preceded by the composition of assets and liability. Non-performing assets are defined as an advance where, on the date of the balance sheet, an amount to be paid to the bank is due for a period of 180 days. The loans which are unpaid beyond the due dates are categorized as

*Corresponding author. E-mail: nkavithamba@gmail.com.

Abbreviation: NPAs, Non-performing Assets; **RBI**, Reserve Bank of India.

non-performing assets or non-performing loans. Non-performing assets can be Gross NPAs and Net NPAs. Non-performing loans raise to such an extent that revenues fall off and loan loss expenses, as well as operating costs engage all the incomes that continue. The causes of NPAs include disaster, sickness of the industries, in effective recovery process, business cycle, lending policy, absence of monitoring and follow up loan and managerial problems. The proportion of non-performing assets on selected variables is identified with the help of the following ratios:

i) Ratio of Gross NPA to Gross Advances;
ii) Ratio of Net NPA to Net Advances;
iii) Ratio of Gross NPA to Total Assets;
iv) Ratio of Net NPA to Total Assets.

The non-performing assets increased up to Rs. 95825 crores as per the CRISIL report. The gross NPA increased from 3.3% in 31.03.2013 to 4% in 31.03.2014. Banks and other financial institutions are facing the problem of recovery of dues and banks' approach in managing fraudulent activities in the banking sector. It is important for a developing economy and the failure of NPA may have adverse effect on the banking sector and financial Institutions. The different aspects of literature review related to non-performing assets over the period have been collected and used for this study purpose. But there is an enormous gap existing for the complete research of non-performing assets on quality aspects. Most of the research and studies are being done on causes, and management aspects of NPAs. This study will fill the gap on the impact of NPAs on the profitability in Indian Scheduled Commercial Banks. The objectives of the study are to analyze the impact of NPA on the profitability of Indian scheduled commercial banks, to find out the Gross NPA and Net NPA of Scheduled Commercial Banks in India, to offer suitable solution for the management of NPA in banks.

LITERATURE REVIEW

Many researchers have done research related to NPA and they find out different implications. Chijoriga (2000) and Batra (2003), in their study, stated that in banks, irrespective of profitability, liquidity and competitive functioning, NPA has a serious effect on the psychology of bankers related to disposition of funds towards credit delivery and credit expansion. Michael et al. (2006) insisted that, NPA affects profitability, liquidity and solvency position of banks by affecting its operational efficiency. It is essential to have a serious look on NPA, since it may affect the growth and survival of banks. Borbora (2007) pointed out that, banking sector must maintain efficient NPA management system to avoid negative financial performance. Panta (2007) emphasized that, after the initiation of banking sector reforms in 1992, most of the banks are taking initiatives to maintain NPA level and try to improve their profitability position. Banks also consider the guidelines of RBI related to income recognition, asset classification and its norms related to various provisions. Panta (2007) pointed out that, relationship exists between NPA and bank failure all over the world. Rajput et al (2011), in their study increasing level of non-performing assets (NPAs) in the banking sector can sternly affect the economy of the country. The reason for financial and economic reduction which in turn bad signals when NPAs are not correctly managed. Kumar and Gupta (2012) try to find out the effect of NPA on public sector banks of India by analysing their financial performance.

Rajput et al. (2011) try to find out the effect of NPA on public sector banks of India by analysing their financial performance. Chaudhary and Sharma (2011), using projection of trend analysis, try to find out the efficiency of public and private sector banks in NPA management. Kumar and Singh (2012) conducted a study on NPA by selecting top performers of public sector banks and few foreign banks in India and analysed the important factors which cause NPA problems and also try to find the effective measures which are essential for effective NPA management. Patidar and Kataria (2012) conducted a research on the comparative study between SBI and Associates, Old Private Banks and New Private Banks and Nationalized Banks of the benchmark category and try to find out the significant difference of NPA and its impact on priority sector lending on the total NPA. For the study, they used regression analysis and ratio analysis. Chatterjee et al. (2012) conducted a study and the result of their findings are NPAs have a negative effect on the achievement of capital adequacy level, funds mobilization, banking system credibility and productivity on the overall economy. Their study also reveals that private sector banks can protect themselves by adapting to the changing environment whereas public sector banks are facing enormous problems.

Mir and Jegadeeshwaran (2013) conducted a study, "NPA and causes for NPA". They collected secondary data for five years and carried out analysis by using various tools like mean, CAGR, ANOVA and Rank. In their findings, they ranked the performance of banks based on NPA management. Das and Dutta (2014) conducted a study, "The growth of NPA in the public and private sector banks in India". They collected data from 'report on trend and progress of banking in India, RBI report on currency and finance, RBI economic surveys of India' and analysed by focusing on sector wise non-performing assets of the commercial banks. The result of their study shows that the performance of the banks is low because of worse NPA management. Ranjan and Dhal (2013) conducted a research on the Indian commercial banks' nonperforming loans by using regression analysis and they analysed the terms of credit, risk preference based on the size of the bank and macro-economic shocks. Das and Dutta (2014) conducted a study, “The growth of NPA in the public and private sector banks in India”. They collected data from „report on trend and progress of banking in India, RBI report on currency and finance, RBI economic surveys of India‟ and analysed by focusing on sector wise non-performing assets of the commercial banks. The result of their study shows that the performance of the banks is low because of worse NPA management.

Arora and Ostwal (2014) conducted a study titled, “The classification and comparison of loan assets of public and private sector banks”; the results of the study show that, public sector banks and financial institutions are having high level of NPAs compared to private sector banks. Tripathi et al. (2014) conducted a study on the impact of priority sector advances, unsecured advances and advances made to sensitive sectors by banks like SBI group and other nationalised banks on Gross NPAs of banks using multiple regression model. Parmar (2014) states that the management of NPA is a challenging task for every bank as it affects banks’ profitability position and performance. Loan defaulters are the main reason for NPA.

Tandon et al. (2017) focuses on banks’ specific, macroeconomic determinants of the non-performing loans and their impact on the banking profitability. They selected 35 public and private sector banks for the period 2007 -2016 and used multivariate analysis to find out the result. Their study conveys that, PSU banks - NPA management requires more attention to increase their profitability and performance. According to Swain et al. (2017), the present core financial problem of banks is NPA. The proper recovery of loans can boost the performance of banks in India. Therefore, an attempt is made to measure the effectiveness of NPA recovery measures. Selected recovery measures like Lok Adalat, Debt Recovery Tribunal and SARFAESI Act are taken for the study purpose and the efficiency of NPA recovery. From the study, the recovery of NPAs is still a major concern for commercial banks in India. The reasons for the poor recovery from NPAs are the mechanism created and banks are not able to derive full benefits. Banerjee and Mitra (2018), In their study NPA have a direct influence on the profitability, liquidity and solvency of the bank. Growing NPA has been one of the major problems of Indian Banking System. To know the position of NPA in banking groups and it anticipated the facts of Gross NPA of all Public Sector Bank, Nationalised Bank, SBI Group, Private Sector Bank, All Scheduled Commercial Bank. Manu and Maheshwari (2018), in their study, the Non-performing assets have been varying from time to time which effect the bank's profitability during the study period. The study reflects ROA, ROE and ROCE as measures bank's profitability, Gross NPA and Net NPA as measures non-performing assets of the banks. The study recommends rigorous policies to be executed by governing system to control constant increasing of Banks's NPA which will provide loss of tax payer's money in India. Valliammal and Manivannan 2018, in their study the impact of non-performing assets on the financial performance is the emphasis for this study. there is a very high relationship between decrease of profits and increase in various assets related to the study. Banking groups essential to emphasis more on handling financial assets in order to increase profitability of the banks. Varma (2018) presents growing problem of NPAs in Indian banking sector and its management. Bank frauds involving Punjab National Bank (PNB) and the companies associated with businessmen like Nirav Modi and Mehul Choksi as well as the Rotomac case could not have come to a worse time. The Indian banking system is already reeling under the pressure of growing NPAs, or non-performing assets. This has already caused a slowdown in disbursal of bank credit, in turn affecting productive investment. The key issue is one of poor regulation. This paper analyses the various schemes introduced to restriction of non-performing assets, which emerged out as a greatest challenge for government as well as for the RBI to reduce NPAs.

The following hypotheses were formulated and tested for the study purpose as follows:

H0: There is no significant difference in NPA having direct and negative impact on the profitability of the bank;
H1: There is significant difference in NPA having direct and negative impact on the profitability of the bank.

METHODOLOGY

The present study is based on census method. The secondary data were collected from the annual reports of Indian Bank Bulletin, Reserve Bank of India Annual reports, RBI websites, Various issues of Economic survey, various news daily papers and magazines dealing with the current banking scenario. The period of the study is ten years from 2007-2008 to 2016-2017. The ratio analysis, regression analysis, tests of equality of means, cross correlogram with the help of E-Views 10 software were used to identify the variables pertaining to NPAs on the profitability of the banking sector.

RESULTS AND DISCUSSION

Ratio of gross NPA to gross advances

The data were used to analyze the gross advances and gross NPAs outstanding and gross NPA % of scheduled commercial banks over a ten years period as shown in Table 1.

Sontakke and Chandan (2013) provides the amount of Gross Advances to Gross NPA and the percentage of Gross NPA from 2008 to 2012. The amount of advances increased from Rs. 25079 crore in 2008 to 51,589 crore in 2012. The amount of NPA also increased from Rs. 564

Table 1. Ratio of Gross NPA to Gross Advances.

Year	Gross Advances	Gross NPA (Amount)	Gross NPA %
2007-2008	25078	563	2.3
2008-2009	30382	683	2.3
2009-2010	35449	846	2.4
2010-2011	40120	979	2.5
2011-2012	46488	1423	3.1
2012-2013	59718	1935	3.2
2013-2014	68757	2633	3.8
2014-2015	75606	3233	4.3
2015-2016	81673	6119	7.5
2016-2017	85139	7918	9.3

Source: Data calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai Issues of relevant years.

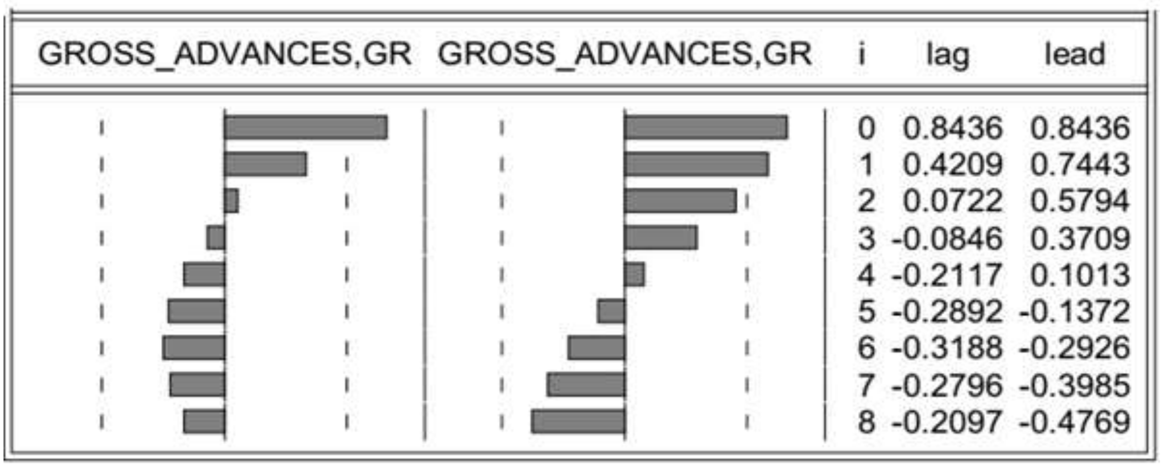

Figure 1. Cross Correlogram of Gross Advances and Gross NPA.

to Rs. 1,423 from 2008 to 2012. Similarly, NPA percentage rose from 2.3 in 2008 to 3.1 in 2012. This study supports the present research. Table 1 indicates the amount of Gross advances, Gross NPA and % of Gross NPA from 2007-2008 to 2016-2017. The amount of Gross advances increased from Rs.25,078 crore in 2007-08 to Rs.85,139 crore in 2016-2017. The amount of gross NPA increased from Rs.563 crore in 2007-2008 to Rs.7,918 crore in 2016-2017. Similarly, % of Gross NPA increased from 2.3% in 2007-2008 to 9.3% in 2016-2017.

The increase in Gross NPA has direct and negative impact on the profitability of banks. As with the correlogram, the computed cross correlation is an asymptotically consistent approximation as the overall means were used in the computation. Cross correlations are not necessarily symmetric around lag 0. The dotted lines in the cross correlogram are the approximate two standard error bounds computed as $\pm 2/(\sqrt{T})$. This hypothesis holds good for Scheduled commercial banks in India by means of calculating the correlation technique. The results of ratio of Gross NPA to Gross Advances with profitability reveal that, there exists a negative correlation to the extent. The reductions in the non-performing assets have an indirect impact on the profitability which shows the stringent collection mechanism followed by the banks by applying constant control over non-performing assets (Figure 1).

Ratio of Net NPA to net advances

The data were used to analyze the Net advances and Net NPAs outstanding and as a Net NPA % of Scheduled Commercial Banks over the 10 years period (Table 2).

Ravindra et al. (2013) provide the amount of Net Advances, Net NPA and the percentage of Net NPA from 2008 to 2012. The amount of advances increased from

Table 2 Ratio of Net NPA to Net Advances.

Year	Net Advances	Net NPA (Amount)	Net NPA %
2007-2008	24769	247	1
2008-2009	29999	315	1.1
2009-2010	34970	387	1.1
2010-2011	42987	417	1.1
2011-2012	50735	650	1.3
2012-2013	58797	986	1.7
2013-2014	67352	1423	2.1
2014-2015	73881	1758	2.4
2015-2016	78964	3498	4.4
2016-2017	81716	4331	5.3

Source: Data calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai Issues of relevant years.

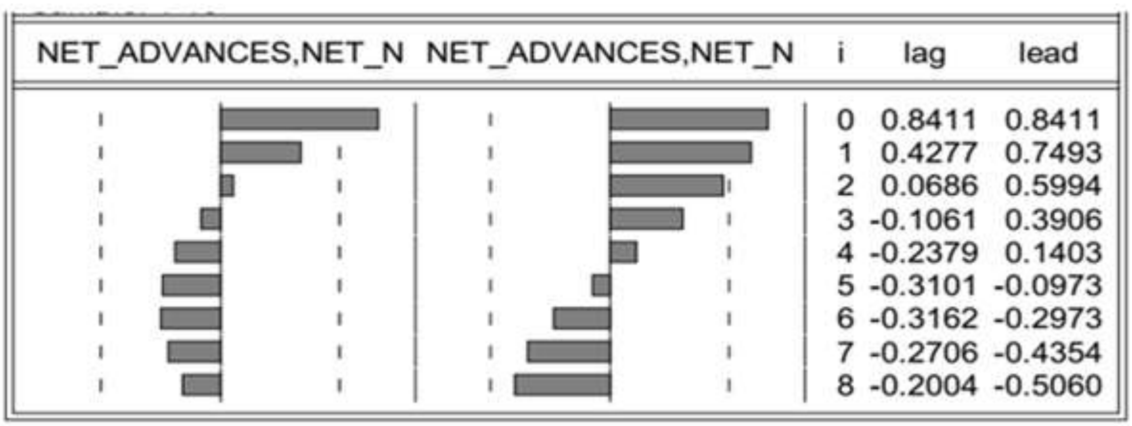

Figure 2. Cross Correlogram of Net Advances and Net NPA.

Rs. 24,770 crore in 2008 to 50,842 crore in 2012. The amount of NPA also increased from Rs.247 crore to Rs. 649 crore from 2008 to 2012. The percentage of Net NPA increased from 1.1.in 2008 to 1.12 in 2010. Then it declined to 0 .97% in 2011 due to increase in provisions. Later the percentage of NPA again increased to 1.4 in 2012. This study supports the present research. Figure 2 indicates the amount of Net advances, Net NPA and % of Net NPA from 2007-08 to 2016-17. The amount of Net advances increased from Rs.24,769 crore in 2007-08 to Rs.81,716 crore in 2016-17. The amount of Net NPA also increased from Rs.247 crore in 2007-08 to Rs.4.331 crore in 2016-17. Similarly, % of Net Gross NPA increased from 1% in 2007-2008 to 5.3% in 2016-2017.

The increase in Gross NPA has direct and negative impact on the profitability of banks. As with the correlogram, the computed cross correlation is an asymptotically consistent approximation as the means used in the computation are the overall means (Figure 2). Cross correlations are not necessarily symmetric around lag 0. The dotted lines in the cross correlogram are the approximate two standard error bounds computed as $\pm 2/(\sqrt{T})$.This hypothesis holds good for Scheduled commercial banks in India by means of calculating the correlation technique. The results of ratio of Net NPA to Net Advances with Profitability reveal that there exists a negative correlation to the extent. The reductions in the non-performing assets have an indirect impact on the profitability which shows the stringent collection mechanism followed by the banks by applying constant control over non-performing assets.

Ratio of gross NPA to total assets

Table 3 shows the relationship between Gross NPA and Total Assets; the results for testing the equality of variances for non-performing assets by Gross NPA and Total Assets using data in the work file “Grunfeld_baltagi_pool.WF1”. At 1% level of significance the F table value is 3.0. The F table value is greater than

Table 3. Influence of Gross NPA (Amount) and Gross advance on Gross NPA%.

S/N	Variables	Coefficient	SE	't' value	'p' value
	Constant	1.520			
1	Gross Advance	-0.467	0.000	-0.771	0.466^{NS}
2	Gross NPA (Amount)	0.001	0.000	11.089	0.000*
	R Value	0.993			
	R^2 Value	0.986			
	F Value	244.48*			

* - Significant at 1% level; NS, Not Significant.
The resulted equation is formulated as follows: Gross NPA % = 1.520 - 0.467 (Gross Advance) + 0.001 (Gross NPA (Amount).

Method	df	Value	Probability
t-test	18	1.797216	0.0891
Satterthwaite-Welch t-test*	15.13800	1.797216	0.0923
Anova F-test	(1, 18)	3.229987	0.0891
Welch F-test*	(1, 15.138)	3.229987	0.0923

*Test allows for unequal cell variances

Analysis of Variance

Source of Variation	df	Sum of Sq.	Mean Sq.
Between	1	13.12200	13.12200
Within	18	73.12600	4.062556
Total	19	86.24800	4.539368

Category Statistics

Variable	Count	Mean	Std. Dev.	Std. Err. of Mean
GROSS_N	10	4.070000	2.414332	0.763479
TOTAL_AS	10	2.450000	1.515292	0.479178
All	20	3.260000	2.130579	0.476412

Figure 3. Test for equality of mean between series of gross NPA to total assets.

F calculated value. F tabulated > F calculated, that is, 3.0 >1.8. The test statistics provide strong evidence of the presence of scheduled commercial banks, decisively rejecting the null hypothesis of equal variances and alternative hypothesis accepted (Figure 3).

As with the correlogram, the computed cross correlation is an asymptotically consistent approximation as the means used in the computation are the overall means. Cross correlations are not necessarily symmetric around lag 0. The dotted lines in the cross correlogram are the approximate two standard error bounds computed as $\pm 2/(\sqrt{T})$. This hypothesis holds good for Scheduled commercial banks in India by means of calculating the correlation technique. The results of ratio of Gross NPA to Total Assets with profitability reveal that, there exists a negative correlation to the extent. The reductions in the non-performing assets have an indirect impact on the profitability which shows the stringent collection mechanism followed by the banks by applying constant control over non-performing assets (Figure 4).

Ratio of Net NPA to total assets

Figure 5 shows the relationship between Net NPA and

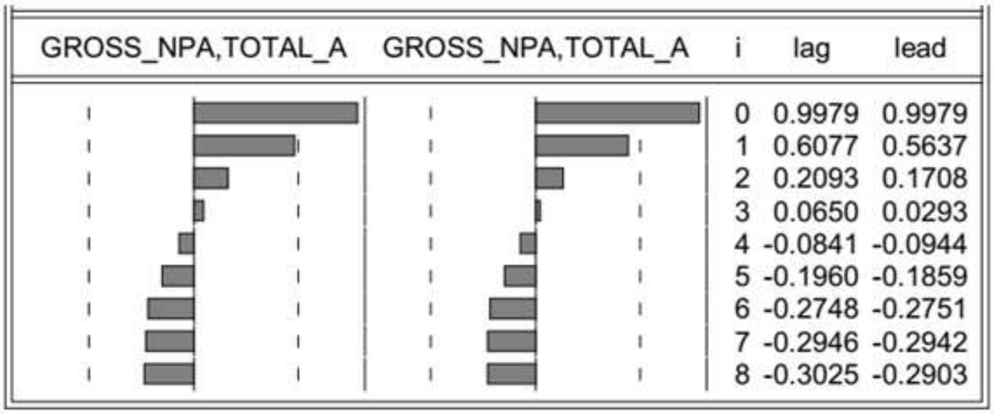

Figure 4. Cross Correlogram of Gross NPA and total assets.

Method	df	Value	Probability
t-test	18	1.611566	0.1245
Satterthwaite-Welch t-test*	14.38468	1.611566	0.1288
Anova F-test	(1, 18)	2.597144	0.1245
Welch F-test*	(1, 14.3847)	2.597144	0.1288

*Test allows for unequal cell variances

Analysis of Variance

Source of Variation	df	Sum of Sq.	Mean Sq.
Between	1	3.960500	3.960500
Within	18	27.44900	1.524944
Total	19	31.40950	1.653132

Category Statistics

Variable	Count	Mean	Std. Dev.	Std. Err. of Mean
NET_NPA	10	2.150000	1.513091	0.478481
TOTAL_AS	10	1.260000	0.872035	0.275762
All	20	1.705000	1.285742	0.287501

Figure 5. Test for equality of mean between series of net NPA to total assets.

total assets; the results for testing the equality of variances for non-performing assets by Net NPA and Total Assets using data in the work file "Grunfeld_baltagi_pool.WF1". At 1% level of significance the F table value is 3.0. The F table value is greater than F calculated value. F Tabulated > F Calculated, that is 3.0>1.61. The test statistics provide strong evidence of the presence of scheduled commercial banks, decisively rejecting the null hypothesis of equal variances and alternative hypothesis accepted.

As with the correlogram, the computed cross correlation is an asymptotically consistent approximation as the means used in the computation are the overall means. Cross correlations are not necessarily symmetric around lag 0. The dotted lines in the cross correlogram are the approximate two standard error bounds computed as $\pm 2/(\sqrt{T})$. This hypothesis holds good for Scheduled commercial banks in India by means of calculating the correlation technique. The results of ratio of Net NPA to total assets with profitability reveal that, there exists a negative correlation to the extent. The reductions in the non-performing assets have an indirect impact on the profitability which shows the stringent

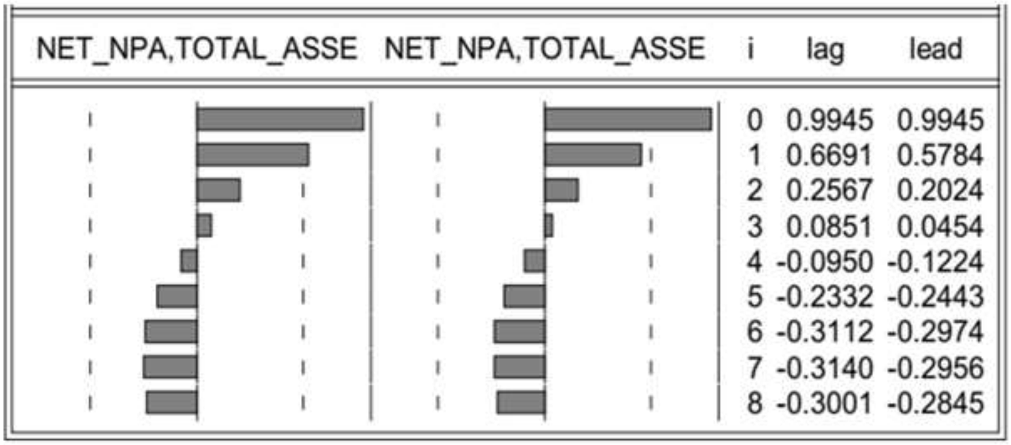

Figure 6. Cross correlogram of Net NPA and total assets.

Table 4. Influence of Net NPA (Amount) and Net Advance on Net NPA%.

S/N	Variables	Coefficient	SE	't' value	'p' value
	(Constant)	0.884			
1	Net Advance	-0.001	0.001	-0.979	0.360^{NS}
2	Net NPA (Amount)	0.001	0.000	10.281	0.000*
	R Value	0.990			
	R^2 Value	0.980			
	F Value	175.49*			

* - Significant at 1% level; NS, not significant.
The resulted equation is formulated as follows: **Net NPA %**=0.884- 0.001 (Net Advance) + 0.001 [Net NPA (Amount)].

collection mechanism followed by the banks by applying constant control over non-performing assets (Figure 6).

Regression analysis

Influence of gross NPA (Amount) and gross advance on gross NPA%

The relationship between the selected independent variables (Gross NPA (amount) and Gross Advance) and the dependent variable Gross NPA% has been found by using multiple regression analysis. The result of the independent and dependent variables using regression analysis is discussed in Table 3.

The multiple linear regression co-efficient is found to be statistically fit, as R^2 is 0.986 for Gross NPA%. The result clearly indicates that, the independent variables contribute about 98.6 percent of the variation in the Gross NPA% and this is statistically significant at 1 percent level. It is found from the analysis that; the gross advance is having negative association and Gross NPA (Amount) is having positive significant association. The resulted equation shows that Gross NPA% is predicted by 0.467 unit decrease of gross advance and 0.001 unit increase of Gross NPA (Amount).

Influence of net NPA (Amount) and net advance on Net NPA%

The relationship between the selected independent variables (Net NPA (amount) and Net Advance) and the dependent variable Net NPA% has been found by using multiple regression analysis. The result of the regression between the independent and dependent variables is discussed in Table 4.
The equation is formulated as follows:

Net NPA % = 0.884
- 0.001 (Net Advance)
+ 0.001 [Net NPA (Amount)]

The multiple linear regression co-efficient is found to be statistically fit, as R^2 is 0.980 for Net NPA%. It shows that the independent variables contribute about 98.0 percent of the variation in the Net NPA% and this is statistically significant at 1 percent level. It is found from the analysis that; the net advance is having negative association and Net NPA (amount) is having positive significant association. The resulted equation shows that Net NPA% is predicted by the 0.001 unit decrease of net advance and 0.001 unit increase of Net NPA (Amount).

Implications and future scope of study

The success of banking sector is determined by its profit and quality of assets. Though banks are providing various services like, lending, networks and generating employment to the public, its growth and survival depends on the quality of assets it possesses and the profitability position it holds. The greatest challenge for banking sector is the existence of Non-Performing Assets (NPA). NPA creates threat to the assets of the banks and for its survival by affecting its liquidity and profitability. Hence, it becomes essential to strengthen the financial systems in the developing economies and emerging markets. It is evident that, sound financial systems will assist in achieving economic growth through fund mobilization and utilizing them productively to transform various risks involved. The banking sector can improve their recovery process by focusing on large borrowers and they can implement some strict norms to solve this problem. It is the right time that, government should take some effective measures to improve the settlement of pending cases and banks can avoid mandatory lending to some priority sector. Thus, serious concern is essential on the part of NPA, otherwise it may collapse the profitability of banks and that in turn may affect the growth on Indian economy.

It is the onus on the concerned bank which has given the loan to tackle the problem of NPA. Therefore, the recommendations of Narasimham Committee which suggest that, the asset management companies or asset reconstruction fund must redress the NPAs to be reviewed. The use of technology will bring important change in the way banks manage their NPAs. Bankers may resort to Compromise Settlement or One Time Settlement for the recovery measures. Lok Adalats and Debt Recovery Tribunals are other ways for the recovery of dues as a part of NPA remedial measures. RBI may take actions against defaulters by publishing their names in Newspapers, broadcasting the information in media, which may enable other banks and financial institutions. Banks may prefer one-time settlement as a corrective measure and other existing ways to recover dues are Lok Adalats and Debt Recovery Tribunals. If banks found that dues are because of genuine reasons like, draught, floods or other natural calamities then they can restructure their plans accordingly.

Conclusion

It can be concluded that, non-performing assets on the profitability have an adverse impact on the scheduled commercial banks in India. The non-performing assets or bad loans are adversely affecting the world economy from time to time. This leads to crisis around the world. Now, the central banks are taking effective steps against the non-performing assets and they try to create a safe and productive banking sector. The study on NPA is the need of the hour and many authors had made efforts to study the performance of NPA and its impact on banking sector. In this paper the authors had tried to give critical view on NPA and try to give some possible solution to resolve the effect of NPA on banking sector. The increasing level of NPA can severely affect the banking sector. It was found from the study that, there was evidence for increase in the non-performing assets. The various analyses were used to find out the impact of NPAs on the profitability of the scheduled commercial banks. It was significantly related to the Ratio of Gross NPA to Gross advances and Ratio of Net NPA to Net Advances, Ratio of Gross NPA to Total Assets and Ratio of Net NPA to Total Assets is insignificantly related to each other. Thus, the profitability of the banks has reduced, due to rise in the non-performing assets of the scheduled commercial banks in India.

Limitations of the study and future research directions

NPAs are changing with the period. The study is done for the present period without predicting future advances. The study is restricted to the functioning of Indian Scheduled Commercial Bank, relating to its impact of NPAs on profitability. Thus, the important limitations are as follows: the data are collected for 10 years period from 2007-08 to 2016-17. The source for finding non-performing assets is taken from the annual reports and website of Reserve Bank of India. The findings need to be confirmed by further evidence in other foreign banks and then the rest of the world. Researcher should discover how the NPAs work across different banking sector. Future research may focus on causes and management of NPAs of Indian Scheduled Commercial Banks. Future research can also be conducted to know the performance based on the NPAs of banking sectors in India.

CONFLICT OF INTERESTS

The authors declare that they have no conflict of interest.

REFERENCES

Arora N, Ostwal N (2014). Unearthing the Epidemic of Non-Performing Assets: A Study of Public and Private Sector Banks. Management Insight 10(1):1-8.

Banerjee R, Mitra R (2018). Non-Performing Assets of the Indian Banking System: A Critical Evaluation. Asian Journal of Research in

Banking and Finance 8(6):1-16..
Batra S (2003). Developing the Asian Markets for Non-Performing Assets; Developments in India. In 3rd Forum on Asian Insolvency Reform (FAIR), Seoul, Korea, November, 2003. pp. 10-11.
Borbora RR (2007). Management of Non-Performing Assets (NPAs) in the Urban Cooperative Banks (UCBs), Reserve Bank of India. pp. 5-12.
Chaudhary M, Sharma M (2011). Performance of Indian Public Sector Banks and Private Sector Banks: A Comparative Study. International Journal of Innovation, Management and Technology 2(3):249-256.
Chijoriga MM (2000). The Interrelationship Between Bank Failure and Political Interventions in Tanzania in the Pre-Liberalization Period. African Journal of Finance and Management 9(1):14-30.
Chatterjee C, Mukherjee J, Das R (2012). Management of nonperforming assets -a current scenario. International Journal of Social Science and Interdisciplinary Research 2012(1):11.
Das S, Dutta A (2014). A Study on NPA of Public Sector Banks in India.
Kumar M, Singh G (2012). Mounting NPAs in Indian commercial banks. International Journal of Transformations in Business Management 1(6):1-6.
Manu KS, Maheshwari R (2018). Relationship between Non-Preforming Assets (NPA) and Profitability of Development Banks: The Case of India. Asian Journal of Research in Banking and Finance 8(6):99-111.
Michael JN, Vasanthi G, Selvaraju R (2006). Effect of Non-Performing Assets on Operational Efficiency of Central-Cooperative Banks, Indian Economic Panorama 16(3):33-39. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1735329&download=yes
Mir ZA, Jegadeeshwaran M (2013). Performance evaluation of private sector banks in India through camel approach. International Journal of Management, IT and Engineering 3(10):390.
Panta R (2007). Challenges in Banking: A Nepalese Diaspora. Socio-Economic Development Panorama 1(2):9-22.
Patidar S, Kataria A (2012). An Analysis of NPA in Priority Sector Lending: A Comparative Study between Public Sector Banks and Private Sector Banks of India. Bauddhik 3(1):54-69.
Ranjan R, Dhal SC (2003). Non-performing loans and terms of credit of public sector banks in India: An empirical assessment. Reserve Bank of India Occasional Papers 24(3):81-121.
Rajput N, Arora AP, Kaur B (2011). Non-performing assets in the Indian public sector banks: an analytical study. Retrieved from Banks and Bank Systems 6:4.
Parmar R (2014). Non-Performing Assets (NPAs): A comparative analysis of SBI and ICICI Bank. International Journal for Management and Pharmacy 3(3):68-72.
Sontakke RN, Chandan T (2013). Trend Analysis of Non-Performing Assets in Schedule Commercial Banks in India in International Journal of Applicastion or Innovation in Engineering and Management, Special Issue for National Conference on recent Advances in Technology and Management for Integrated Growth.
Swain RK, Sahoo M, Mishra AP (2017). Non-Performing Assets of Scheduled Commercial Banks in India. Its regulatory framework, Parikalpa, 154. Available at: http://ksom.ac.in/wp-content/uploads/2018/01/Parikalpana-13ii.pdf#page=160
Tandon D, Chaturvedi A, Vidyarthi H (2017). Non-performing assets and profitability of Indian banks: an econometric study. International Journal of Business Competition and Growth 6(1):60-76.
Tripathi LK, Parashar A, Mishra S (2014). A Comparative Study of Advances Contributing to Non - Performing Assets Between SBI Group and Nationalised Banks. International Journal of Marketing, Financial Services and Management Research 3(7):1-12.
Valliammal M, Manivannan SK (2018). A Study on Non-Performing Assets and Its Impact on Public Sector Banks in India.
Varma S (2018). The Burgeoning Problem of Npas in Indian Banking Sector and its Management. Zenith International Journal of Multidisciplinary Research 8(4):118-123.