Bad loans Problem in Indian PSU Banks: Impact of Selected Bank Specific Variables on NPA

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Abstract - Banks play very crucial role for the economic growth of a nation. Banks do not only deal with acceptance of deposits and extension of credit facilities but they also accelerate the growth engine of the nation. Indian banking system is not different in this context as they also extend the credit and accept deposits as banks of the other nations. Banks primarily deals in extension of credit through lending in various and diverse sectors belong to economy as per the lending policy and sometimes in meeting of the socio economic purposes of the country. Lending always carries a risk, widely known as credit risk. Credit risk arises when borrower of the advance/credit is unable to make repayment of such loan in form of principle or interest or both in the specified time period according to the guidelines for lending determined by the Reserve Bank of India. These loans which do possess magnified proportion of such risk are usually termed as bad loans. Bad loan problem has radically increased in Indian banking system during last couple of years. Though the Bad loans which is also articulated as NPA is allied with whole banking structure of the nation but the extent of the problem is more significant with Indian PSU Banks. An attempt has been made in this paper to explicate the problem of bad loan problem of Indian Public Sector Banks. Further, attempt has made in the present paper to investigate the influence of particular variables belong to Indian PSU banks such as advances, bank borrowings, reserves & surplus and total assets on Non-Performing Assets (Popularly known as NPA) of Public Sector banks in India. Movement of NPA belong to Indian PSU banks have also been analysed with the help of bar diagrams during 2003 to 2016. Study concludes with several recommendations/suggestions to cope up with the problem.

Key words: Bad Loan, Bank Specific Variables, Indian PSU Banks, NPA.

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INTRODUCTION

Banks are very important part of financial system of a nation as the banks mobilizes nation's savings and leading them towards better investment primacies for healthier use of financial resources. PSU banks occupies a big portion of the banking business in India. PSU Banks are the first form of banking institution having large volume of operations over a vast area. PSBs have very good net-work of branches even in rural and semi-urban areas. These banks do not only perform primary functions of banks viz. extension of credit facility and acceptance of deposit but also offers various financial services to the customers. Extension of credit facilities through lending is to be done to fulfil the socio economic purpose of country. Lending always carries risk, particularly known as credit risk. When borrower of the loan/advance is unable to meet its financial obligation till 90 days the loan is categorised as Non-Performing Asset.

Non-Performing Assets (NPA) is a severe reason of worry for Public Sector Banks of the country. NPA has increased with an alarming rate particularly in Public Sector Banks in recent past. There are various causes responsible for the problem of in PSU banks like aggressive lending in the past, slower economic growth, severe crisis in steel and aviation industry, wilful default, poor legislative system and lack of timely legal solution remained the most crucial reasons behind the mounting NPA. Although this problem (NPA) is also associated with private banks but the size of the problem is more significant with Public Sector Banks in India. Several bank specific variables like bank's borrowing, bank size have also contributed in the distressing level of NPA. Bad loan problem adversely disturbs the profitability of the banks and also reduces the operational efficiency and financial health of the banks. Entire loan portfolio of Public Sector Banks is under severe pressure as it has shown noteworthy rise in NPA (both gross NPA and net NPA). Banks has shown aggression

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in lending to non-priority sectors which has been observed as major cause behind sharp increase in the NPA level in PSU banks, further infrastructure sector, iron and mining business has undergone through severe pressure consequently NPA of public sector banks has shown a noteworthy rise in the recent past.

LITERATURE REVIEW:

Pooja Rana (2016) examined in her research titled "Analysis of Non-Performing Assets of Public Sector Banks in India" that A sharp rise in NPAs shows high possibility of a enormous figure of credit defaults that affects the profitability and net-worth of PSU banks and also obstructs the money of the banks consequently affects the liquidity in the economy. Analysis has been done on NPA Database during 2004-2014. She found several reasons behind mounting NPA viz. economic conditions, wilful defaults, diversion of funds and inefficiency of banks to manage credit risk. Author concluded that NPA of PSU banks continuously increasing in priority and non-priority sectors. Author suggested that Loan should be granted to different sectors as per the asset performance in various segments.

Vivek Singh (2016) analysed that the Economic Value Additions (EVA) performed by banks has become poor because of greater level of NPA. High provisioning negatively affects capital adequacy ratio (CAR) and profitability. Study was pursued on SCBs for the period of 14 years during 2000-2014. Author concluded level of NPA is rather high in PSU Banks, government should make more provisions for faster settlement of pending cases and also it should reduce the mandatory lending to priority sector and RBI should take rigid actions against wilful defaulters.

Banambar sahoo (2015) observed that Lack of solid supervisory framework, Political proclamations like debt relief and Socio-political pressures commercial credit decisions are the key reasons for augmented level of NPA in banking industry particularly in Public Sector Banks. Author also examined the main reason of NPA from the borrower's side like improper choice project/activity, Adoption of obsolete technology and inefficient management etc. author suggested that bankers should implement the corrective measures effectively. Further he suggested 3 'R' measures Rectification, Restructuring and Recovery to cope up with the bad loan problem.

Dr Sonia Narula and Monika (2014) analysed that deterioration of NPA is essential to increase profitability. Research shown relationship between Net profit and NPA of Punjab national bank during 2007-2012. Study examined that mismanagement by bank lead to higher NPA. Authors concluded that there is positive relation between Net profit and Non-Performing Assets of PNB due to wrong selection of

borrower. Further, it was suggested that banks should be very careful in selection of the borrower, close pre sanction appraisal and post disbursement assessment should be done by banks to control rising NPA in Indian bans.

Dr. Rohit R. Manjule (2013) observed NPA is a serious problem associated around the globe and Indian Banking system is not an exception to this universal phenomenon. He concluded that it is right time to take suitable and stringent measures to control the problem. A proficient and effective MIS Information System) (Management developed. Official and bank staff of loan department must be trained for the proper and close assessment of the borrower and series of evaluation of the documentation, charge of securities sanctioning the advances and they must be proactive to take essential measures in preventing advances turning into Non-Performing Assets and constant follow ups and monitoring of loans after disbursement.

Faizanuddin, Md and Mishra R.K. (2011) observed in their research that banking system needs to adopt several macro level changes in the norms of project financing, recovery policy and legal procedures. The research was conducted on SBI. Authors concluded that close supervision of NPA account will reduce the existing level of NPA.

Jayasree, M. and Radhika, R. (2011) examined that level of Non-Performing Assets has been drastically increased in new private and foreign banks during year 2005 to 2009. Study focused on sector wise comparison of lending in private banks and foreign banks during 2005 to 2009. Authors found that NPA negatively affects the profitability. Further, it was suggested that banks must follow RBI guidelines and prudential norms. Authors concluded that securitization and changes in laws would result in superior management of loan assets of banks.

Kamalpreet Kaur and Balraj Singh (2011) observed in their study that huge level of Non-Performing Assets shows great number of credit defaults in banks. This render hazardous impact on profit and operations on banks. Study investigated that alarming level of bad loans reflects poor financial health of banking system. Bad loan problem is a serious cause of concern for Indian banking system. Higher provisioning requirement arises due to high level of Non-Performing assets. Study explicates the extent of NPA, reasons and factors behind mounting NPA and its impression on the financial health of the banking system. Study also investigates that the bad loan problem is more serious in Public Sector Banks of India.

Shalu Rani (2011) investigated existing position of Non-Performing Assets in Indian SCBs. Author found the causes of the problem and remedial

measures to bring down existing level of Non-Performing Assets. She concluded that economic slowdown is the main reason for bad loan problem. Author observed that early recognition of the problem and tightening of norms for reduction of NPA. Credit risk can be mitigate up to certain level in banking business so bank must go with prudent decisions like following proper credit appraisal, monitoring and close post sanction.

Ekta Sikarwar and Roopak Kumara Gupta (2010) analysed that PSU banks of India are facing tuff competition from private banks. Authors explicated in study that financial fitness of a bank can be judged by its asset quality, if asset (loan/advances) quality is poor it would resulted into Non Performing Assets. Asset quality ensures ability of the bank to fight with the bad loan problem. Superior assets quality indicates that banks are performing well on credit risk matters/fronts.

Credit risk could be properly managed with accurate measures like right selection of the debtor, periodical follow-ups after sanctioning of loan and it will improve the quality of loan assets in banks and would help to diminish the alarming level of Non-Performing Assets asset quality of banks and will help to reduce the level of NPA.

RESEARCH OBJECTIVES:

- To investigate the influence of bank specific variables (selected) on Non-Performing Assets of Indian Public Sector Banks during the study period.
- To analyse trends of Gross NPA and Net NPA of Indian Public Sector banks during the study period.

RESEARCH METHODOLOGY AND DATABASE:

Present study is exploratory and analytical. Analysis has been done on the basis of available secondary data. Figures of Gross Non Performing Assets and Net Non-Performing Assets of public sector banks have obtained from publications of RBI particularly 'statistical tables relating to banks in India'. Time period from March 2003 to March 2016 have been considered as study period. Total 14 years data have been collected and considered for analysis. Public sector banks comprise State bank & associates and nationalized banks. Collected secondary data have been tabulated systematically in MS excel and the same has been imported and analysed through Statistical Package for Social Sciences version 20.0

Bank specific variables (selected) namely advances, bank borrowings, reserves & surplus and total assets (Bank size) have been considered as independent/self-governing variables and Net NonPerforming Assets of Indian Public Sector Banks during the study period considered as dependent variable. Impact of such independent variables on net NPA has been analysed through bivariate correlation and liner regression analysis. Movement of Gross and Net NPA of PSU banks during study period has been shown through bar diagrams. Secondary data related to aforesaid variables have been sourced through different annual and semi-annual periodicals of RBI viz. report on trends of banking in India, RBI bulletin and handbook of statistics on Indian economy. For measuring influence of independent variables on net NPA of PSBs (also known as PSU banks) following hypotheses have been formulated.

HYPOTHESES:

H₀₁: There is no significant impact of Advances on net NPA of PSU banks in India.

H₀₂: There is no significant impact of bank borrowings on net NPA of PSU banks in India.

 H_{03} : There is no significant impact of reserves and surplus on net NPA of PSU banks in India.

H₀₄: There is no significant impact of total assets (Bank size) on net NPA of PSU banks in India.

ANALYSIS AND INTERPRETATIONS:

Secondary data related to independent and dependent variables has been analysed with bivariate correlation and linear regression through SPSS 20.0 and results are tabulated as under:

Table-I
(Coefficient Values, Test of Significance and Comparison)

Variables	Regression Coefficients	Test of	Significance	Value of	Correlation Coefficient (r)
		P-Value	Significance	R-Square	
Advances	0.039	0.001	Yes	0.623	0.789
Bank borrowings	0.008	0.000	Yes	0.725	0.851
Reserves and surplus	0.463	0.000	Yes	0.661	0.813
Total assets	0.027	0.001	Yes	0.647	0.804

Source: Data analysis-Authors compilation through SPSS 20.0 version

Significant correlation (r=0.789) has been found between advances and net NPA of PSU banks of India which indicates that as advances or lending increased during the study period, NPA of PSU banks has also increased. Value of R-square indicates that advances can to explain up to 62.30 per cent variation in net NPA. P-value (0.001) indicates that there is a significant impact of advances on net NPA of PSU banks in India. Extension of more credit is a function of aggression in lending. During the study period it has been

observed that public sector banks has shown aggression in the lending and consequently advances has been increased and resulted as bad loans.

Bank borrowing has also shown significant correlation (r = 0.851) with net NPA of PSU banks. Value of R- square explicates that bank borrowing can explain up to 72.50 per cent variation in net NPA during the study period. P-value (0.000) shows that there is a significant impact of banks borrowing on net NPA of PSU banks during the study period. When bank's borrowing increases, liability of the bank towards repayment against that borrowing also increase but simultaneously potential of lending of banks also increases with influence of the borrowings, thus banks do extend more credit and consequently advances increases and resulted as Non-performing asset.

Reserves and surplus has shown significant correlation (r = 0.813) with net NPA. P-value is found significant means there is a significant impact of reserves and surplus on net NPA. Value of R-square shows that reserves & surplus can explain 66 percent variation in net NPA of PSU banks during the study period. Reserves and surplus considered as liabilities of the banks but it influence the potential of lending. When reserves and surplus increases, bank's advances also increase and advances has a positive correlation with NPA.

Total assets is significantly correlated (r = 0.804) with net NPA of PSU banks. P-value (0.001) indicates that there is a significant impact of total assets on net NPA of PSU banks. Value of R-square means that 64.70 per cent variation in net NPA can be explained by total assets. Total assets is considered as bank size, when bank size increases banks' NPA also increase.

For better understanding of movements of NPA of Public sector banks in India, entire study period has been divided into two time frames: (1) 2003-2009, (2) 2010-2016. Gross and Net NPA has been shown separately during the study period.

(I) Movement of GNPA of Public Sector Banks: Movement of GNPA of Public Sector Banks during the study period has shown in the below table:

Table: II

Movement of GNPA of Public Sector Banks As on 31 March (Millions)								
Year	Gross NPA	AGR	Year	Gross NPA	AGR			
2002-03	540860	-4	2009-10	599273	34			
2003-04	515380	-5	2010-11	746157	25			
2004-05	483994	-6	2011-12	1172620	57			
2005-06	413585	-15	2012-13	1644614	40			
2006-07	389684	-6	2013-14	2272643	38			
2007-08	404523	4	2014-15	2784679	23			
2008-09	449570	11	2015-16	5399564	94			
Average Annual Growth Rate(2003-09)		-2.89	Average Annual Growth Rate(2010-16)		44.36			
AAGR (2003-2016) = 20.68 % per annum								

Source: Statistical tables relating to banks in India

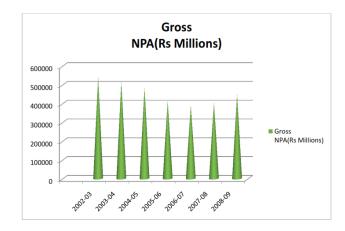
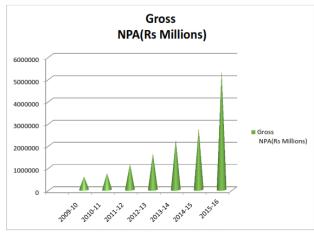


Figure I: Movement of GNPA in Public Sector Banks during 2003-2009



Movement of GNPA in Public Sector Banks during 2010-2016

Figure II: Movement of GNPA in Public Sector Banks during 2010-2016

Public Sector banks have shown negative growth in the Gross NPA during the first half of the study. The average annual growth rate remained -2.89% during 2003-2009. The GNPA amount as on March 2003 was 5, 40,860 million Rupees has become 4,

49,570 million Rupees in end of March 2009. On the other hand during the second half of the study period (2010-2016), the growth rate in GNPA has shown a noteworthy rise. Average annual growth rate of Gross NPA remained 44.36 % during 2010-2016. During entire study period (2003-2016) the average annual growth rate of GNPA has remained 20.68 % in the Public Sector banks in India.

(II) Movement of Net NPA of Public Sector Banks: Movement of Net NPA of Public Sector Banks during the study period has shown in the below table:

Table: III

Movement of Net NPA of PSBs As on 31 March (Amount								
Millions)								
Year	Net NPA	AGR	Year	Net NPA	AGR			
2002-03	249630	-11	2009-10	296434	40			
2003-04	188600	-24	2010-11	360546	22			
2004-05	169035	-10	2011-12	592052	64			
2005-06	145655	-14	2012-13	899516	52			
2006-07	153250	5	2013-14	1303615	45			
2007-08	178365	16	2014-15	1599511	23			
2008-09	211554	19	2015-16	3203758	112			
Averog	ra Annual		Average Annual					
Average Annual Growth Rate(2003-09)		-2.78	Growth		51.06			
			Rate(2010-16)					
AAGR $(2003-2016) = 24.13 \%$ per annum								

Source: Statistical tables relating to banks in India

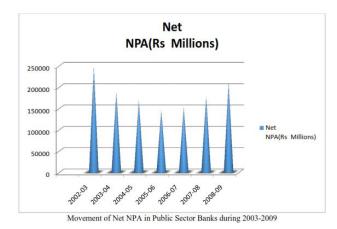


Figure III: Movement of Net NPA in Public Sector Banks during 2003-2009

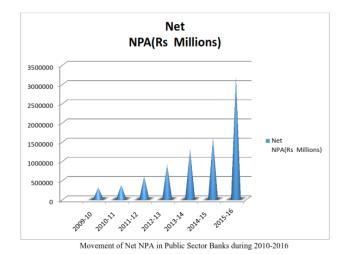


Figure IV: Movement of Net NPA in Public Sector Banks during 2010-2016

Public Sector banks have shown negative growth in the Net NPA during the first half of the study. The average annual growth rate remained -2.78% during 2003-2009. The Net NPA amount as on March 2003 was 2, 49,630 million Rupees has become 2, 11,554 million Rupees in end of March 2009. On the other hand during the second half of the study period (2010-2016), the growth rate in Net NPA has shown a significant increase. Average annual growth rate of Net NPA remained 51.06 % during 2010-2016. During entire study period (2003-2016) the average annual growth rate of Net NPA has remained 24.13 % in the Public Sector banks in India.

FINDINGS AND SUGGESTIONS:

After examining the level of NPA of Public sector banks, the research reveals that in 2003 PSBs of India contributed 78.74 % of Gross NPA of Schedule Commercial Banks (SCBs) of India. This later increased to 85.9% in March 2016. On the other hand Net NPA of PSBs was 83.83 % of the of SCB's Net NPA in 2003. This later increased to 93.94 % in March 2016. Level of Gross and Net Non-performing assets has drastically increased during the study period (2003-2016) in Public Sector Banks in India. For better understanding of the trends of Gross and Net NPA, entire study period has been divided into two time frames: (1) 2003-2009, (2) 2010-2016.

It has been observed that the average annual growth rate of Gross NPA was -2.89 % during the first half (2003-2009) of the study period on the other hand the average annual growth rate in Gross NPA remained 44.36 % during the second half (2010-2016) of the study period. During the entire study period (2003-2016) the average annual growth rate has remained 20.68 %. Average annual growth rate of Net NPA was -2.78 % during the first half (2003-2009) of the study period on the other hand the average annual

growth rate in Net NPA remained 51.06 % during the second half (2010-2016) of the study period. During the entire study period (2003-2016) the average annual growth rate has remained 24.13 %.

The reason behind tremendous growth in NPA in the second half is Global economic slowdown in 2008. Due to slower economic growth after global economic crisis most of the Projects/companies remained under stress and the borrowers could not make repayment of the loans/advances and because of the same level of NPA has significantly increased in the banking sector particularly in PSU Banks. Further, credit risk management practices were not that much effective in the second half of the study period than they were in the first half and because of the same first half of the study period have shown negative growth in the NPA. Major Portion of NPA in Public Sector Banks comes from Non Priority Sectors. Non priority sector lending comprises extension of credit into large and medium industries, loans to big corporate houses, commercial real estate and wholesale and retail trade etc. Major portion of NPA in non-priority sector contributed by telecommunication, power, steel, mining and infrastructure sector.

Net Advances is significantly correlated with Gross NPA (r=0.798) and Net NPA (r=0.789). When Net advance increases. NPA also increases. Aggressive lending practices in order to meet socio economic objectives and to meet the loan disbursement targets without proper pre-sanction appraisal and post sanction follow-ups along with ineffective credit risk management leads to Non-Performing Assets. Regression study highlighted that Net advance has significant impact on Gross and Net NPA of PSBs during the study period. Bank borrowings have a significant positive correlation with Gross NPA (r=0.861) and Net NPA (0.851). Although borrowings increase the liability of banks but simultaneously this variable influences the credit potential of the banks and consequently extension of credit increases. Hence when borrowings increase NPA also increases. Regression study exhibited that there is significant impact of Bank borrowings on NPA of PSU banks during the study period.

Correlation between Reserves and surplus of Public Sector Banks with Gross NPA (r=0.822) and Net NPA (r=0.813) is positively significant during 2003-2016. Reserves and surplus influence the advance of Banks consequently advances/loan increases and leads to fresh NPA of the Banks. Regression analysis showed the significant impact of Reserves and surplus on NPA of Public Sector Banks during the study period. Total assets (Bank size) is also significantly correlated with Gross NPA (r=0.813) and Net NPA (r=0.804) of Public Sector Banks during the study period. It implies that when bank's total asset increases bank's lending power also increases. It influences the advances of banks and leads to NPA. Regression analysis indicates that there is a

significant impact of Total assets of PSBs on NPA during the study period.

SUGGESTIONS:

Non-Performing asset is a serious disease badly affecting the banking system of India particularly Public sector banks. The loan asset quality is deteriorating because of the magnitude of the bad loan problem. Following are few suggestions which may help to reduce the level of NPA in Public sector banks in India.

- Public Sector Banks could not bear the brunt of economic crisis; there should be systematic framework of prudential procedures to minimize the risk associated with recessionary forces through which banks may reduce the risk of loan portfolio.
- Public sector banks in India should follow a selective approach for the extension of credit particularly in Non priority sector. Loans/advances must be granted on the basis of the credit worthiness of the borrower instead of Name and fame of the borrower.
- Public Sector Banks should also employ technical staff at periodical intervals to visit factory sites for on the spot study to obtain first-hand information on the progress of the project for which bank has extended credit.
- There must be proactive approach to mitigate the risk associated with loan/advance assets like diversification of credit portfolio, accelerate the frequency of visiting the project sites, effective use of market intelligence to gather accurate information about the borrower.
- Indian PSBs need to strengthen the existing credit appraisal system and they must emphasize to develop a cohesive lending policy framework with standard global practices of close pre-sanction approval and post sanction follow-ups.
- The study exhibited that the major cause behind NPA is wilful default. Due to wilful default, the borrower having potential to make repayment of loan do not repay the loan on time. The kind of problem can be administered by employing more human capital particularly in the credit department of the banks. Further, immense training must be provided to the officials and subordinating personals to deal such problem by facilitating close and frequent follow-ups to the borrower and accurate assessment of the execution of the project

 After implementation of the project for which credit has been extended by banks. Officials of the banks must monitor the performance of the project and compare with the target performance. Such kind of steps will enable bank officials to assess the risk associated with the project and it will help to determine the curative actions to ensure the mitigation of risk associated with the loan portfolio.

CONCLUSION:

The rise in level of Non-Performing Assets indicates the ineffectiveness of banking system to maintain their asset the quality of their loan/advance asset and it negatively affects the profitability and operational efficiency. PSBs faced larger asset quality implications owing to the fact that they were the prime lender to crucial and slowing sectors like power, iron, infrastructure and mining, and agriculture which got affected extensively during the subprime crisis in 2008.

Gross and Net NPA of PSBs is increasing with an alarming rate. It is requiring serious attention; there should be a united effort from the government and banking sector to cope up with the problem before it become out of control. Further the team of policy makers belongs to PSBs in India must pay attention on bad loan problem and take appropriate action to arrest the creation of new NPAs, besides putting efforts on the recovery fronts of existing NPAs. Effective and proactive actions are required at various level of management belongs to Public Sector Banks in India to overcome with the problem and ensure upcoming/future growth of the banking system.

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