

THE PRESENT SCENARIO OF NON-PERFORMING ASSETS IN INDIAN BANKING SECTOR – AN ANALYSIS

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Abstract: *Non-performing assets (NPA) makes up a huge chunk of the total assets of any bank and have become a huge burden on the banking sector. Many policies and procedures adopted over the decades have been responsible for this dismal state. NPAs have a negative effect on the financial position of any bank, especially on its liquidity, solvency and profitability. Their disclosure also affects the share prices in stock market and general perception of the investors. The present study tries to find out the state of NPAs of the Indian banks and how these have been impacted by various macroeconomic variables over the years. Pearson's Correlation Coefficient and trend analysis are used to analyze the data. The results show that the foreign banks and private banks are more efficient in credit management as compared to the public sector banks. It can be concluded that in terms of NPA management, privatization leads to better results.*

Key Words: *Asset Classification, Credit Risk, Default Risk, Indian Banking Sector and Non Performing Assets.*

Introduction

The assets of banks are divided into two broad categories namely Performing Assets and Non-performing Assets. When the borrower pays interests or installments of the loan in stipulated time, such assets are known as performing assets, whereas, when the interests or installments on loans remain due for a period exceeding 90 days, such assets are known as non-performing assets (NPA). As per the guidelines issued by the Reserve Bank of India, the assets of banks are classified into four major heads namely, standard assets, sub-standard assets, doubtful assets and loss assets. Of the four, the latter three are considered as NPAs by the banks. Non-performing assets are that part of the total advances which cannot be recovered by the lender. It arises when a portion of the loan or the entire loan leads to no recovery or partial recovery to the lender. It is the quantified portion of credit risk which has to be borne by the lender. NPAs represent a huge burden for any lender especially on the banking sector. The success of any financial institution dealing with loans and advances depends primarily on the methodology adopted in dealing with the NPAs. The better managed institutions keep the NPAs within their tolerance limits.

From a broader perspective, higher NPAs become an obstacle for economic growth or

prosperity of any nation and the Central Bank takes active interest in devising mechanisms to minimize the loss. In India, the recommendations of the Narasimham Committee (1991) led the Reserve Bank of India to comprehensively address NPA through the introduction of the 'Prudential norms'. The Reserve Bank of India advised the banks to identify their NPAs and ensure that the accrued interests on those loans are not recorded as income in the profit and loss account of the corresponding year. In the case of NPAs, the incomes are to be recorded on cash basis whereas; accrual basis of recording is followed in case of other incomes. It was further recommended that if a credit had been identified as NPA, accrued interest on such loan which is credited to profit and loss account on accrual basis must be cancelled through a reverse posting in the books of accounts. The volume of NPA acts as an indicator of the bank's operational efficiency, its financial stability and its long-term solvency. Each bank tries to minimize its NPA or keep it within a tolerance limit to ensure its reliability in the market.

Literature Review

Iyer (1999) made a comprehensive study of banking risks and observed that many risks are associated with banking business like risk of markets, risk of operation, risk of liquidity, risk of management, risk of credit, risk of interest etc. Among all risks, the risk of credit is the most threatening and can severely impair banking operations.

Hazarika (2019) found that NPAs have become a serious problem for the banking sector in India. The problem of NPA is faced by both public sector and private sector banks of India. An increase in the quantum of NPA becomes a serious threat for any economy as the effects of non recovery is spilled over to the whole economy in the long run. The results are not satisfactory till date in spite of many steps being taken by the Reserve Bank of India.

Vijai (2018) also found that NPAs have become a major problem in the Indian banking sector. The problems of bank's balance sheet are in sharp focus over the last two decades and this has adversely affected the economy. He suggested that the disclosure policies in balance sheets must be reviewed from time to time and adequate modifications be made to avoid crisis.

Rajput, Arora and Kaur (2011) stated that improper management of NPAs can deteriorate investment climate of an economy. Government intervention is needed to curb the misuse of lenient lending policies especially applicable to the priority sector which has given huge amounts of NPAs continuously over the years. The policies of compromise settlements have done no good and high levels of NPA become a serious challenge in implementing reform measures.

Agarwala and Agarwala (2019) found that the growth rate of NPA is low in the private sector banks as compared to the public sector banks. The issue of poor loans has been mismanaged by the nationalized banks and the associates of State Bank of India and the rate of growth of poor loans have been very high in these banks. The profitability and future prospects of these banks are hampered due to these poor loans and may be detrimental for the future.

Jain (2018) stated that if the NPA is recognized early, the adverse impact on the balance sheet may be mitigated to certain extent. The banks usually defer NPA recognition due to several reasons which further aggravates losses. To stop this, the legislation must be amended and made simpler in case of NPA recognition and its subsequent write-off. Proactive approach along with strong governance is advocated by Jain (2018).

Objectives of the Study

1. To analyse the trend and composition to NPAs of banks in India.
2. To study the interrelationship between non-performing assets and few macro economic variables.

Data Source, Sample Size and Research Methodology:

Data has been sourced from RBI's annual publication "Report on Banking" and RBI's online repository at dbie.rbi.org.in. General statistics on the Indian economy have been sourced from various official government websites. A sample size of 10 years has been selected for analysis, Financial Year 2007-08 TO 2016-17. Pearson's Correlation Coefficient and trend analysis are used to analyze the data. The study has used data analysis tool pack of Microsoft Excel.

Analysis And Interpretation

Trend And Composition Of NPA:

Data of Non-Performing Assets of public sector banks and private sector banks has been collected from the official database of the Reserve Bank of India and the same has been collated in the tables presented in this analysis. $\text{Gross NPA}\% = \text{Gross NPA}/\text{Total Advances}$.

TABLE 1: Trend of NPA And Gross NPA%

Year	Rs. In billion (Combined)		Gross NPA to Total Advances		
	Gross Advances	Gross NPAs	Com	Private sector	Public sector
2008	23,317	557	2.39%	2.33%	2.75%
2009	27,893	682	2.45%	2.10%	3.25%
2010	32,644	818	2.51%	2.28%	2.97%
2011	39,915	941	2.36%	2.32%	2.45%
2012	46,655	1,371	2.94%	3.17%	2.08%
2013	51,025	1,759	3.45%	1.91%	3.84%
2014	58,022	2,395	4.13%	1.88%	4.72%

2015	62,826	2,943	4.68%	2.20%	5.42%
2016	68,738	5,504	8.01%	2.70%	9.88%
2017	72,471	7,149	9.86%	3.51%	12.47%

Inferences

1. It was observed that over the years both gross advances and gross NPAs of the banks have increased.
2. The gross NPAs have increased at a higher rate than the gross advances as indicated by the rising gross advances to gross NPA ratio.
3. The gross NPA ratio of public sector banks has been higher than the private sector banks and the gap between the two is widening.
4. The analysis shows that over the years the banks have been ineffective in selecting the customers.
5. The assets of public sector banks are in greater stress than that of the public sector banks. This implies that ownership of bank i.e. public or private bank has an impact on the total NPA and ultimately on the profitability of the bank.
6. The banking sector has expanded over the years as indicated by the rising advances but the expansion has not been managed effectively as indicated by the rising Gross NPA ratio.

Priority sector lending is major contributor to increase in NPAs in public sector banks. The public sector banks by providing loans and advances to these sectors, contributed significantly to the socio-economic development of the country. Therefore, banks should make their efforts to manage and reduce NPAs but not the advances in these sectors.

Share of Priority Sector NPA for a year = (Priority Sector NPA/ Total Gross NPA)*100

Share of Non-Priority Sector NPA for a year =(Non-Priority Sector NPA/Total Gross NPA)
 *100

TABLE 2: Share of Priority Sector and Non-Priority Sector NPAs

Year	Priority Sector		Non-Priority Sector		Total (Rs. In Billion)
	Amount (Rs. In billions)	Ratio (%)	Amount (Rs. In billions)	Ratio (%)	
2008	357	64	200	36	557
2009	377	55	305	45	682
2010	443	54	375	46	818
2011	548	58	393	42	941
2012	691	50	680	50	1,371
2013	721	41	1,038	59	1,759
2014	852	36	1,542	64	2,395
2015	1,009	34	1,934	66	2,943
2016	1,383	25	4,122	75	5,504
2017	1,676	23	5,473	77	7,149

Inferences

1. The absolute amount of NPAs in both priority and non priority has increased over the years.
2. The share of priority sector NPAs have declined from 64% in 2008-09 to 23% in 2017-18. Consequently, share of non-priority sector has increased from 36% in 2008-09 to 77% in 2017-18.
3. Contrary to public perception it is the non priority sector which is contributing to rise in Non-Performing Assets. The rise in NPA of the priority sector is alarming and needs to be addressed.
4. Non priority sector advances became the majority contributor to the non performing assets after the 2012. It is to be noted that there was growth recession in 2012 in India which impacted the manufacturing and service industries. This could be one of the reasons for this steep rise in non priority sector NPAs.

Correlation Between NPA And Macroeconomic Variables

In this part of the analysis four macroeconomic variables have been considered to analyse their correlation with Non-Performing Assets: -

- **Exchange Rate:** Weakening of rupee vis-à-vis dollar is a sign of weakness in economy. Rise in Rs/\$ exchange rate shows that the demand of dollar has increased over time, implying that the country has been importing goods rather than becoming self sufficient. A rising demand for imports implies the goods produced domestically are either of inferior quality or are expensive due to inefficiencies in production. This will lead to slowdown in economy and slowdown in repayment of loans.
- **Fiscal Deficit:** A sustained rise fiscal deficit is an indicator of weakness in the overall economy. A rising fiscal deficit directly implies that the government has been borrowing to meet its expenditure. An increase in government borrowings has a domino effect and leads to increased borrowings in the economy as well. As time passes this becomes a debt trap leading to bad loans
- **Interest Cost:** Interest Rates in the economy directly impact the amount of money borrowed. A rising interest rate would imply a rise in cost of borrowing leading to difficulty in repayment of the borrowed funds.
- **Inflation Rate:** The impact of inflation on Non Performing loan is difficult to identify. On one hand it will help to pay off the debts by lowering the real cost of debt. On the other hand it might have an adverse impact on the business especially in an agriculture dominant economy like India

- To find out if there is any significant relationship between the macroeconomic variables selected and the NPA amounts over the years, correlation analysis is performed.

Correlation Coefficient =

$$r = r_{xy} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \sqrt{\sum_{i=1}^n (y_i - \bar{y})^2}}$$

The value of coefficient of determination (r^2) has also been calculated. This value also gives us an idea about the strength of the correlation. Further the correlation obtained has been tested at 95% confidence using t-test and F-test. The critical values of the test have been obtained using Excel's Data Analysis Tool pack.

- **NULL HYPOTHESIS (H_0):** There is no significant correlation i.e. $r=0$.
- **ALTERNATE HYPOTHESIS (H_1):** There is significant correlation i.e. $r \neq 0$.

TABLE 3: Summary of the data used to perform the analysis

Year	NPA (in billion Rs.)	Exchange rate (Rs/\$)	Fiscal deficit (in billion Rs.)	Interest rate*	Inflation rate
2008	556.99	39.98	1464.35	7.00%	8%
2009	682.13	50.61	1425.73	4.50%	11%
2010	818.05	44.305	1269.12	4.50%	12%
2011	941.17	44.525	3369.92	6.75%	9%
2012	1370.96	50.955	4184.82	8.00%	9%
2013	1759	54.285	3735.92	7.50%	11%
2014	2394.83	59.965	5159.9	8.00%	7%
2015	2943.21	62.43	4901.9	7.50%	5%
2016	5504.48	66.255	5028.58	6.75%	5%
2017	7148.98	64.86	5311.77	6.25%	4%

*RBI repo rate has been used as a proxy for interest rate.

TABLE 4: Summary of the results of the tests performed

Factors	Actual Correlation(R)	R squared	p-value	Significance at 95% confidence interval
Exchange rate(Rs/\$)	0.846	0.716	0.0020	Significant
Fiscal deficit	0.736	0.541	0.0153	Significant
Interest rate	-0.126	0.016	0.7286	Not significant
Inflation rate	-0.826	0.682	0.0032	Significant
All 4 combined	N.A.	0.759*	0.0208	Significant

Inferences

1. There is a positive correlation between exchange rate and non-Performing asset. The value of correlation is 0.846.

The p-value is 0.0020 which is <0.05 . Hence the Null Hypothesis is rejected at 95% confidence interval i.e. there is significant positive correlation between exchange rates and Non Performing Assets.

The value of R squared is 0.716 implying that exchange rate has been able to explain 71.6% variability in the non-Performing assets.

2. There is a positive correlation between Fiscal Deficit and Non-Performing asset. The value of correlation is 0.736.

The p-value is 0.0153 which is <0.05 . Hence the Null Hypothesis is rejected at 95% confidence interval i.e. there is significant positive correlation between exchange rates and Non Performing Assets.

The value of R squared is 0.541 implying that exchange rate has been able to explain 54.1% variability in the non-Performing assets.

3. There is a negative correlation between interest rate and non-Performing asset. The value of correlation is -0.126.

The p-value is 0.7286 which is >0.05 . Hence the Null Hypothesis cannot be rejected at 95% confidence interval i.e. significant correlation between exchange rates and Non Performing Assets may not exist

The value of R squared is 0.016 implying that exchange rate has been able to explain 1.6% variability in the non-Performing assets.

4. There is a negative correlation between Inflation Rate and Non-Performing asset. The value of correlation is -0.826.

The p-value is 0.0032 which is <0.05 . Hence the Null Hypothesis is rejected at 95% confidence interval i.e. there is significant negative correlation between exchange rates and Non Performing Assets.

The value of R squared is 0.682 implying that exchange rate has been able to explain 68.2% variability in the non-Performing assets.

Conclusion

Several policy implications can be gleaned from the analysis. Firstly favourable macroeconomic conditions facilitate in NPA management. This therefore calls for the need to have supportive macroeconomic environment within which bank operate if non – performing

loans are to be effectively monitored and lowered overtime. Secondly Priority Sector lending by banks is found to be not much significant in contributing for NPAs in contrast to the perception of some urban bankers that Priority Sector Lending cause NPAs. This supports the contention that branch expansion in rural and semi urban areas for extending priority sector credit is a viable proposition and there need not be aversion on this by the policy makers as well as the industry heads. Finally the recovery of NPAs through various channels has been improving in absolute terms but banks have been taking severe haircuts. The government has legislated the Insolvency and Bankruptcy code, 2016 to facilitate speedy and robust recovery of Non Performing Loans. Whether this new legislation will be a success or not, only time will tell. The above findings infer that better credit risk management practices need to be taken up for bank lending. Adequate attention should be paid to those banks with low operating efficiency and low capitalisation as also to macroeconomic cycles that appear to be playing a role in NPA management.

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