



Impact of government finance scheme on increase in NPAs of banks – A review

Mayank Dandhare

mayankgdandhare@gmail.com

Balaji Institute of Modern Management, Pune, Maharashtra

ABSTRACT

The financial structure of the country plays an important role in the development of the country. It saving and investment of all classes in the economy to create wealth. As banks earn money on the basis of interest provide on the loan amount and other schemes. As money lent by the bank have to be recover after particular time period of time. Sadly, sometimes it not goes by the path defined. Many borrowers fail to return money back to the bank in the form of interest on loan taken. So eventually it became non-performing asset on bank and it creates negative impact on the bank. The purpose of this study is to determine the pattern in growth of gross NPAs in banking industry as well as to determine which measures should be taken to save an asset from becoming NPAs. This is an exploratory study which is conducted by involving the data provided by government website data.gov.in. This study identifies the fact that impact of government finance schemes MUDRA on rising of NPAs of banking industry. It also gives solution on how banks should approach towards lending loans under such schemes such that it prevents the asset from becoming NPA in future.

Keywords: Non- Performing Assets (NPAs), Lending Loan, Negative Impact on Economy, Mudra (Micro Units Development and Refinance Agency)

1. INTRODUCTION

When we study about economics the first thing came into our mind is Money. Where did this money came from and why it is so important for individual to earn and spend money for his livelihood. The answer is money play a very important role in human life. In ancient times barter system was followed which were basically goods were exchange with other goods having equal value. But there seems to be inequality in trade. Man wants to calibrate all the need and wants in same unit. This leads to rise in Money exchange. Every individual when start to earn money, at first, he satisfies all his wants and need and then remaining amount he put in reserve where he can trust. This trustworthy place is called as Banks. Banking sector plays a vital role in financial system around the globe. The functioning should be carried out smoothly which ensures the healthy condition of an entire economy of the country. In the process of accepting deposits and lending money in form of loans, banks

make credit, which is called as Profit in terms of interest on principal amount. The funds received from the borrowers by way of interest on loan and repayments of principal are utilized for driving other economic resources. Sometimes this process might not carry out that smoothly as it seems which leads to creation of non-performing assets (NPAs). IMF point out that “India's financial sector is facing considerable challenges with high non-performing assets and slow deleveraging and repair of corporate balance sheets testing the resilience of the banking system and holding back growth” [1]

To boost the ‘Make in India’ initiative, government wants to give rise to entrepreneurial ideas amongst young generation. To promote this idea Hon'ble Prime Minister launched Pradhan Mantri MUDRA Yojana (PMMY) on April 8, 2015 for providing loans up to 10 lakhs to the non-corporate, non-farm small/micro enterprises by banks in India. Initially it was going well but after few years the scheme starts contributing non-performing assets figures of the banks.

“The failure of a loan usually represents miscalculations on both sides of the transaction or distortions in the lending process itself.”

Radelet, Sachs, Cooper and Bosworth (1998)

According to Reserve bank of India (RBI) because of 'Micro Units Development and Refinance Agency Bank (MUDRA) scheme the Non-performing assets (NPAs) rose to 126% in FY19. This information is covered by RTI filed by The Wire. This shows the poor practice of banks in terms of recovering money from customers. If any loan given is not generating money in the form of interest then it is a bad sign for the banks because their main source of income gets fail. 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, this time period is fixed which is 90 days. The loan EMI or loan amount repayment failed by customer for more than 90 days then it terms as Non-performing asset. They are further classified into three types of assets:

1. *Sub-standard asset:* If an asset has been non-performing for less than 12 months

2. *Doubtful asset*: If an asset has been non-performing for more than 12 months and
3. *Loss assets*: Assets where losses have been identified by the bank, auditor or inspector and have not been fully written off (not able to recover)

Under MUDRA scheme the money in the form of loan is lend to micro enterprises. Money in the form of loan lend by banks to customers were unable to recover at the time of repayment. This leads to creation of NPAs in banks and this whole situation becomes worst day by day.

This paper aims to analyzing the pattern of loans which became NPAs and what measure should be taken by government in schemes to minimize the loss regarding poor quality loans for business. By finding correlation between different attributes responsible for NPAs from the data we can come with solution with regards to these poor-quality loans.

2. RESEARCH PROBLEM

- This study focuses on the factors responsible for poor practice of banks in terms of loan lending to borrowers
- Reasons behind the bad loan eventually turns to become NPA
- By finding correlation between different attributes responsible for NPAs from the data we can come with some insights with regards to poor quality loans

3. RESEARCH OBJECTIVE

- Analyzing the pattern in growth of gross NPAs in banking industry form 2015-2019
- Identifying the factors which are responsible for the bad debts and how to save them from becoming NPA
- Identifying the government scheme which are responsible for increase in NPA and reasons behind the failure
- To determine which measures should be taken by commercial banks to save an asset from becoming NPA

4. HYPOTHESIS

H1 - As we accept alternate hypothesis, which states that Failure of government finance scheme has a significant impact on increase in NPA of Banks

5. REVIEW OF LITERATURE

The NPAs rising in the banking sector have become major concern in banking industry. Many researchers have published the papers on raising the NPAs and how to control it by various measures.

Karunakar et al. (2008) discuss the various factors that boost NPAs, their size, and their effect on Indian banking operations and suggest various measures to control the curse on the banking industry. According to Business Today by means of filing RTI complaint some figures have come out. The NPAs of loans issued under PM Modi's Mudra scheme leapt Rs 9,204.14 crore in FY 19 from Rs 7,277.31 crore in March 2018 to Rs 16,481.45 crore in March 2019(Business Today, 2019).

Sengupta and Vardhan (2017) have compared the two banking crisis episodes of post-liberalization 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. We had adopted Open economy policy and allow other nation to invest in our country for development. The authors are having the view that strong governance; proactive banking regulations and a strong legal framework for resolution of NPAs would help in solving the problem of NPAs of banks.

Abhijit Mukhopadhyay (2018) discuss on innovative solutions to India's NPA woes. In this paper they discussed the effect of GDP growth on NPA growth of the country and NPA growth and lending rates then composition of priority and non-priority sector of the country. The most important slowdown In Industrial credit growth due to accumulation of NPAs. 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 *Debts Recovery Tribunals (DRTs)* to be much better compared to the recovery through Lok Adalats and SARFASEI Act.

Varuna Agarwala, Nidhi Agarwala (2019) discusses the percentage wise contribution in NPAs of public as well as private sector banks in the country. Data also shows year on year growth rate of Gross NPAs in State Bank of India and its associates that is computes by researchers (p.5).

Numer P, Devika P (2019) discuss the correlation coefficient between the NPA and the Profitability ratio of the banks. In this research correlation ratio of IndusInd Bank is showing the positive relationship among the NPAs and Profitability of bank. The Positive ratio indicates that IndusInd bank is more stable in acquiring profit and funds in each sector of the loan distributions. The Reserve Bank of India (RBI) has decided to set up Public Credit Registry (PCR) an extensive database of credit information, which is accessible to all stakeholders of the firm who are willing to invest in the company. The Insolvency and Bankruptcy Code (Amendment) Ordinance, 2017 Bill has been passed and is expected to strengthen the banking sector, which is real, need of the economy (p.17).

Viral Bhatt, Bhoomi Parekh(2017) discussed the relationship between the situations that lead to the defaults in microfinance sector and reasons behind NPAs through correlation analysis. Basically, in correlation analysis two or more variables in the study was taken and with the help of matrix value the conclusion is made between various variables. In this study the correlation between Overall situations where income was utilized for other things vs Overall reasons for NPA in microfinance loan were studied successfully (p.12).

6. RESEARCH METHODOLOGY

A. Sampling techniques

In this study, a Judgmental sampling also called Purposive sampling is used which came under non-probability sampling technique. The research methodology adopted is exploratory research.

B. Sample size

Sample size for the study is 82. The study is limited to only Government finance scheme (PMMY), which promotes entrepreneurial ideas. For primary research a structured questionnaire was circulated online through Google forms for collection of data from target respondents. The study was conducted among the age group of 21 to 60, those who are having knowledge or experience on government finance schemes.

C. Statistical Tools

The secondary data collected is analyzed by Correlation and Regression test. Data visualization is done with the help of Tableau to prepare Lollipop chart. The primary data collected is analyzed by cross-tabs between various factors and Correlation using SPSS. The R square value states that how much percent of y is explained by x in the given data.

7. DATA ANALYSIS

Secondary Data Analysis

(Secondary data is taken from data.gov.in website of Government of India with reference to Reserve Bank of India. <https://data.gov.in/resources/details-loans-disbursed-under-pradhan-mantri-mudra-yojana-pmmyp-public-sector-banks-psbs>). As we are having Total Loan Amount Disbursed by top commercial banks and these loans converted into NPAs as on 31st March 2019.

Table 1: Correlations

		Loan Disbursed	NPA Amount
Loan Disbursed	Pearson Correlation	1	.918**
	Sig. (2-tailed)		.000
	N	21	21
NPA Amount	Pearson Correlation	.918**	1
	Sig. (2-tailed)	.000	
	N	21	21

Table 2: Secondary Data

Scheduled Commercial Banks (SCBs)	NPA Amount	Loan Disbursed
1 State Bank of India	2694.22	83621.57
2 Punjab National Bank	1605.13	19712.5
3 Bank of India	965.77	16834.68
4 Canara Bank	921.46	27704.88
5 Syndicate Bank	845.14	11468.92
6 Union Bank of India	546.71	11275.96
7 Bank of Baroda	522.99	13675.11
8 Bank of Maharashtra	449.66	6506.16
9 Allahabad Bank	382.15	8546.03
10 Indian Bank	355.92	7178.08
11 IDBI Bank Limited	310.33	6560.35
12 Corporation Bank	310.28	6123.39
13 Andhra Bank	295.1	8673.67
14 Central Bank of India	225.78	7868.63
15 Indian Overseas Bank	209.56	5968.09
16 Vijaya Bank	166.37	7634.81
17 Oriental Bank of Commerce	164.07	8043.31
18 UCO Bank	144.51	7583.04
19 Dena Bank	134.96	1859.35
20 Punjab & Sind Bank	123.86	2838.69
21 United Bank of India	109.47	4826.35

(*Amount in Crores)

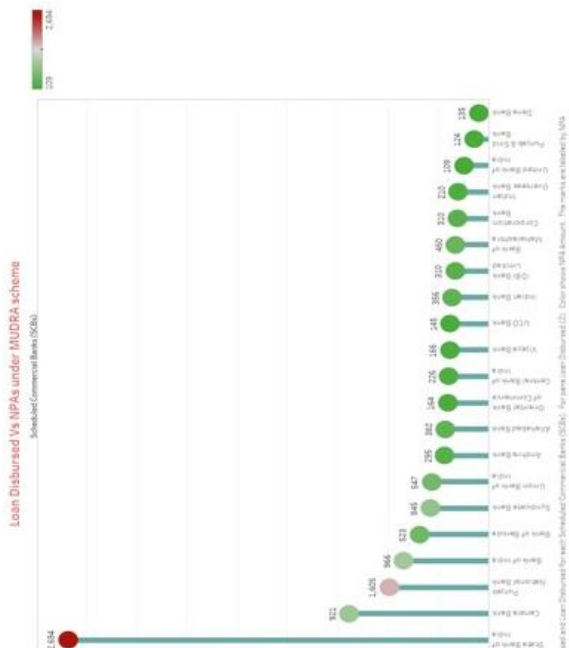


Fig. 1: Lollipop Char

Hypothesis Testing

Regression

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.918 ^a	.843	.834	250.902174	1.581

a. Predictors: (Constant), Loan_Disbursed

b. Dependent Variable: NPA_Amount

Interpretation: As R square is 0.843 which signifies that NPA amount signifies 84.3% of loan distributed.

Table 4: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	6398641.299	1	6398641.299	101.643	.000 ^b
Residual	1196086.119	19	62951.901		
Total	7594727.418	20			

a. Dependent Variable: NPA_Amount

b. Predictors: (Constant), Loan_Disbursed

Interpretation:

- As p value < 0.05, we reject null hypothesis and from above data our H1 is accepted which is Failure of government finance scheme has a significant impact on increase in NPA of Banks.
- As we can see there is high correlation between the two variables. We can say that with higher amount disbursed under scheme leads to increase in NPAs of banks under MUDRA scheme (figure no.11). Lollipop chart is showing as loan disbursed is high the chances of loan becoming as NPA is also high. Thus govt. should reform this finance scheme in the form of interest rate cut, collateral while taking loan and so on.

Primary data Analysis

The method of data collection is primary data collected via questionnaires. Survey research approach will be used, using questionnaires, and it will be analyzed using SPSS software. The statistical tool to be used for this study is contained in SPSS (Statistical Package for Social Scientists) so as to adequately verify information collected for this study.

Reliability and Validity Test

Table 5: Case Processing Summary

Cases	Valid	N	%
	Excluded ^a	0	.0
Total		82	100.0

Table 6: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.711	.720	6

Table 7: Inter-Item Correlation Matrix

	MURDA reform	Liquidity income capacity	Interest rate change	Fresh credit proposal	Ageing	Relationship borrowers
MURDA reform	1.000	.107	.005	.136	.248	.372
Liquidity income capacity	.107	1.000	.472	.463	.489	.191
Interest rate change	.005	.472	1.000	.447	.351	.167
Fresh credit proposal	.136	.463	.447	1.000	.532	.299
Ageing	.248	.489	.351	.532	1.000	.221
Relationship borrowers	.372	.191	.167	.299	.221	1.000

- No perfect multicollinearity
- Homoscedasticity- distance from best fit line should be in range
- Linearity

Table 8: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.741
Approx. Chi-Square	104.027
Bartlett's Test of Sphericity	
df	15
Sig.	.000

Table 9: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.588	43.126	43.126	2.588	43.126	43.126	2.353	39.220	39.220
2	1.218	20.297	63.423	1.218	20.297	63.423	1.452	24.204	63.423
3	.703	11.714	75.138						
4	.578	9.641	84.778						
5	.504	8.404	93.183						
6	.409	6.817	100.000						

Extraction Method: Principal Component Analysis.

Table 10: Rotated Component Matrix

	Components	
	1	2
Liquidity income capacity	.791	
Interest rate change	.770	
Fresh credit proposal	.768	
Ageing	.710	
MURDA reform		.860
Relationship borrowers		.756

Interpretation: As we can see that Cronbach alpha between 0.6 to 0.9 is considered to be good for data analysis.

- Cronbach alpha of above scale comes out to be 0.711 which is lying between the range, so scale reliable to data analysis.
- All the values of alpha are lies within the range, so scale satisfies the test of validity.

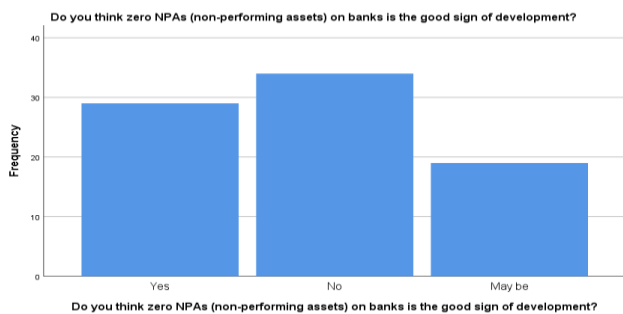


Fig. 2: Frequency chart

Interpretation: This question is about study. So, answer of this question is based upon field knowledge of the respondents.

Interpretation On the basis of rank question asked in questionnaire we came know that there are some important factors which respondents points out responsible for increase in NPAs under PMMY. Out of five factors, three important factors are responsible for growth of NPA's with reference to govt. scheme is

- 1) Default by Customer
- 2) Lack of Supervision
- 3) Political Influence is most important factor

Factor Analysis

As we have checked all the assumptions which should satisfy before performing factor analysis. These assumptions are

- No outlier
- Adequate sample size

Interpretation:

- As we can see that four constructs Liquidity and income capacity of bank, Interest rate change of loan given, Application for Fresh loan and ageing of loan given are in component 1 which signify that they are strongly correlated and relatively measures same component.
- Remaining which are MUDRA reform is necessary or not and relationship between borrower and banking officials are in component 2 of factor analysis.
- We can perform further analysis with the help of these two components which can be used in regression model and this come under future scope.

8. FINDINGS

- Maximum number of people willing to raise the capital for business by taking loan from bank
- Out of total loan disbursed most were unable to replay loan amount to bank with interest, this loan eventually becomes NPA on banks
- The loan amount disbursed and NPAs of different banks is compared in correlation co-efficient ratio to find the comparison among the two factors
- After performing Regression test, the p value comes out to be less than 0.05
- From above analysis we reject null hypothesis and came up with certain conclusion
- Failure of government finance scheme has a significant impact on increase in NPA of Banks

- The main reasons behind the asset being an NPA are Default by Customers, Lack of Supervision and Political Influence in decision making

9. SUGGESTIONS

- To prevent the asset from becoming NPA is very challenging task under government financial schemes
 - It requires preventive measures as well as reform in policy so that banks should not only take steps to reduce NPA but also take precautions to avoid future NPAs
- a) Verifying the background of applicant before approval of loan
 - b) Collateral should be mandatory for at least two types of loans in PMSY scheme (Kishor and Tarun)
 - c) Subsidy should be given on interest rates and renegotiation should be done of loan repayment tenure
 - d) Ageing of loan should be strictly monitored in concurrent audit
 - e) Timely sanction and disbursement of credit
 - f) Assisting borrowers in developing entrepreneurial skills
 - g) Banks should follow SLP (Security, Liquidity, Profitability) principal
 - h) Low expertise and lack of training amongst bank officials

10. CONCLUSION

- It can be concluded from the secondary data analysis that there is strong **positive correlation** between Loan disbursed under MUDRA scheme and rise in NPA figures
- More the loan disbursed under Pradhan Mantri MUDRA Yojana (PMSY) more will be the chances of becoming NPAs of Banks
- It can also be concluded from primary research that several other scaled factors also impact on rise in NPA of banks
- Thus, in order to reduce NPA, it is necessary to make **reforms** in rules and regulations as well as **eligibility criterion** of applicant under MUDRA scheme to avoid the situation that leads to NPA

11. LIMITATIONS

- Primary data collection was administered through telephonic interview and personal interaction with very few banking experts owing to **pandemic situation** due to this personal interaction was not possible at a desired count
- The respondents for primary data was **restricted to a specific domain** i.e. Banking and Financial field and respondents who are having knowledge related to government finance schemes are considered to be representative of the entire population

12. FURTHER RESEARCH DIRECTIONS

- In this study the NPA data is taken up to 31st of March 2019 because of data unavailability due to pandemic.

- To study the current trends of NPA under MUDRA scheme the current data at least up to 31st of March 2020 should be considered.
- Responses from the questionnaire should be taken from administrative class in the governing body of the finance scheme. This activity helps to get exact constructs which should be changed to improve the current scheme.
- In-depth interview of Banking experts should be taken which will help in getting not only current NPA trend but also measures to reform the structure of scheme.

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