

## A Systematic Review on Non-Performing Assets in Banks in India

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**Abstract:** Lending is a crucial part of financial sector that is Banks/NBFCs in India. It is main revenue generation business of Bank/NBFCs. Financial Institution i.e. Bank and NBFCs used to borrow funds from the market i.e. from other institution & public and then lend the same again to its clients to gain profits to its owners/investors. There were 27 Public Sector Banks in India (Incl. SBI Associates Banks) before announcement of merger of some Banks by Union Govt. Of India in the year 2019 and there are multiple other Pvt. Sector Banks and NBFCs, co-operative bank and regional rural bank which we studied in this paper. Lending business of the Banks/NBFCs is facing slowdown in recent years. Non-Performing Assets are increasing day by day which is creating big problem not only to financial sector i.e. Bank/NBFCs but also for other industries. In this paper we will systematically review the literature/articles already published on NPAs in India and to know the main reasons and factor which are responsible for rising NPA in financial institutions and to find out scope of further research on this topic.

**Keywords:** Non-performing Assets (NPA), Non-performing Loans (NPL), Bad Assets of Banks, Bad Debts/Doubtful Debts of Banks.

### 1. Introduction

NPA: We can describe NPA as Non-Performing Assets, stressed Assets & Loans. An asset/Loan becomes NPA when it stops to get revenue for the organization.

History of banks has been started from the Bank of Hindustan in India which has been established in the year 1770. SBI is the oldest bank from the live banks of India, it was form as Bank of Kolkata in 1806, and name has been changed to Imperial Bank of India in the year 1921, name again got changed to State Bank of India (SBI) in the year 1955. Non-Banking Financial Companies (NBFCs) has been started incorporated after independence, & in 1960s and then 14 Banks were first of all nationalized in the year 1969 and 6 more banks nationalized in the year 1980. Then in the year 1991 a nationalized bank i.e. New Bank of India got merged with PNB and total number of nationalized bank dropped to 19 from existing 20 in the year 1991. As of now government of India is in the planning of merger of banks and they have announced list of some banks which needs to be merger with each other and total number of nationalized bank to be reduced to 12 including SBI & its associate banks has already been merged with SBI. As of now a lot of Public Sector Banks, Pvt. Banks and NBFC are working in India, which have primary objective to earn profits through lending business.

Financial Institution i.e. Banks and NBFCs deals in multiple type of loans, These are Home Loan, Loan against property, Auto Loan, Business Loan, Personal Loan, Gold Loan, MSME Loans and Agricultural loan and other working Capital Finance Limits. All the loans have their different repayment terms, which start from 1 year to 30 years, and working capital limits which used to renew annually. Both interest and principal to be repay by client as per repayment terms in the form of EMIs, those loans on which repayment cannot come within certain period the bank, categorized as Non-Performing Assets.

These kind of assets/loans which/ are Non-performing rising day by day in the banks/NBFCs in India and that impacting the profitability of the institutions and raising problems to these institution as well as to the economy of the country.

### 2. Objectives

- To systematically review the literature/articles already published on Non-Performing Assets in India
- To find out reasons and scope of further research on this topic
- To know the major determinant of NPA in banking industry as NPA of financial institution in India is rising very fast which is creating issue for banks and Govt. and public of India.

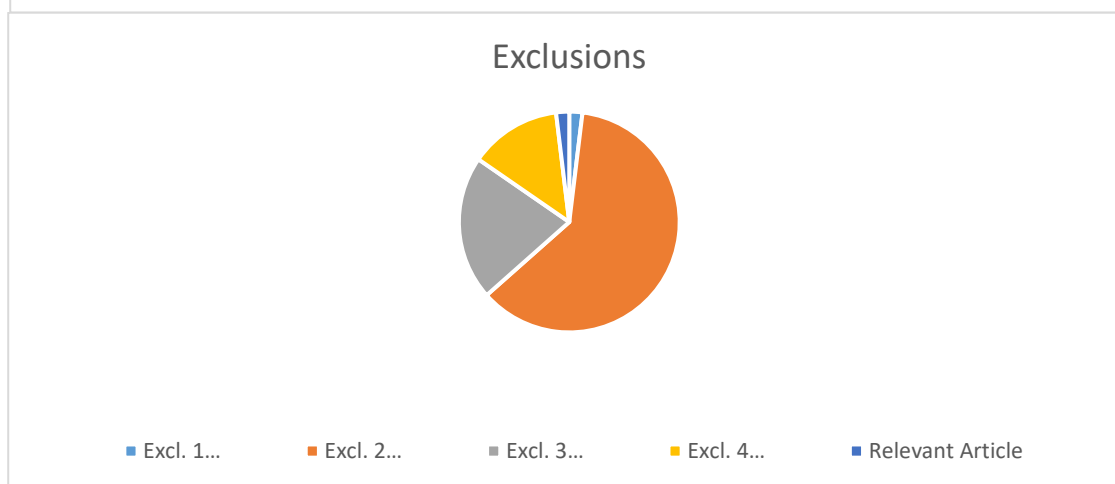
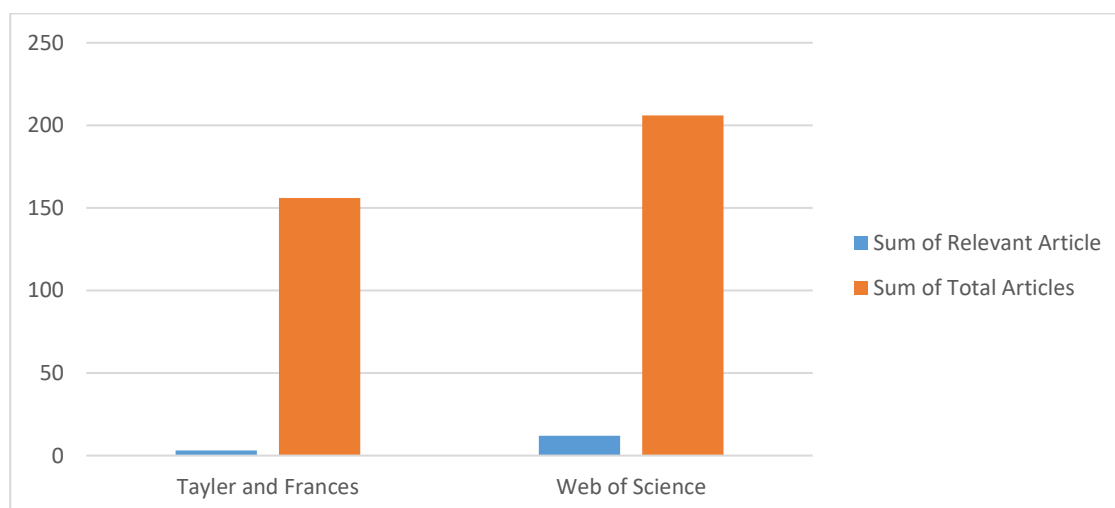
### 3. Literature Review

In this paper we have done review of 2 Data Houses i.e. Taylor and Frances and Web of Sciences. We found and reviewed total 362 papers from these 2 Data Houses. Then we have exclude and include papers bases some variables and we have exclude the 347 papers and finally we found that there is 15 papers written on this topic

Exclusion and Inclusion criteria/parameters mentioned below in details:

Sr. No.	Data House	Search by	Total Articles	Excl. 1 Case Study/Review Articles	Excl. 2 Irrelevant Articles	Excl. 3 Country of Study out of India	Excl. 4 Comm on	Relevant Article

1	<b>Taylor and Frances</b>	Key Word-Non Performing Assets	73	3	65	4	0	1
2		Key Word-NPA	11	0	8	0	2	1
3		Key Word - Non Performing Loans	34	0	8	24	2	0
4		Title - Non Performing Loans	32	0	15	0	16	1
5		Title - Bad Loans	6	0	0	5	1	0
1	<b>Web of Science</b>	Title - Non Performing Assets	32	12	0	7	2	11
2		Title - Non Performing Loans	150	42	0	106	1	1
3		Title - Bad Loans	24	8	0	16	0	0
	<b>Total</b>		<b>362</b>	65	96	162	24	15

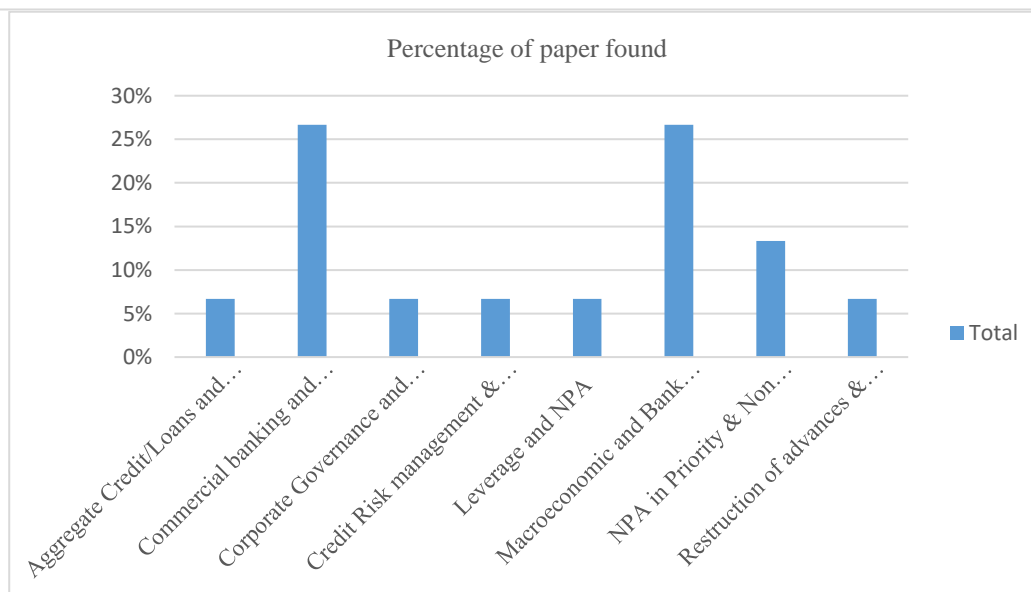
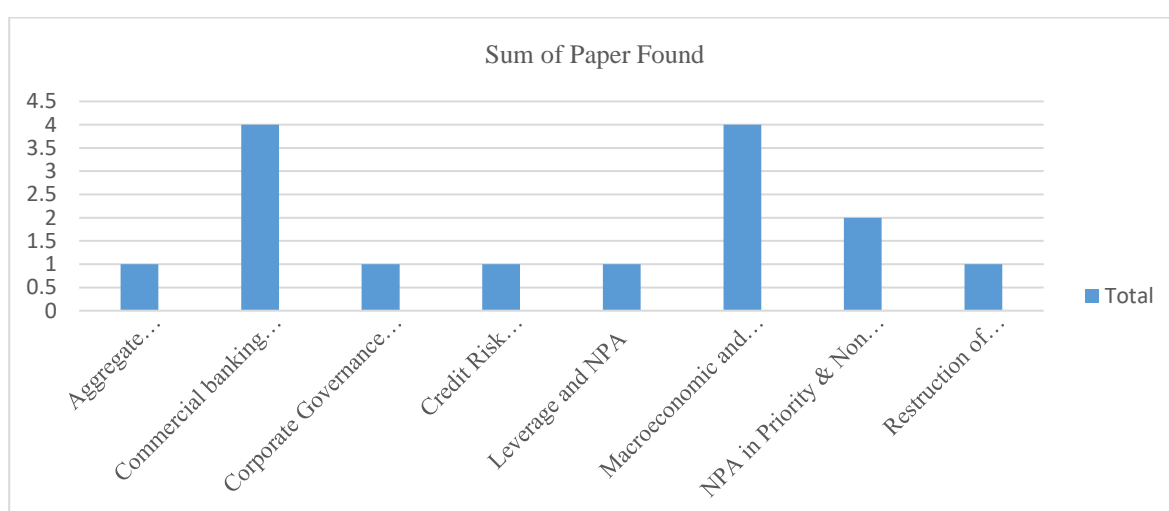


**Sector wise distribution of relevant articles:**

We observed that maximum study have been done in the area of comparison of PSB & Pvt. Banks in terms of NPAs which covers the 27% of the study and one another sector which equally contributed is Macroeconomic & micro economic i.e. bank specific determinants/factors of NPA which also covers 27% of the total papers published on NPA. Third largest sectors on which is maximum studies have been done is comparison of NPA in Priority & Non-Priority sector, which covers the 13% of total studies. Rest all 5 sectors contributed equally each which covers 7% of studies. The sectors on which least studies have been done are Comparison between aggregate portfolios of banks with NPA, corporate governance with NPA, Leverage of borrower or banks with NPA, restructure of loan with NPA and Credit & Risk management with NPA in Bank and financial institutions.

Sr. No.	Sector/Area Covered	Papers found	Percentage
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1	Aggregate Credit/Loans and NPA	1	7%
2	NPA in Priority & Non Priority Sector	2	13%
3	Macroeconomic and Bank specific determinants of NPA	4	27%
4	Corporate Governance and NPA	1	7%
5	Commercial banking and comparison of PSB wit Pvt.	4	27%
6	Leverage and NPA	1	7%
7	Restructure of advances & NPA	1	7%
8	Credit Risk management & NPA	1	7%
	<b>Total</b>	<b>15</b>	<b>100%</b>



A. Goyal, A. Sharma – studied the causes of credit and of NPAs with the use of a organization and panel of a organization with data till the year 2015 to check bank lending in comparison the total demand channel as an explanation for lower the credit growth in India. The study is about to answer the question that is the slow demand as key issue or credit lending policy is the reasons for rising NPA and to study the reasons for slow growth rate in India. This study shows total demand is more dominant than bank's credit policy for lending. Both the panel that is bank panel and firm level panel show that the main cause for slowdown in credit growth is low demand not the high Non-Performing Assets. Global demand was also affect advances of banks as well as NPAs. Total demand has been

reduced since the year 2011 due to fight with inflation. This have been enhanced NPAs & the reason to slow credit growth. The key structural changes in the positive direction needed to revive credit growth and demand in India.

D.Gaur, D R Mohapatra - Compared Non Performing Assets in the two sectors i.e. priority & non-priority in India. Study has been done on Secondary data of Non-performing assets on these two sectors i.e. priority and non-priority of banks in India & data has considered from the year 2012 to year 2017; It is observed that CAGR in NPA in priority sector have been risen at a lower rate in public sector banks in comparison to private banks and if we compare NPA growth in priority and non-priority sector then it is low in priority sector and high in non-priority sector. Situation in opposite in credit growth it is high in Priority sector for private & public sector banks both rather than non-priority sector. Study concludes bases regression analysis the difference is significant in NPAs in priority sector w.r.t. private & public sector banks. NPAs under priority sectors shown high relation with total advances in private sector banks. It conclude that more loans have been gone bad which are given by private banks to priority sector, against loans given by public sector banks. So we can say that, PSB have managed loan portfolio better of priority sector. Study also conclude that NPAs are higher in priority sector in comparison to average combined NPAs under priority and non-priority sector both. Hence, we can conclude that NPA contributed by the No-priority sector is lower than what is in priority sector, but priority sector is very crucial for country's economic growth & it cannot deny.

L. Memdani - Find the factors of NPA in banking industry in India, and to find out that how determinants vary in the 3 separate ownership structures which are, private banks, public sector banks & foreign banks in India. The data collected from the year 2005 to the year 2014 from the website of RBI, which the Central Bank & regulator of all banks in India. The facts shown that the factors which are Macro economic are significant in affecting NPA in PSB like inflation & log of per capita income. LPCY is strongly significant in Private Banks and none of the variable found significant in case of Foreign Banks.

NK. Sahu, M. Maharana, S K Choudhary - Analysis of rising issue of Non performing Assets under banking system in India & effect of practices of corporate governance on NPA Management. Findings shows that, the correlation of average WCG score is significant with net NPA ratio in PSB and it is also significant for value of mean WCG score on net Non Performing Assets in PSBs. Both correction & regression were opposite in private sector banks which is insignificant. But another finding is that correlation & regression both were found positive in all cases, which shows that Corporate Governance was being improving from last 6 years but it was not able to reduce NPA neither in private nor in private sector banks in India

M. Kuar, R. Kumar – Examine the NPAs in Priority Sector & Non Priority industry in the period of pre crisis and after crisis and to study relationship between Private & Public Sector Banks. To find significant difference during period of pre & post crisis between NPAs of Private & PSBs using statistical tools to data analysis like t-test & growth rate; Study discover that NPAs in priority sector was significantly higher in both private & PSB during period of pre-crisis but growth rate in NPA registered negative in both private & PSB in the period of post crisis. Growth rate of NPAs has been high in Pvt. Sector Bank in priority sector against PSBs. Analysis also discovered that NPAs in non-priority sector was reducing in PSB during pre-crisis period but Pvt. sector Banks was shown upward trend. Study concluded that overall effect of crisis observed significantly in 7 PSBs where NPAs of banks were significantly low in the period of pre-crisis but it has been increased significantly in the period of post crisis.

M. Kuar, R. Kumar - To study the framework of NPAs & effects of specific variable of bank on Non Performing Assets Sample of Ten banks has been taken from PSB basis size & sample taken by quartile deviation for period from 2001 to 2013. Data analyzed with panel data & used secondary data which have been collected from the many reports published by RBI; It shown, the specific factor of bank & determinant at macro level both affects the gross NPA of PSBs. In PSBs, independent variables like ROE, ROA, CDR, ROI and CAR have shown significantly negative impact on dependent variable that is gross NPA. It shows that if a bank has sound capital & strong margin that will reduce the NPAs. Factors at Macro Level have also proved the effect on bank's NPAs significantly. The result also shown that if there is rise in the supply of domestic currency, then Non Performing Assets of banking organization expected to go up. Hike in non employment in the country leads to negative impact income of persons who increases their obligation. Therefore tightening of loan rates increases problems for borrowers to repayment of loans, mainly to whom, who has borrowed the loans at variable rates. Highest WALR leads to lower NPAs & vice versa.

N.Arora,NGrover,K. Kanwar - Study is to check the hypothesis that Non-performing Assets have come at alarming condition in commercial banking in India where they have started impacting the technical efficiency negatively or not; It has been observed that the effect of NPA is significant on entire technical efficiency & its different components. The main source of poor efficiency is gap in technology that is structure, purpose of banking and setup in public, domestic Pvt. & foreign Pvt. Categories of banks.

N.Rizvi,S.Kashirmaka,S.Singh- To explore the factors of NPA from literature & then identify relationship between factors which are known. Observed interactions & interlinks between the factors of NPAs in banking industry in India. This defines that the main driver of NPAs is macroeconomic-political environment that increase the factors like implementation of international good practices & impact the pattern of ownership with others. This study has contributed by telling that how to use methodologies in analysis in operations research. So, this study can

be consider as a significant contribution to research regarding crucial problem of banking industry of India in current scenario.

P. Mahajan - To identify the trends of NPAs of Pvt., Public & Foreign institutions in banking industry in India & a comparative analysis of NPAs of different banks in India; Conclusion - The level of NPAs are improving in India. NPAs have reducing trend in the period of study, but NPAs of PSBs are more than Pvt. & foreign banks. Senior management of Pvt. & foreign banks are comparatively more professional, expertise & core competent rather than PSBs. Hence they are comparatively more competent in preparing plans and policies for the recovery of funds from the borrowers. PSBs need to advance loans to weaker section as per government instruction and the chances of recovery is very less there. NPAs of PSBs are in reducing trend but still more than Pvt. & foreign banks. As role of CIBIL SARFAESI has been increased which helps banks to fast recovery of debts.

S.Ghosh- Study the relationship of corporate leverage & banks' NPA on data on manufacturing industry in India from the year 1993 to the year 2004; Findings showed that leverage is a crucial determinant of NPAs of banks. It is observed 10 percent points up in company's leverage impacted a 1.3 Percent point up in bad loan related to loans.. An increase in cost of capital has 2 effects on NPAs: One is that, it motivate the banks to advance more, which decreases the NPA ratio due to increase in denominator. Second impact is that, it also increases borrowing costs of the borrower, which contribute to increase in the numerator, hence increase NPA ratio. The net effect shows that the second aspect dominates the former. Hence study suggest that the high leverage of banks is shown a negative impact on quality of assets. Study also showed that bad loans rises with increase in corporate leverage, higher the leverage leads to fail more. We can also say that there is a impact of the leverage on bank's quality of the assets.

S. Vardhan,R.Sharmam,V.Mukherji - Investigate function of specific determinants banks on Non Performing Assets in banking system of India, from the year 1995 to years 2010. Using CRAR & credit growth as alternate variables which is dependent and bank-specific variables as independent; Investigates significant effect of CRAR on Non-Performing Assets, which is in range of 10 to 12%, and after that level CRAR leads to decrease in Non-performing Assets. This finding also resembles observation by Berger & De Young in the year 1997, where raising in capital level in small capital banks results in reduction of Non-performing Assets in bank in United State.. However very high growth in credit may lead defaulted assets in an organization of developing country like India. Also observed that large banks especially PSB, plagued with more NPAs & counter states that large banking organization are even projecting comparatively good credit management system, strong financial status & therefore, likely to have smaller NPAs. Results of the study suggest that regulatory & monitoring framework is required to be strict & to have transparent auditing policies to reduce the NPAs. Commercial banks which have CRAR below the norms have reduced NPAs.

S.Chandran,K Alemelu - Study the trends in restructuring of loans of PSBs, through comparing restructured assets ratio of PSBs & Private Banks to examine the quality of asset. Data extracted from RBI's website & websites of other banks in India. Statistical tools has been utilized in analysis such as graphs, standard deviation, co-variance, percentages and ANOVA; Study investigate that the Restructured Standard Asset ratio of Public Sector Banks have been increased by 4.10% in the period of 2008 to 2016 & the ratio of Pvt banks risen by 1.10% & The ratio of bad asset of Public Sector Banks has raised by 11.4% in the period of 2008 to 2016 & the ratio of Pvt. Bank has been raised by maximum just 1.40%. Restructuring lead to reduction in NPAs of banks. Conclude that over the period there is an increase in restructured assets of PSBs. All the key ratios like impaired asset ratio & restructured assets ratio are showing the similar trend. Hence, suggested that bank should take supervision carefully on restructuring of their advances.

S.Sharifi,A.Haldar,N.Rao -Analyze the effect of risk of credit factors on the productivity of risk and credit management and the growth of non performing assets Indian banks; Shows that finding of risk of credit affects the performance of credit risk. Outcomes are too high identification of risk of credit is adversely related to per anum growth in NPAs. Found that expectation of comparatively better risk performance of credit of Pvt. Banks in comparison of PSBs.

S. Sharma,D D Rathore,S. Prasad – To know about information regarding Non performing assets to bankers & comparative analysis of their information about NPAs among PSB & Pvt Banks. To determine the reasons for assets to become as NPAs. To determine the status of NPAs in banks in last five years & also to know the schemes of default in loan in last Five years. To know main industries which helps in NPA. To find the determinants which are considered for appraisals of proposal of loan. 1. Study shows that the NPA norms are disclosed to both PSB & Pvt banks. So there is a requirement to monitor NPAs closely. Major reasons of NPAs are observed bank loan's miss utilization & lacks in recovery management & also poor of managerial skills in both PSB & Pvt banks. And the skills of the employees should be enhance so that they can take better decision while financial assistance to the clients. Also observed that NPA are increasing with high pace in PSB than Private Banks. The study shows that lending principles were not property adhered by both PSB & Pvt Banks which leads to enhance the bad loans. Suggests it is required to establish some responsibility at the top management level which also includes Board of Directors of institutes at least in high value loans to ensure proper adherence of principles of lending. There is also scope in Corporate Governance to improve for better Credit & operational decision

S. Sharma, D D Rathore, J Prasad - Attempt has made to make the comparison of selected PSB & Pvt Banks regarding increase in NPAs in this paper. The research bases Fresh Data which were gathered by “Questionnaire Method” from the bank staff.

#### 4. Theoretical Framework

An asset/Loan become NPA when stops to earn revenue to the bank

Kind of NPA/Stressed Assets

i. Standard Assets

Which assets are not classified NPA are called Standard.

ii. Sub- Standard Assets

When a loan remains NPA for less than 12 months, categorized Sub Standard. Bank has to maintain reserves of 15% in these assets.

iii. Doubtful Debts

When an asset remains NPA for exceeding 1 year.

iv. Loss Assets

Where asset has identified as loss by the auditor of the bank

#### Reasons of NPAs

**Willful Defaults:** When a borrower is not paying its debts to lender however borrower is able to pay their due obligation.

**Misuse of funds:** Some time borrower takes the loan for some other purpose and actually use the same for some other purpose from where they cannot earn sufficient funds to repay loans, like they takes funds for short run and utilize the same for long run, so that they cannot earn sufficient funds to repay short term obligation.

**Industrial Crisis:** It is an external reason which affects NPAs of the banks in the country. Sometime industry faced some issue in performance like real estate has faced issue in last 5 years, and real estate funding of the banks got in default.

**Lenient Lending Norms:** Leniency of the banks is also a major reason in increasing the number of NPAs. Aggressive funding for growth and due to cut throat competition in the banking industry are also the reasons for it.

#### Kind of Loans

##### Secured Loans

These loans which are funded against some assets of borrow which is called collateral assets, means backed by or secured by any assets of borrow, so if borrow fails to pay or loan gets NPA then bank can sell the asset and recover the loan.

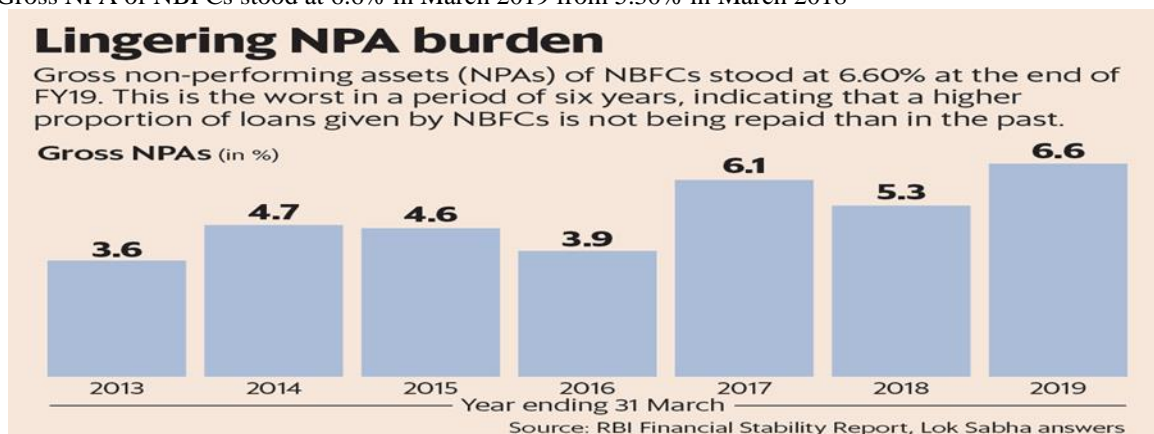
##### Unsecured Loans

When banks does not have charge on any of the assets of borrower

#### NPA scenario in India at present

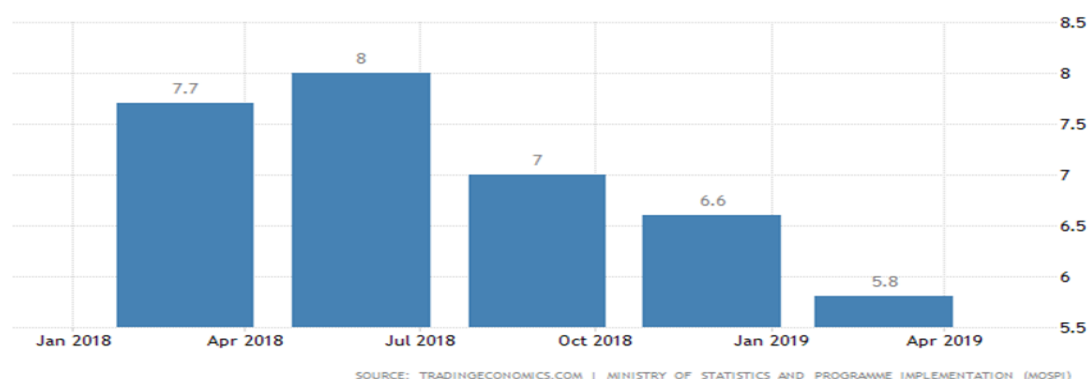
Gross NPA of Banks stood at 12.20% in March 2019 from 11.60% in March 2018

Gross NPA of NBFCs stood at 6.6% in March 2019 from 5.30% in March 2018



Economy Slowdown due to Bank Default and funding issue

#### Quarterly GDP Growth Rate of India in latest one year:



## 5. Conclusion

We found that there are only 15 relevant articles out of total 362 articles about NPA, Most of the studies found about the other countries, hence there is a scope of study of NPA in India

Some of the study worked on comparison of scenario of Non Performing Assets of Priority Sector and Non Priority Sector in India and find out that growth rate in NPA of Priority sector is less than of Non priority sector although growth in Priority sector loans is higher than Non Priority Sector in India.

Study has also done for comparison of NPA status of Public and Pvt Sector in India which shows that growth rate of NPA in Public Sector Banks in India is more than the growth rate of NPA in Private Sector Banks. Study has also conducted on co-relation between corporate leverage with chances of default/NPA, there is positive co-relation between the both when there is high leverage it will lead to more default or chances to fall the loan under NPA

Study also revealed that lending parameter has not been followed properly while appraising loans, that is also the main reasons of default/NPA

Most of the studies have been speak about the comparison of Public sector and pvt sector banks, co-operative banks, means kind of financial institutions, and some of the studies also study about the NPA scenario of kind of loans like Secured/Unsecured) but nobody or very less researcher has study that under which program (Eligibility method) there is high NPAs and under which eligibility program there is low NPA growth rate, so there is scope to research on the topic that how is institutions portfolio in separate kind of loans and how it behaved in separate eligibility program

Most of the study has been done for period of 5 years and most of study done till 2015 and there is a scope to do comparative study lending business of Banks/NBFC in India with respect to NPA for last decade i.e. from 2009 to 2019 which will cover 1 tenor of UPA2 (i.e. from 2009 to 2014) having PM Dr. Manmohan Singh and 1 tenor of NDA1 (i.e. from 2014 to 2019) having PM Mr. Narendra Modi.

Last decade is period of 10 years post global recession of 2008 and there is also scope of comparison of the NPA scenario in India in the previous decade i.e. 1998 to 2008 which is just previous decade of the global recession 2008. So here we can make comparison of latest 2 decades which will cover pre-recession and post-recession period and also compare the 2 period of the both central Govt. i.e. UPA and NDA

We also observed that max study have been done to compare of PSB & Pvt. Banks in terms of NPAs & covers the 27% of the total study & one another sector where equal studies has been done is Macroeconomic & micro economic determinants/factors of NPA which also covers 27% of the total papers published on NPA. Third largest sectors on NPA is comparison of NPA in Priority & Non-Priority sector, which covers the 13% of total studies. Rest all 5 sectors contributed equally each which covers 7% of studies. The sectors on which least studies have been done are- Comparison between aggregate portfolio of banks with NPA, corporate governance with NPA, Leverage of borrower or banks with NPA, restructure of loan with NPA and Credit & Risk management with NPA in Bank and financial institutions. Hence there is a scope for further studies in these sectors where as of now least studies has been done like, Like Credit & Risk Management Policy of Bank, determinants of NPA, Leverage of borrower a determinants of NPA, Corporate Governance in Banks with NPA. Some un touch sectors also observed are Trends of NPA & measure determinants of NPA in NBFCs in India, Trends of NPAs in Regional Rural Bank, Trends & determinants of NPA in co-operative banks in India, a comparative study of NPAs in India in PSB, Pvt Sector Bank, NBFCs, RRB, Co-operative Banks for latest decade and their measure determinants

## 6. Limitations

There are following limitation of the study:

1. We have taken 2 Data Houses for review i.e. (1) Web of Science and (2) Taylor and Francis
2. Total Articles found & reviewed in these data houses are only 362
3. We have reviewed on NPA in India only & excluded the scenario in rest of the world

## 7. Abbreviations

NBFC-Non Banking Financial Companies, NPA - Non Performing Assets, RBI- Reserve Bank of India, AQR-Asset Quality Review, CAR-Capital Adequacy Ratio, CAGR-Compounded annual growth rate, PSB-Public Sector Banks, WCG - Weighted Corporate Governance, ROE-Return on Equity, ROI-Return on Investment

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