

NON-PERFORMING ASSETS (NPA) AND ITS MENACE IN COVID -19 PERIOD: FACET OF INDIAN PUBLIC SECTOR BANKS

Sohan Singh Dagur

Research Scholar

School of Business & Management

The Apex University

Jaipur, Rajasthan, India

Abstract:

Banking sector performance can be measured easily by assessing the existence of bad loans such as if any asset could unable to provide returns for a specific period of time is known as Non-Performing Asset (NPA). Nowadays, most of the banks are facing with issues like bad loans and increasing frauds in large scale which results into critical imbroglio in public sector banks. After second Covid-19 wave across sectors, repayment capacity of borrowers was arising big spike and reporting sharp surges in stressed assets. This study aims at identify reasons on occurring non-performing assets in Indian public sector banks and to find out existing monitoring systems and credit appraisals to control its occurrence, additionally to examine the level of covid- 19 impact on NPA, and how it manipulated with appropriate measures adopted by Reserve bank of India. This research covers the period of 2019 to 2021 by collecting data and information from various secondary sources such as journals, articles, annual publication report from Reserve bank of India and another available index. However, some relief measures were provided to borrowers like moratorium on loan repayment, standstill on asset classification, and liquidity extended to borrowers under emergency credit line will enable to repay. Banks have raised equity through various modes resulted in capital adequacy ratio of scheduled commercial banks increasing from 14.7% to 16 % during March 2021. Periodically banks should assess its credit performance, asset quality and capital adequacy ratio will accelerate the efficiency of banking operations and reduce the occurrence of critical risks.

Keywords: Menace, Non-Performing Assets, Credit appraisals, Indian Public sector banks, Capital Adequacy ratio.

1. INTRODUCTION

In financial system, banking sector is considered as significant keystone and its healthy condition will enhance the nations economy. (*Varuna & Nidhi 2019*) Occurrence of financial crisis in banking sector can be reduced till to the extent by giving priority on regular monitoring, and evaluating bank performance as this can impact their productivity, operating efficiency, and profit. (*Hafsal et al. 2020*) Non-performance assets can cause big threat to all financial institutions since they highly incline on interest payments for income and economic downfall in country can lead to sharp increase in non-performing loans and eventually it results with

massive write downs, so increase in NPAs growth will affect bank profit and drastic changes in monetary policy. (*Preeti & Bansal 2019*) From Express Computer, part of Business-to-Business (B2B) unit published in an article, unveiled in order to control number of bad loans, frauds and other malpractice which support for the increase on non-performing assets in banks have resulted in critical imbroglio in Indian banking system.

BCT Digital global fintech company has initiated with “Real-time early warning systems for credit monitoring” which assist banks and financial institutions via innovative product to detect and prevent suspicious or fraudulent transactions which will pave a way to prevent credit risk monitoring and control in lack of due diligence before loan disbursal. Providing huge amount of loans to start-up firms and individuals will create a big challenge to banks to recover from them due to their acquaintance with any political holding or misuse of funds towards any activities will deteriorate banking stability on assets and its credibility. (*Syamala et al. 2018*) As per RBI Financial Stability report 2021, aggregate deposits of scheduled commercial bank grown by 9.7 % during June 2021 portraying current account and savings account (CASA) deposit grew faster than term deposits, feasibly reflecting propensity of savers to hold more liquid assets during pandemic circumstances. Bank credit increased by 5.4% year on year which was lowest in last four financial years and it remain subdued. Gross non-performing assets (GNPA) and Net non-performing assets (NNPA) ratio of gross advances settled at 7.5 % and 2.4% during March 2021.

Banks need to take precaution for recovery of loans and take appropriate measures on credit assessments by pre- and post-sanction of loan to avoid any faults and standard assets of NPA. (*Esha Jain et al. 2021*) Public sector banks will drive considerable improvement through by reducing net non- performing assets and slippages were reduced during FY20 and accepted levels are 1.9 – 2.4%. (*Anup Roy 2019*) According to Economic Times, RBI imposed penalty of Rs.56 lakh on Nainital Bank, Uttarakhand for non-compliance of certain norms related to classification of bifurcated bank report between reported and assessed, failure to disclose material divergence related to asset classification and its provisions despite exceeding defined threshold. Capital infusion play a vital role in manipulating lending rate and extended Rs. 70,000 crores to state run banks last fiscal year and government refrained from providing more capital in budget for FY21. Larger Public Sector Banks like SBI, Bank of Baroda, Punjab National Bank and Canara Bank were raised capital and smaller ones need government support and state-run banks need Rs.50,000– 60,000 crores in capital even after RBI breather on one-time restructuring of loans which was estimated by IcrA credit rating agency. (*Banikinkar 2020*) From RBI Financial Stability report, forecasted that gross non-performing assets have jumped from 8.5% to 12.5% during March 2021.

2. OBJECTIVES OF STUDY

- To identify the reasons of incur non-performing assets in Indian public sector banks.
- To study on existing monitoring systems and credit appraisals adopted by banks to control non-performing assets.
- To examine the covid-19 impact on public sector banks and manipulated measures adopted by Reserve Bank of India.

3. SCOPE OF STUDY

The purpose of study aims at providing rationale of occurring non-performing assets, loans and its appropriate measures adopted by public sector bank to control of its occurrence and find out the challenges and difficulties encountered during covid-19 period.

4. LITERATURE REVIEW

Contemporary study of Indian Public Sector Banks (PSBs):

As, per the Department of Financial Services, there are 12 public sector banks in India. After covid-19 impact on global economy its crisis was spurred towards Indian economy and gradually started limping towards normalcy. However, PSBs faced serious issues due to large non-performing assets and adequate measures like introduction of Insolvency and Bankruptcy code were supported to reduce the size of NPAs, necessary initiatives taken by government of India like introducing moratorium on repayment, loan waivers have exacerbated the situation. In terms of credit deployment, PSBs score is good and aggregate credit extended with share of Rs. 85.20 lakh crore (55.5%). (Swamy 2021) From the recommendation of Committee on Banking Sector Reforms (CBSR) to evaluate the bank's capability, there are some precise indicators been used by selecting seven parameters for assessing a bank's strength and weakness focusing on three major factors which are solvency, earning capacity and profitability.

(i) Solvency	(a) Capital Adequacy Ratio (b) Coverage Ratio
(ii) Earning Capacity	(a) Return on Assets (b) Net Interest Margin
(iii) Profitability	(a) Ratio of Operating profit to average workingfunds (b) Ratio of cost to income (c) Ratio of staff cost to net interest income (NII) +all other income

Conceptual Framework of Non-performing assets (NPA):

The concept of NPA came in India after reforms in the financial sector were introduced during 1991 by Reserve Bank of India to reflect a bank's actual financial health as per the recommendations made by Committee on Financial System headed by Shri. M. Narasimham. When an asset could not generate any income or returns for the bank during specified period of time is known as Non-performing Asset. It is classified by financial institutions for loans and advances in books of lender in which there is no payment of interest and principal have received and are past due. If an account remains overdue for more than one month, it indicates as red signal and if it remains overdue for more than two months, it will turn into NPA. Due to this reason, Reserve bank of India created with category of Special Mention Account (SMA) which exhibit sign of incipient stress from borrower default to pay their debt obligations within mentioned days.

SMA Category	Classification basis
SMA0	Overdue up to 30 days
SMA1	Overdue for 31 to 60 days
SMA2	Overdue for 61 to 90 days

As, per RBI guidelines, banks should classify their assets into Performing and Non- Performing Assets. Performing assets are Standard assets and Non-Performing assets are Sub- standard asset, Doubtful asset, and Loss Asset.

Performing Assets	
Standard Asset	Normal Flow of Income and bank hold only normal risk
Non-Performing Assets	
Sub-standard Asset	Do not generate income which default from 90 days to 2 years
Doubtful Asset	Account which default for more than 2 years
Loss Asset	Account which identified as 100% loss.

Asset quality is considered as significant indicators for financial health. Therefore, banks should put proper mechanism for early detection of signs of distress at individual account level and in segment level like asset class, industry, geographic and size etc. (*Dipesh shah 2020, Madhuri Thakur 2021, Debbarma et al. 2021*)

Empirical Study of Non-Performing Assets:

Non-performing assets is considered as vital issue among bankers and policy makers. Researchers have experimented with many studies to understand the cause of occurring NPAs and provided various solution based on their research to control and manipulate the occurrence of NPA.

Varuna and Nidhi 2019 examines that contribution of individual banks to NPA in the industry by looking into growth pattern during period 2010 – 2017 by using secondary data collected from Reserve Bank of India using geometric mean to arrive growth rate of gross NPAs and it reveals that growth rate of NPAs is low as compared to the nationalized banks as well as the State Bank of India (SBI) and its associates, further it provides with nationalized banks and the associate banks of SBI failed to handle the issue poor loans effectively due to which the growth in such loans has been phenomenally high.

Preeti and Atul 2019 have compared aggregate data of public sector and private sector banks and interpret the NPA management from the year 2010-2015 using least square method and ANOVA for statistical analysis and enable them to identify percentage of Gross NPA to Gross advances is increasing for public banks, the estimated gross NPA for 2014-2015 is also more in public sector banks as compared to private banks and concluded with ratio of gross NPA to Gross advances for public and private sector banks do not have significant difference between 2010 to 2015.

Sunita Sharma et al. 2020 analyzed the relationship between Gross NPA and profitability of banks to know the performance with respect to gross NPA by using sample as 8 public sector banks and 3 private

sector banks for the period of 13 years from the financial year 2006 -2019, statistical tools like descriptive method, correlation, t-test and ANOVA method were used for empirical research and identified with lack of transparency and hide particularly high value accounts which come under NPA was not classified, poor appraisal, pre and post disbursement of loans, ignoring delinquency especially in high value accounts, and poor follow-up affect financial performance of banks. NPA problem is mainly affecting Public sector banks, so strict measures need to be taken to tackle the problem of NPA.

Sudin Bag and Sajjil Islam 2017 makes a comparative study between India and Bangladesh banking sector to understand the concept of NPA, measure the trend, and analyze the impact of NPA on Return on Asset and Return on Equity on profitability for the study period of 2010-2011 to 2015-2016 using profitability as dependent variables and Net Non-performing assets to Net advances as independent variables. The trends of NPAs are found to be more stable during the study period for private banks in both countries whereas in public sector banks it has more adverse impact on profitability for both types of banks in India as well as Bangladesh and it creates more serious problems. However, management of public sector banks should take preventive action to minimize and control before the occurrence of NPAs.

Esha Jain et.al 2021 in their paper examines that influence of NPA on economic recital and analyze gross and net Non-Performing assets in public, private and foreign banks to assess the dependability, asset eminence and proficiency of banks by selecting with sample size of two banks from each public, private and foreign bank based on market capitalization for the financial year April 2015 to March 2020 and identified with positive association between total income and gross Non-performing asset and negative indication in total profit and gross NPA, because if there is increase in total income, NPA will increase but in contrary if NPA is increase profit will decline, so the banks should focus on proper credit risk management process to control NPA situation in country.

Vivek 2016 in his paper has discussed about the impact of NPA and how it can recover through various channels by collecting secondary data focusing with scheduled commercial banks for the period of 2000 to 2014 and identified with NPA impact can reduce earning capacity and affect return on investment, decrease book value in capital market, high provision requirement will adversely affect capital adequacy ratio and banks profitability, ineffective recovery, willful defaults and defective lending process will rise NPA in banks, so to manipulate these issues researcher recommended with RBI can revise existing credit appraisals and monitoring systems, should improve and strengthen loan recovery methods, RBI need to initiate action against defaulters like publishing name in newspapers and telecast in media will support in some extent to other banks and financial institution before their loan disbursal.

Mayur & Ankita 2015 conducted study to understand types, causes and analyze various NPA related ratios for aggregates of Public sector, Private sector, Foreign Banks and to test any significant differences between ratio of Gross NPA to Gross Advances for the period of 2009 to 2013 using secondary data and identified with ratio of sub-standard advances to Gross Advances for private banks is better than foreign bank from 2011 to 2013 and ratio of doubtful advances to gross advances having increasing trend for three different banks .

Hafsal et al. 2020 have examined the efficiency of the Indian banks in a two- stage network DEA (Data Envelopment analysis) model to understand the overall efficiency of the banks during its intermediation

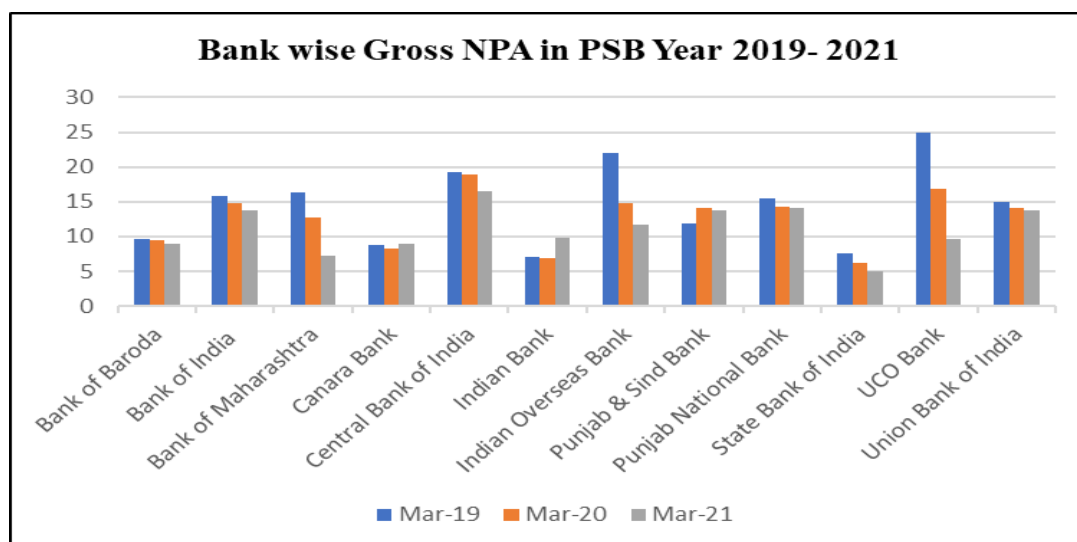
and operating stages, secondly by incorporating NPAs in the general two-stage DEA framework of Kao as an exogenous output in intermediate stage and quantifying level of improvement or loss in overall efficiency by using data from 46 banks for the period from 2014 to 2016 exempt foreign and cooperative banks identified with public sector banks have a more substantial efficiency loss due to NPAs and derived positive results in the future could be ensured by reducing the government „s shareholding in these public sector banks.

Shilpa Jain 2018 has recommended with accountability of chairpersons and other top management should well define and incentives given to employees should be improved. Concurrent audit system should be enhanced to indicate red flag the real time risks, to monitor transactions artificial techniques can be used to prevent financial fraud and to recognize stressed assets early by observing accounting transaction pattern, credit monitoring system and vigilant department should frequently inspect and find out any negligence attitude of enforcement authorize to penalize any malpractice activities initiated by employees.

5. RESEARCH METHODOLOGY

In order to ascertain financial health of banks there are some ratios are used such as Gross non-performing assets (GNPA), Provisioning coverage ratio (PCR), Capital adequacy ratio (CAR) and Net interest margin (NIM). Firstly, the Gross Non-performing Assets (GNPA) ratio of public sector banks has declined from March 2020 to March 2021 except Canara bank (8.21 to 8.93%) and Indian Bank (6.87 to 9.85%). Banks should improve the monitoring level and ensure quality of assets to be authentic before loan disbursal, slippage ratio and outstanding gross NPAs were declined due to this reason and GNPA ratio level was controlled. Banks use to maintain Provisioning coverage ratio (PCR) in order to face any losses occurred due to bad debts, and high level of PCR will benefit the banks to buffer themselves against losses if NPAs start increasing faster.

FIGURE 1



Source: Author Work

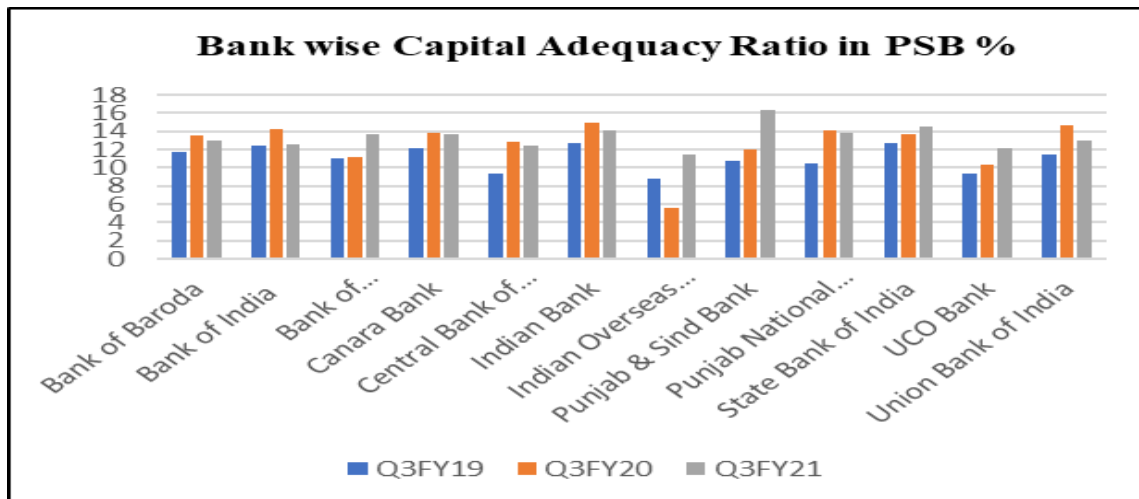
Table 1: Bank wise Gross NPA (PSB) in %

Public Sector Banks (PSB)	Mar-19	Mar-20	Mar-21
Bank of Baroda	9.61	9.40	8.87
Bank of India	15.84	14.78	13.77
Bank of Maharashtra	16.40	12.81	7.23
Canara Bank	8.83	8.21	8.93
Central Bank of India	19.29	18.92	16.55
Indian Bank	7.11	6.87	9.85
Indian Overseas Bank	21.97	14.78	11.69
Punjab & Sind Bank	11.83	14.18	13.76
Punjab National Bank	15.50	14.21	14.12
State Bank of India	7.53	6.15	4.98
UCO Bank	25.00	16.77	9.59
Union Bank of India	14.98	14.15	13.74

Source: Money Control

Capital Adequacy Ratio (CAR) is considered as significant factor to assess the ability and efficiency of banking system to ensure that banks can determine the level of its function, operation and shows its internal strength to bear losses during any crisis occurred. (Bahtiar Usman et al. 2019) As per Basel III norms stipulated a capital to risk weighted assets of 8%. Indian Public Sector Banks are emphasized to maintain a CAR at 12% as per RBI norms. From the below table, 3.0.2 Punjab & Sind Bank shows 16.39% which is good and high comparatively among others and lowest is Indian Overseas Bank with 11.49% in Q3FY21.

FIGURE 2



Source: Author Work

Table 2: Bank-wise Capital Adequacy Ratio (PSB) in %

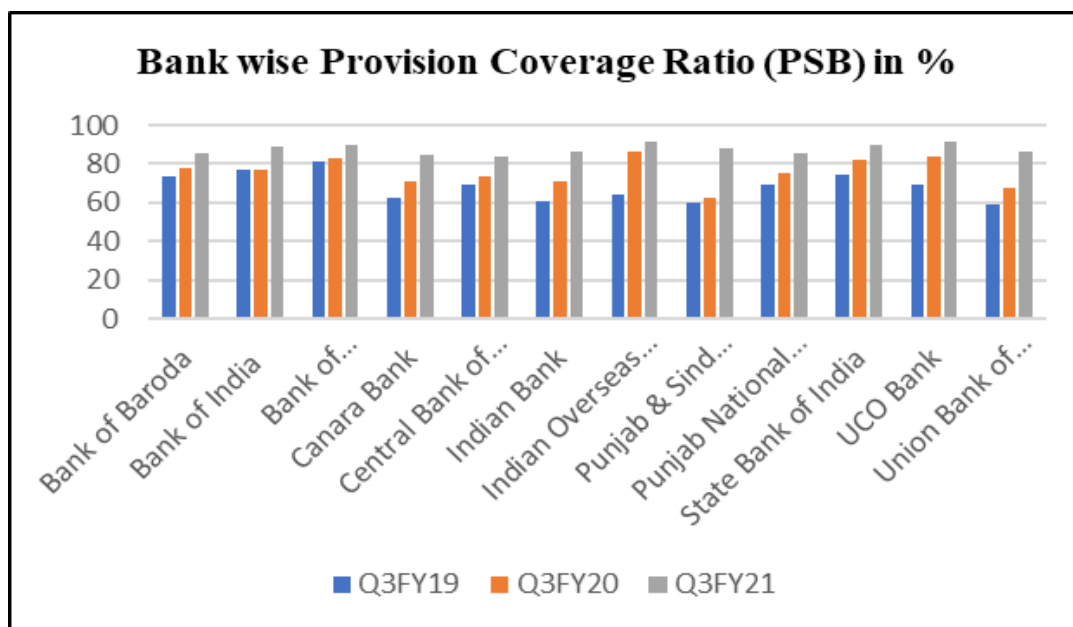
Public Sector Banks (PSB)	Q3FY19	Q3FY20	Q3FY21
Bank of Baroda	11.67	13.48	12.93
Bank of India	12.47	14.2	12.51
Bank of Maharashtra	11.05	11.21	13.65

Canara Bank	12.21	13.86	13.69
Central Bank of India	9.34	12.83	12.39
Indian Bank	12.67	15	14.06
Indian Overseas Bank	8.86	5.53	11.49
Punjab & Sind Bank	10.78	12.04	16.39
Punjab National Bank	10.52	14.04	13.88
State Bank of India	12.77	13.73	14.5
UCO Bank	9.33	10.27	12.08
Union Bank of India	11.43	14.71	12.98

Source: Ace Equity

The average Provision Coverage Ratio (PCR) of public sector bank stands at around 87.75% at Q3FY21 against 75.71% in the year -ago period reflecting an improvement in financial health of the PSBs. Of the 12 PSBs considered, Indian Overseas Bank has shown highest PCR as 91.9% and the lowest is Central Bank of India is 84.2%. A higher PCR can protect the bank against bad loans and sustain its ability to manipulate any financial crisis to some extent.

FIGURE 3



Source: Author work

Table 3: Bank wise Provision Coverage Ratio (PSB) in %

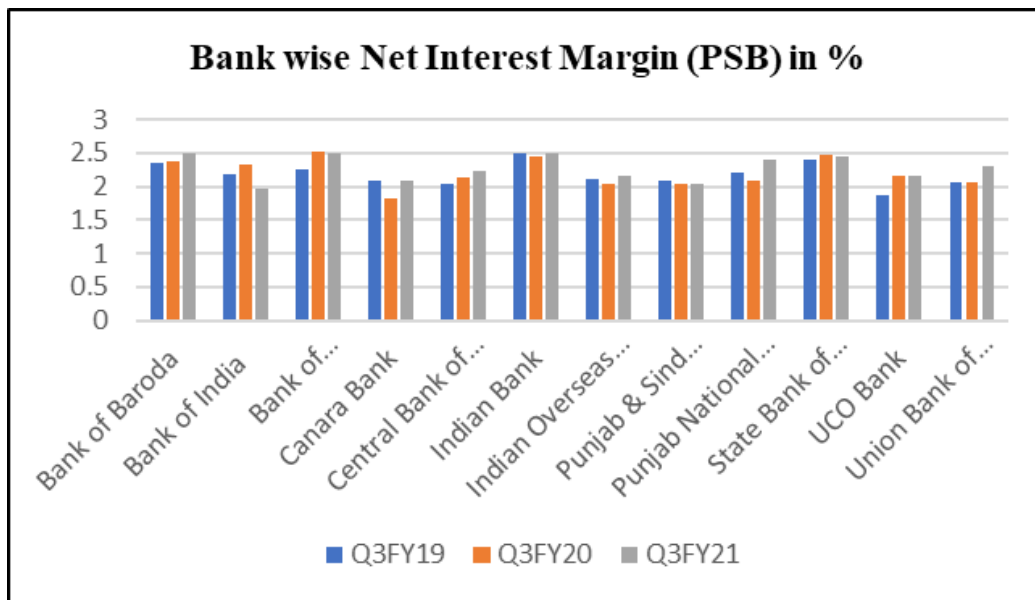
Public Sector Banks (PSB)	Q3FY19	Q3FY20	Q3FY21
Bank of Baroda	73.5	77.8	85.5
Bank of India	76.8	77.2	89.3
Bank of Maharashtra	81.1	82.6	90
Canara Bank	62.5	71	84.9
Central Bank of India	69.5	73.7	84.2
Indian Bank	60.9	70.8	86.5

Indian Overseas Bank	64.2	86.2	91.9
Punjab & Sind Bank	60	62.1	88
Punjab National Bank	68.9	75.3	85.2
State Bank of India	74.6	81.7	90.2
UCO Bank	69.5	83.7	91.2
Union Bank of India	58.8	67.4	86.2

Source: Ace Equity

Net Interest Margin (NIM) measure the differences between interest incomes earned by bank and interest it pays out to its lenders relative to the amount of their assets that earn interest. Of the 12 banks considered, Indian bank shows with high interest margin as 2.5% and the lowest with Bank of India as 1.96%. Therefore, banks can increase net interest margin by focusing more on liquidity matters, monitor cash equivalents area precisely and create platform for open communication and transparent information on its rates to their investors.

FIGURE 4



Source: Author work

Table 4: Bank wise Net Interest Margin (PSB) in %

Public Sector Banks (PSB)	Q3FY19	Q3FY20	Q3FY21
Bank of Baroda	2.36	2.37	2.49
Bank of India	2.18	2.32	1.96
Bank of Maharashtra	2.26	2.53	2.49
Canara Bank	2.08	1.81	2.08
Central Bank of India	2.04	2.14	2.23
Indian Bank	2.5	2.45	2.5
Indian Overseas Bank	2.11	2.03	2.15
Punjab & Sind Bank	2.09	2.04	2.04

Punjab National Bank	2.21	2.09	2.41
State Bank of India	2.4	2.48	2.44
UCO Bank	1.87	2.15	2.16
Union Bank of India	2.06	2.07	2.3

Source: Money Control

According to KPMG report, the significant impact of Covid-19 generated high instability and volatility in global market and financial sector is considered as one of the most affected with bank valuations dropping in all countries during the period December 2019 to April 2020. Due to health crisis, waiver on compound interest was granted by RBI on loan accounts opting for a moratorium during pandemic period and this has led the bank finance into prospect pressure. RBI initiated with various measures to reduce the burden by infusion of liquidity and maintain adequate liquidity in financial system by easing out the financial stress, extending deadlines, and amending limit on group exposures and relaxation of guidelines for consolidated sinking fund of state governments. (Abir Lal & Arshi 2020)

6. FINDINGS

Indian Public Sector banks has gradually increased average level of capital adequacy ratio from 12.57% in Q3FY20 to 13.37% in Q3FY21, PCR with 75.79% in Q3FY20 and 87.75% in Q3FY21, NIM with 2.20% in Q3FY20 and 2.27% in Q3FY21 except GNPA with 12.6% in Q3FY20 and 11.09% in Q3FY21 which shows good sign of controlling the occurrence of bad loans and also will support country's economy to get stable at some extent. Before the commencement of nation-wide lockdown government has premonition that most overwhelming challenge on its way and provides banking fraternity to prepare and aware necessary measure to face any kind of hurdle which may come in future. RBI has targeted with term repos for up to three years tenor by conducting auction and injecting around 50,000 Crore of additional liquidity into banking system with 4% till the Year 2022 to boost provision of immediate liquidity for ramping up Covid related issues in country. (George Mathew, 2021) To control financial market RBI recommended the banks to participate in Non-Deliverable Rupee Derivative market and this initiative supported RBI to intervene in NDF market and reduce the spread between onshore rupee forwards. In view of continuing disruptions of covid-19 RBI decided to permit lending institutions to extend moratorium on term loan during the period and this measure will reduce the burden for various sectors.

7. RECOMMENDATION & CONCLUSION

This study concludes that banking sector contribution towards country economy is enormous and the method of manipulating operating functions is commendable. The vital aim of this study is to understand the reason in occurrence of NPA in Indian public sector banks and identify monitoring system adopted by banks to control bad loans. However, most of the banks have taken some initiative to raise equity through various modes which eventually result in increase capital adequacy ratio and periodic assessment on bank's credit performance, monitoring asset quality will accelerate banking efficiency and reduce the occurrence of risks. Under the Insolvency and Bankruptcy Code (IBC), Government of India framed up with inter- creditor

agreements to speed up resolution and proposed with combination of bank-led asset management company to auction bad assets and stressed assets constitutes 15% of outstanding loan. Therefore, banks need to set up a distinct committee to pre-check creditor's ability and identify any other obligations are overdue in their account before loan disbursal. Finally, this study has done based on secondary data available on websites and focused only for the year 2019-2021 and perhaps the researcher findings might not reflect for consecutive years.

REFERENCES

1. Abhijit Lele (26th Aug 2021) “NPAs in retail and MSMEs rise to 7.3% for public sector banks in Q1” Business Standard <https://www.business-standard.com/article/finance/npas-in-retail-and-msmes-rise-to-7-3-for-public-sector-banks-in-q1>.
2. Abir Lal Dey, Arshi Siddiqui (2020) “India: Covid-19 Response on Banking and Finance: Measures and Reliefs by RBI. <https://www.mondaq.com/india/operational-impacts-and-strategy/948636/covid-19-response-on-banking-and-finance-measures-and-reliefs-by-rbi>
3. Ace Equity https://www.careratings.com/uploads/newsfiles/23032021115247_SCBs_-_Gross_NPAs_declined_further_in_Q3FY21.pdf
4. Anup Roy (16th March 2019) Reduced NPA to drive solvency of public sector banks, says ICRA. Business Standard. https://www.business-standard.com/article/finance/reduced-npa-to-drive-solvency-of-public-sector-banks-says-icra-119031600011_1.html
5. Banikinkar Pattanayak (8th Oct 2020) Govt Open to more capital infusion into select state-run banks this fiscal to boost lending. Financial Express <https://www.financialexpress.com/industry/banking-finance/govt-open-to-more-capital-infusion-into-select-state-run-banks-this-fiscal-to-boost-lending/2100320/>
6. Dipesh Shah (01st May 2020) NPA An Overview. <https://taxguru.in/rbi/npa-overview.html#pcomments>
7. Durgananda Swamy (18th March 2021) Importance of Public Sector Banks. The India Forum <https://www.theindiaforum.in/letters/public-sector-banks-continue-be-important>
8. Department of Financial Services <https://financialservices.gov.in/banking-divisions/public-sector->

[banks](#)

9. Economic Times (29th Oct 2021). RBI imposes Rs.56 lakh Penalty on the Nainital bank <https://economictimes.indiatimes.com/industry/banking/finance/banking/rbi-imposes-rs-56-lakh-penalty-on-the-nainital-bank/articleshow/87372547.cms>
10. Esha Jain, Jonika Lamba, Nitika Soni (2021) A Comparative Examination of Non-performing asset management of Banks in India. International Journal on Recent Trends in Business and Tourism. Vol.5 (3)
11. Express Computer (2nd June 2020) BCT digital launches real time early warning systems to tackle NPAs
<https://www.expresscomputer.in/news/bct-digital-launches-real-time-early-warning-systems-to-tackle-npas/57185/>
12. George Mathew (11th May 2021) Explained: RBI's Rs.50,000 crore fund support to healthcare; liquidity push. The Indian Express
<https://indianexpress.com/article/explained/explained-rbi-unveils-rs-50000-crore-fund-support-to-healthcare-liquidity-push-7302704/>
13. Hafsal, Anandarao Suvvari, Raja Sethu Durai (2020) Efficiency of Indian Banks with Non-performing assets: evidence from two-stage network DEA. Future Business Journal. Vol.6 (1):26
14. KPMG Report (2020) Covid-19: Impact on the Banking sector.
<https://home.kpmg/xx/en/home/insights/2020/07/covid-19-impact-on-banking-m-and-a-2020.html>
15. Mayur Rao, Ankita Patel (2015) A Study on Non-performing Assets Management with reference to Public Sector Banks, Private Sector Banks and Foreign Banks in India. Journal of Management and Science. Vol. 5. No. 1
16. Manojit Saha (01st July 2021) “Asset quality of banks remained stable during pandemic year: RBI FSR” Business Standard <https://www.business-standard.com/article/finance/asset-quality-of-banks-remained-stable-during-pandemic-year-rbi-fsr>.
17. Money Control <https://www.moneycontrol.com/stocks/marketinfo/marketcap/bse/banks-public-sector.html>
18. Preeti Sharma, Atul Bansal (2019) A Study of Non-Performing Assets Management with reference to select Indian Public Sector Banks and Private Sector Banks.

International Journal of Technical Research & Science. Vol. 4, Issue 1.

19. Reserve Bank of India
<https://m.rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=46>
20. Sentulal Debbarma, Amit Kumar Das, H.R. Laskar (2021) A Study on analyzing the Non-Performing Asset (NPA) level in Tripura Gramin Bank. Turkish Journal of Computer and Mathematics Education. Vol.12 No.11
21. Shilpa Jain (2018) Manoeuvring Growing NPA in Indian Public Sector Banks. Journal of Social Welfare and Management. Vol.10 No.3
22. Sunitha Sharma, Rajesh Kothari, D.S. Rathore, Jagdish Prasad (2020) Casual Analysis of Profitability and Non-Performing asset of selected Indian Public and Private sector banks. Journal of Critical reviews. Vol.7. Issue 9.
23. Sudin Bag, Sajijul Islam (2017) Non-Performing Assets A Biggest Challenge in Banking sector: A Comparative study between India and Bangladesh Banking sector. ICTACT Journal on Management Studies. Vol. 03. Issue 04
24. Syamala Rao, Prem Chand, Purushotham (2018) Causes and Effects of Non-Performing assets in the Banking Sector. International Journal of Management, Technology and Engineering. Vol.8, Issue 12.
25. Thakur, Madhuri. (2021) Non-Performing Assets: Types and its Classification Wall Street Mojo <https://www.wallstreetmojo.com/non-performing-assets-npa/>
26. Usman, B., Lestari, H.S., & Puspa, T. (2019) Determinants of capital adequacy ratio on banking industry: Evidence in Indonesia Stock Exchange. Jurnal Keuangan dan Perbankan, 23(3): 443-453
27. Varuna Agarwala, Nidhi Agarwala (2019) A Critical review of non-performing assets in the Indian Banking industry. Rajagiri Management Journal. Emerald Publishing Limited. Vol.13 No.2. pp 12-23.
28. Vivek Rajbahadur Singh (2016) A Study of Non-performing assets of Commercial Banks and its recovery in India. Annual Research Journal of SCMS. Vol.4