

IMPACT OF NON-PERFORMING ASSETS ON PROFITABILITY OF INDIAN BANKING SECTOR: A CASE STUDY OF BANK OF BARODA

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Abstract

The aim of this research paper is to study the impact of Non-Performing Assets on profitability of Indian Banking Sector with special reference to Merger of Bank of Baroda. This study analyses the profitability of Bank of Baroda from 2016 to 2021. Comparative Income analysis and Correlation Coefficient has used in the study. First section contains the introduction of Non-Performing Assets and measures taken by bank to reduce the amount of NPAs and consolidation of Bank of Baroda. Second section carries out review of literature. Third section shows the statement of problem. Fourth section shows the objectives of the study. Fifth section contains the research methodology. Sixth section elaborates the gathered data analysis and presentation. Last section carries out conclusion of the research. This research work found that there is a high degree of adverse relationship between Net-Profit and Non-Performing Assets in the banking sector. As a result, NPAs eat a lion share of profits. If banks recover and reduce these non-performing assets, they will earn more and more profits.

Keywords: Bank of Baroda, Non-Performing Assets (NPA), Net Profit, Net Loss, Gross NPA, Net NPA, Amalgamation, Stressed asset, Lok adalats, Sankalp-X.

1.Introduction:

A healthy banking sector is important for the flourishing economy. Banking sector is considered as pillar of an economy as it plays a crucial role in economic progress of a country. A bank's main business is collecting deposit from the customers and lending the money so collected to other customer who need these funds for personal or business purposes. Business related to acceptance of deposits do not carry any risk of loss, but there is a lot of risk as in lending side of business as the customers who took loans may not repay these loans on time due to wilful defaults or due to deterioration of their financial position or failure of business apart from various other reasons like economic cycle, natural disasters etc.

NPAs full form is Non-Performing Assets. These are nothing but the loans that are being given by the banks and other financial institutions whose interests as well as the principal amounts have in a status of overdue status for a fairly long time. Non-Performing Assets are also referred to non-performing loans. Reserve Bank of India defines Non-Performing Asset as any advance or loan that is overdue for more than 90 days. According to RBI circular 2007 "An asset becomes non-performing when it ceases to generate income for the bank. To be more attuned international practices, RBI implemented the 90 days overdue norm for identifying non-performing assets has been made applicable from the year ended March 31, 2004. Depending on how long assets have been an NPA, there are different types of non-performing assets as well.

Non-Performing Assets are not a desirable phenomenon in India's banking sector. This is like cancer that is destroying that overall banking business in India.

Categories of Non-Performing Assets:

There are different types of non-performing assets depending on how long they remain in the NPAs category.



Chart:1

Substandard Assets: With effect from March 31, 2005, a substandard asset would be one, which has remained NPA for a period less than or equal to 12 months. Such an asset will have well defined credit weaknesses that jeopardise the liquidation of the debt and are characterised by the distinct possibility that the banks will sustain some loss, if deficiencies are not corrected.

Doubtful Assets: With effect from March 31, 2005, an asset would be classified as doubtful if it has remained in the substandard category for a period of 12 months. A loan classified as doubtful has all the weaknesses inherent in assets that were classified as substandard, with the added characteristic that the weaknesses make collection or liquidation in full, – on the basis of currently known facts, conditions and values – highly questionable and improbable.

Loss Assets: A loss asset is one where loss has been identified by the bank or internal or external auditors or the RBI inspection but the amount has not been written off wholly. In other words, such an asset is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage or recovery value.

The banking industry is growing in leaps and bounds, and so is the difficulty associated with it. In fact, the level of NPAs in Indian banks is nothing but a reflection of the state of health of the industry and trade. India's bad loans stood at the fifth highest in the world in December 2019. Non-Performing Assets in India rose drastically in India from 2015. Reserve Bank of India tightened norms for Non-Performing Assets recognition in 2015. Forced banks to identify standard assets as NPAs.

2. Review of Literature:

Many published articles are available in the area of non-performing assets and a large number of researchers have studied the issue of NPAs in banking industry. The following are the some of them.

V. RAVEENDRA SARADHI, AREEJ A. SIDDIQUI [2021], in their study “The Impact of NPAs on Profitability of Public Sector Banks in India”, they studied the NPA crisis of Indian public sector banks after the financial crisis of 2008, particularly whether an increase in the gross NPA ratio causes any decline in the profitability.

Valliammal and Manivannan (2018), in their study “A Study on Non- Performing Assets and Its Impact on Public Sector Banks in India”, examined the impact of NPA on the profits of the selected public sector banks by analysing the profitability trends and correlation

between NPA vs net profits. They found, that there is a very high relationship in reduction of profits and increase in such assets and banks need to focus more on managing financial assets better to increase profitability.

DrPradeep Bhardwaj, Dr Isha Chaudhary [2018], in their research work “A Study of Non-Performing Assets of Commercial Banks and its Recovery in India”, this study shows that extent of NPA is comparatively very high in public sectors banks. Although various steps have been taken by government to reduce the NPAs but still a lot needs to be done to curb this problem. The NPAs level of selected banks is still high as compared to the foreign banks.

Shanabhogara Raghavendra (2018), in their paper, “Non-Performing Banks in commercial banks in India: An Analysis”, they have analysed the impact of the NPAs, causes of NPAs, and consequences of NPAs in a commercial-banks. This study suggested that restructuring of the bank or financial organization, improvement in financial deepening and modernization of appropriate skills for up gradation of credit wordiness and one more thing is staff efficiency, these are the most important things to solve the present wilful defaulter's system in India and world too.

Suvitha K Vikram, Gayathri G (2018), their study “A Study on NPAs in Indian Banking Sector”, focused on the Indian banking sector, which has higher NPAs., and also focused on causes and control measures for rising NPAs. It found out that the level of NPAs is higher in Public Sector Banks compared with Private Sector Banks. Also, focused causes, level of NPA and controlling measures were analysed. It suggested that the root of the issue of rising NPAs lies in the nature of overseeing credit chance by the banks and wilful defaulters.

Banerjee and Mitra (2018), performed a study on “Non-Performing Assets of the Indian Banking System: A Critical Evaluation”. Their study noted that NPA directly impact the financial performance and liquidity, and identified that growing NPA is a main problem for the Indian banking industry.

Payel Roy and Dr Pradip Kumar Samanta (2017), this analysis indicated the overall NPA position of all the banks is deteriorating over the years. It found that there is a negative high correlation between GPA and NP, the profit gradually decreases as the GNPA grows. And also point out that most of the banks' profit has reduced considerably. Some of the banks have incurred losses too. The losses due to the increase of NPA can't be avoided only by making provisions against NPA. It suggested that the Provisioning can act as a cushion for NPA losses but it can't be regarded as a solution for growing NPAs in all the selected PSBs. The banks advancing loans should be cautious enough to consider the backgrounds of the loan receiver and make the recovery procedure more stringent.

Shiralashetti A.S. and Lata.N.Poojari (2016), analysed the causes of NPA and impact of NPA on the profitability of the bank. The study found that there was a moderate relationship exist with Gross NPA and Net profit of the syndicate bank and also found that there was no significant difference between sector wise NPA. The study provided some suggestions to the regulators.

Ombir and Sanjeev Bansal (2016), their study analysed the recent trends in non-performing assets (NPAs) of different categories of Indian banks. It is found that the impact of ownership pattern in deciding the level of NPAs is investigated against the perception that public sector banks have a relatively larger level of NPAs. But there was no strong empirical evidence is found in support of this perception. Their findings suggested that public sector banks are as

good or as bad as their private counterparts, however, foreign banks have relatively higher profitability as domestic public and private banks. It is also found that a higher level of NPAs negatively affects the profitability of a bank.

Kumar (2013), in his study on A Comparative study of NPA of Old Private Sector Banks and Foreign Banks has said that Non-performing Assets (NPAs) have become a nuisance and headache for the Indian banking sector for the past several years. One of the major issues challenging the performance of commercial banks in the late 90s adversely affecting was the accumulation of huge non-performing assets (NPAs).

Angela Roman and Ioana Iuliana Tomuleasa (2013), studied the impact of various factors for large number of commercial banks operating in the European Union nations using econometric estimation analysis and t-test on the profitability of the banks in European Union countries covering the period of 8 years from 2003 to 2011, found that increase in NPA has an adverse impact on the financial results of the banks.

Kaur K. and Singh B. (2011) in their study on “Non-Performing Assets of public and private sector banks” (a comparative study) studied that NPAs are considered as an important parameter to judge the performance and financial health of banks. The level of NPAs is one of the drivers of financial stability and growth of the banking sector.

3. Statement of the Problem:

A healthy banking sector is important for the flourishing economy. The banking industry is growing in leaps and bounds, and so is the difficulty associated with it. In fact, the level of NPAs in Indian banks is nothing but a reflection of the state of health of the industry and trade. Non-recovery of loans along with interest forms a major hurdle in the process of the credit cycle. Though complete elimination of such losses is not possible, banks can always aim to keep the losses at a low level. The issue of Non-Performing Assets has been discussed at length for the financial system all over the world. When a bank is not able to recover the loan given or not getting regular interest on such a loan, the flow of funds in the banking industry is affected. NPAs growth involves the necessity of provisions, which reduces the overall profits and shareholders' value. The collapse of the banking sector may have an unfavourable impact on allied and other sectors. The dilemma of NPAs is not only distressing the banks but also the entire wealth of the economy. It reflects the reputation and performance of the banks. If the level of NPAs is high, it leads to the high probability of credit defaults that affect the profitability and net-worth of banks and also eat away the value of the asset.

Against this background, the present research study has evaluated the impact of Non-Performing Assets on profitability of banks in Indian Banking Sector with special reference to Bank of Baroda.

4. Objectives of the study:

The study entitled “Impact of Non-Performing Assets on Profitability of Indian Banking Sector: A Case Study of Bank of Baroda” has the following objectives.

- To know the reducing measures taken by the bank and RBI of Non-Performing Assets.
- To study the amalgamation effect on NPAs of Bank of Baroda.
- To make appropriate suggestions and reducing measures to avoid future NPAs and to manage existing NPAs in Banks.

5. Research Methodology:

Research Design: The study is mainly in analytical manner as well as descriptive in order to achieve specific objectives of the study.

Methods of Data Collection: The research study completely depends upon secondary data, the data used in the research is gathered from annual reports of the sample bank, various internet articles, research articles and RBI reports and circulars.

Research Sample: For achieving different objectives of the research, Bank of Baroda has taken as the research sample.

Period of the Study: To evaluate the impact of Non-Performing Assets on profitability of select bank, 5 years data from the financial year 2016-17 to 2020-21 i.e., 3 years pre-merger and 2 years post-merger has been used.

Statistical Tools and Graphical Presentation: To analyse the impact of Non-Performing Assets on profitability of select bank, comparative income analysis and correlational analysis have been applied. To make easier to understand the results of the research, charts i.e., histograms and line charts are presented.

Limitations of the study:

The study is limited to covers only for a period of 5 years from financial year 2016-17 to 2020-21, therefore, a detailed analysis covering a lengthy period, which may give slightly different results have not been made.

Hypotheses:

The present study is based on Two [2] Null Hypothesis.

H₀₁: There is no significant relationship between Net Profit and Gross Non-Performing Assets.

H₀₂: There is no significant relationship between Net Profit and Net Non-Performing Assets.

6. Data Analysis and Interpretation:

Table No:1

(Rs..in crore)

Financial Year	Asset Category			Total GNPA	GNPA (%)	Change in GNPA (%)	Net NPA	NNPA (%)
	Substandard	Doubtful	Loss					
2016-17	8,804	29,186	4,729	42,719	10.46	-0.47	18,080	4.72
2017-18	13,131	35,447	7,903	56,480	12.26	+1.8	23,483	5.49
2018-19	9,014	32,398	6,821	48,233	9.61	-2.65	15,609	3.33
2019-20	14,311	37,005	18,065	69,381	9.40	-0.21	21,577	3.13
2020-21	15,056	35,527	16,088	66,671	8.87	+0.53	21,800	3.09

Source: Annual reports of Bank of Baroda from respective years.

(Rs. in crore)

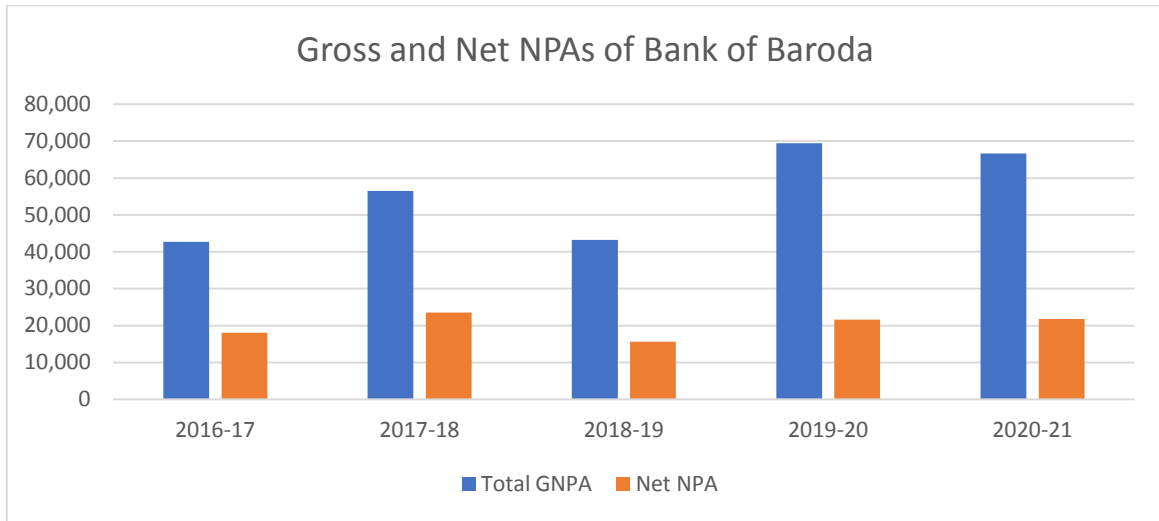


Chart:2 (Rs. in crore)

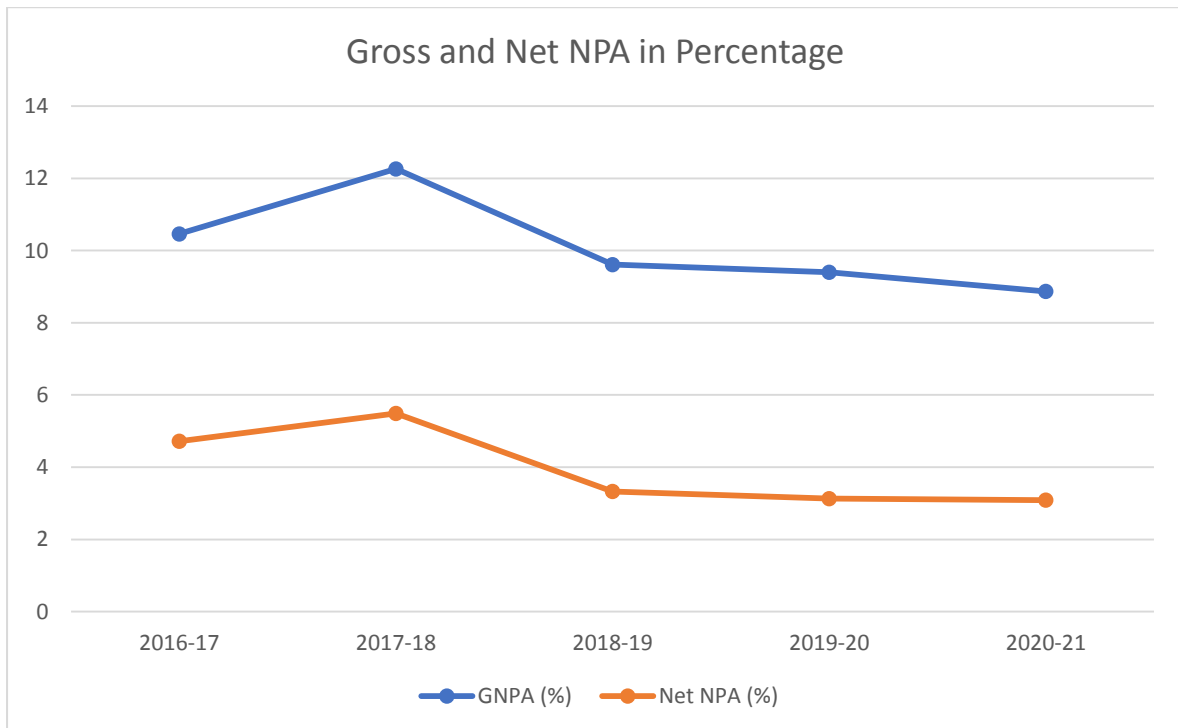


Chart:3

(Rs. in crore)

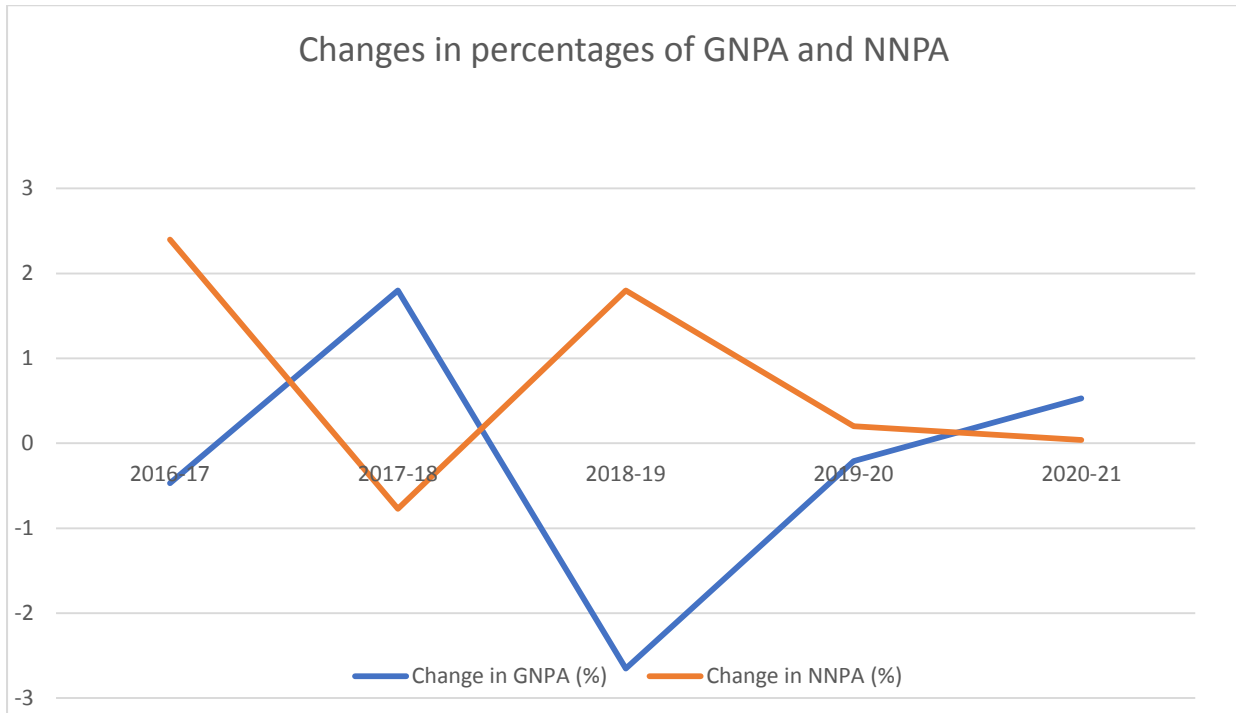


Chart:4

Table No:2

(Rs. in crore)

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Interest Earned	42,199.92	43,648.5	49,974.1	75,983.7	70,495.1
Interest Expended	28,686.51	28,126.8	31,290.3	48,532.4	41,686.0
Net Interest Income (NII)	13,513.41	15,521.8	18,683.9	27,451.3	28,809.1
Other Income	6,758.06	6,657.2	6,090.9	10,317.3	12,364.4
Operating Income (NII + Other Income)	20,271.47	22,179.0	24,774.7	37,768.6	41,173.5
Operating Expenses	9,246.40	10,173.4	11,287.9	18,872.4	20,543.7
Operating Profit	10,975.07	12,005.6	13,486.8	18,896.2	20,629.8
Provisions	8,502.37	14,796.4	12,782.7	20,698.3	15,073.8
Profit Before Tax (PBT)	2,472.70	(2,790.7)	698.2	1,802.1	55,560
Provisions for Tax	1,089.56	358.9	264.6	2,348.2	4,727.0
Net Profit	1,383.14	(2,431.8)	433.6	546.2	829.0

Source: Annual reports of Bank of Baroda from respective years.

Bank posted an operating profit of Rs.10,975.07 crore during Financial Year 2016-17 registering a growth of 24.49%. The provision cost (other than taxes) declined significantly by 45.19% to Rs.8,502.37 crore compared to Rs.15,513.64 crore last year. Provisions for NPAs & Bad debts written off also decreased by 44.21% to Rs.7,679.79 crore. Bank posted a profit before tax of Rs.2,472.70 crore. After making provision for tax of Rs.1,089.56 crore, net profit for the year ended March 31, 2017 was Rs.1,383.14 crore.

The Bank posted an operating profit of Rs.12,005.6 crore during F.Y 2017-18 registering an increase of 9.4%. Total provisions increased by 74% and higher GNPA pool led to increase in provisions for NPAs by 85%, leading to Bank posting loss of Rs.2,431.8 crore. On account

Source: Annual reports of Bank of Baroda from respective years.

From the above correlation analysis, there is a negative correlation between Net Profit and GNPA of Bank. The Correlation Co-efficient 'r' is "-0.107". This negative correlation between Net Profit and GNPA signifies that as the Net Profit decreases, GNPA of bank decrease. Hence, an increase in Net Profit will result in decrease of GNPA of bank.

From the above correlation analysis, there is a strong negative correlation between Net Profit and NNPA of Bank. The Correlation Co-efficient 'r' is "-0.567" which is close to -1, this negative correlation between Net Profit and NNPA signifies that as the Net Profit decreases, NNPA of bank decrease. Hence, an increase in Net Profit will result in decrease of NNPA of bank.

This can be understood by following charts.

(Rs. in crore)

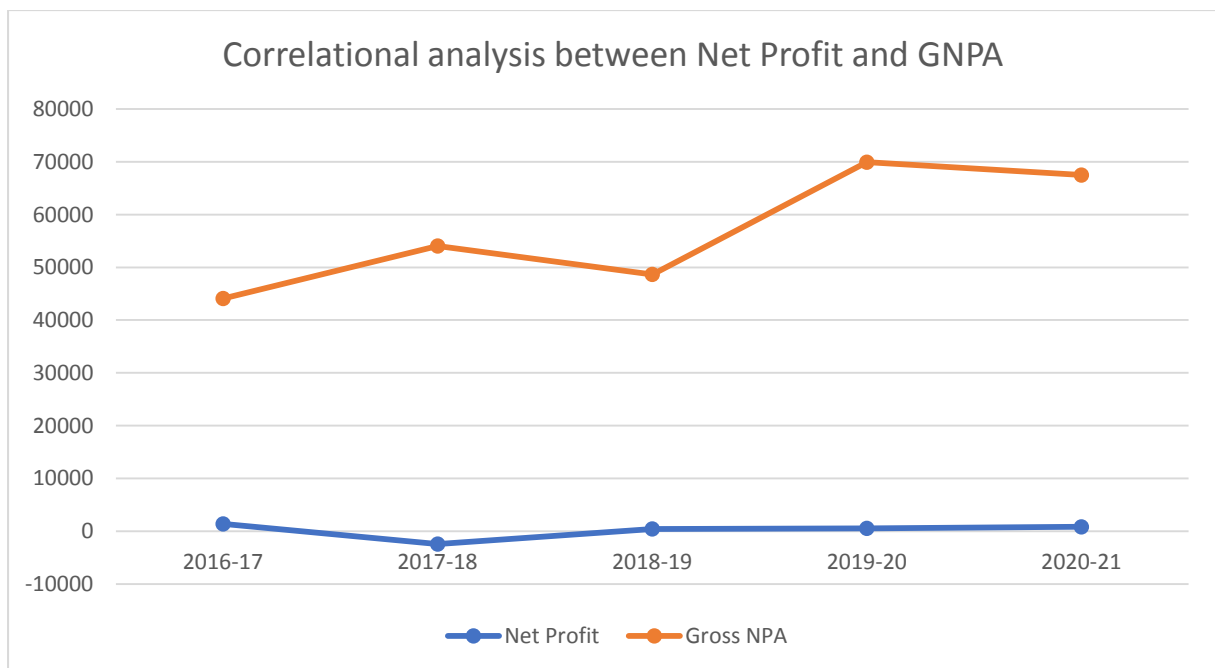


Chart:5 (Rs. in crore)

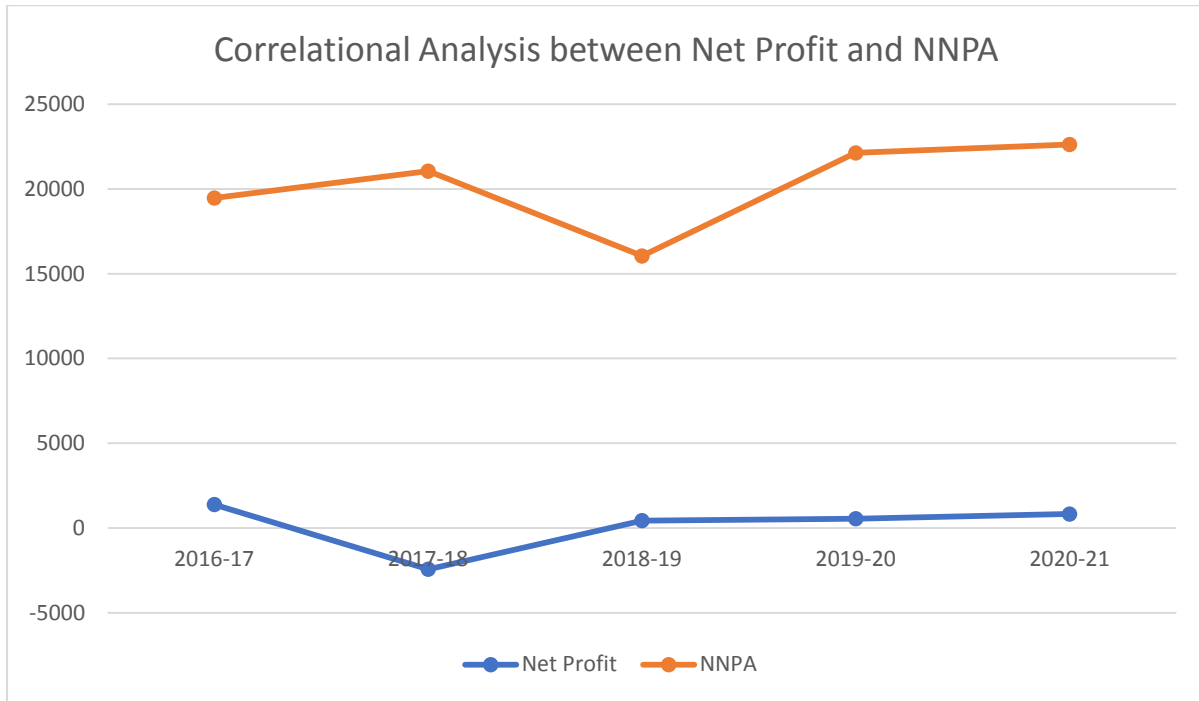


Chart:6

NPA Management and reducing measures initiated by the Bank of Baroda:

Management of non-performing assets (NPAs) and other stressed assets continues to be one of the biggest challenges facing the Indian banking industry impacting the profitability of the banks. To tackle the mounting stressed assets, RBI has undertaken several initiatives. These include creating an empowered Joint Lenders' Forum (JLF) for identification of incipient stress, introducing restructuring mechanism under the Strategic Debt Restructuring (SDR) scheme, enabling flexible refinancing under 5:25 scheme, easing norms around sustainable structuring of stressed assets (S4A), and revising guidelines for their sale. Financial Year 2016-17 had been a challenging year for Bank of Baroda also in terms of stress in asset quality.

Bank of Baroda has developed a comprehensive organisational structure for recovery and credit monitoring across different levels and taken a number of measures to strengthen systems and processes to manage stressed assets which include:

- Set up of legal war-room for real-time tracking of recovery proceedings and to aid accelerated decision making. (~140 high value suit-filed accounts being monitored).
- Strengthening Bank's legal/ fraud investigation capabilities and ability to handle recovery cases enhanced through onboarding of external experts.
- 39 accounts identified for action under Indian Bankruptcy Code (IBC), of which, 13 cases have been filed in NCLT and tracked through war-room.
- 'Solution provider' cell setup to provide resolution strategies for stressed accounts, with currently 65 large NPA accounts with exposure above Rs.100 crore under process of being resolved.
- Collections call centre setup (~200 agents) for retail loans with multi-lingual support and augmented with feet-on-street staff to drive on-ground collections.
- 900-member strong Bank taskforce deployed for NPA and potential NPA recovery in small accounts.

- Business Correspondents incentivized for crop loan collections.
- Assigning Nodal Officer at each of DRT for follow-up of legal cases on daily basis so as to minimize the delay in obtaining decrees and execution and maximize recoveries.
- For recoveries in all DRT Suit filed NPA accounts, the assets charged to the Bank are sold through e-auction to get fair market value.
- Maximum participation in National Lok Adalat's is ensured to expedite recovery in suit filed & non suit filed NPA accounts.
- Recovery Camps were regularly conducted by our Bank's branches to recover & reduce long pending cases and expedite recoveries in small accounts.
- Special incentive scheme named "Sankalp-X" Scheme was launched during the year to intensify recovery efforts of smaller value accounts with an outstanding up to Rs.25 lakhs. Cash recovery made during Financial Year 2016-17 under the scheme was at Rs.116.88 crore.
- Monitoring of large value of NPA accounts of Rs.1 crore and above directly from Corporate Office.

The financial year 2017-18 had been an eventful year. With the Insolvency and Bankruptcy Code (IBC) becoming operational and RBI mandating resolution of large part of NPAs of banking system to be resolved at NCLT, it provided a momentum to the resolution process. During the last quarter of the financial year, the RBI aligned its guidelines on resolution of stressed assets with IBC repealing its earlier guidelines on resolution of such assets. It fronts ended the recognition of NPAs in the system and impacted the profitability of banks in the short run. In the above environment, Bank performed well with improvement in core operating efficiency.

During the Financial Year 2019-20, In order to address the large number of small NPA accounts, sector wise special OTS schemes were launched by the Bank. For MSME sector, the Bank launched special OTS scheme "MSME OTS Scheme" to provide opportunity for repayment of dues. For farmers in distress, a special OTS scheme was launched during FY 2020. The Bank continued with its earlier OTS scheme Lakshya-II (Lakshya Agriculture, Retail and MSME). The Bank has made recoveries and upgraded NPA accounts amounting to Rs.1,296 crore under these schemes. An application called 'One Time Settlement Tracking System' was implemented wherein customers could initiate settlement proceedings online. The Bank also set up a legal war-room for real-time tracking of recovery proceedings and to aid accelerated decision making wherein high value suit-filed accounts are monitored.

The Bank set up a solution provider cell to augment recoveries to ensure minimal slippages and to provide resolution strategies for large NPA accounts i.e., exposure above Rs.30 crores. For timely collections from retail and SME customers, a - 500 - member call centre with multilingual support was set up and supported by feet-on-street staff to drive on-ground collections. A special taskforce of about 2,300 officials of the Bank was deployed for recovery of small NPA and potential NPA accounts. Additionally, BCs are incentivised for collections in crop loans.

The Bank strengthened its NPA management with daily dashboards like Days Past Due (DPD) Report, NPA movement chart and mock runs for forecasting degradations to ensure reduction in slippages and improvement in collections. Further, the Bank is in the process of developing a mobile application which would enable the collection agents on the field to collect the amount based on data fed in the system and also update recovery details.

7. Conclusion:

From the correlation analysis, it can be concluded that there is an adverse relationship between Net Profits and Gross NPA. The Correlation Co-efficient 'r' between Net Profits and GNPA indicates that as the Net Profits decreases, GNPA of bank decrease. Hence, an increase in Net Profit will result in decrease of GNPA of bank. There is a strong negative correlation between Net Profit and NNPA of Bank. The Correlation Co-efficient 'r' is "-0.567" which is close to -1, this negative correlation between Net Profit and NNPA signifies that as the Net Profit decreases, NNPA of bank decrease. Hence, an increase in Net Profit will result in decrease of NNPA of bank.

It was very clear from the correlational analysis, that there was a high degree of negative relationship between Net Profit and GNPA. Hence First Null Hypothesis [H_{01}] rejected. And there was a strong relationship between Net Profit and NNPA, hence second null hypothesis [H_{02}] also rejected.

From the Comparative income analysis, it can be concluded, that the provisions for non-performing assets and stressed assets eat a lion share of profits every financial year. During the Financial Year 2016-17, 'provisions for non-performing assets and written off NPAs' were Rs.7,7679.79 crore, hence Profit Before Tax [PBT] Rs.2,472.70 crore was decreased at a large rate from then Operating Profit of Rs.10,975.07 crore.

During the year 2017-18, Bank of Baroda provided Rs.14,211.7 crore towards NPAs on a larger pool as against Rs.7,680 crore in FY2017. Hence Loss before Tax Rs.2,790.7 crore was decreased at significant rate from then Operating Profit of Rs.12,005.6 crore. As a result, Bank posted Net Loss of Rs.2,432 crore as compared to a Net Profit of Rs.1,383 crore in the FY 2016-17.

In the 2018-19 Financial Year, the Bank of Baroda provided towards 'provisions for non-performing assets and written off NPAs' were Rs.12,192.4 crore as against Rs.14,211.7 crore in FY 2017-18, hence PBT Rs.698.2 crore was decreased from then the Operating Profit of Rs.13,486.8 crore. This year bank posted Net Profit of Rs.433.6 crore.

On 1st April 2019, the "Amalgamation of Vijaya Bank and Dena Bank with Bank of Baroda" has taken place and the other two banks were working together as Bank of Baroda. As a result of amalgamation, the banks' Gross NPAs were increased to Rs.69,381 crore from Rs.48,233 crore in FY 2018-19. During the year, Rs.23,315 crore new non-performing assets were added to the existing NPAs. This year bank provided towards NPAs provisions Rs.20,698.3 crore. As a result, the PBT was in adverse amount of Rs.1,802.1 crore from the Operating Profit Rs.18,896.2 crore. The bank posted a Net Profit of Rs.546.2 crore. It was very clear that merger had a significant effect on NPAs of Bank of Baroda.

Operating profit for the bank rose to Rs.20,630 crore in FY 2020-21 from Rs.18,896 crore in FY 2019-20, an increase of 9.17%. Total provisions (other than tax) and contingencies declined by 27.17% from Rs.20,698 crore in FY 2020 to Rs.15,074 crore in FY 2021. Provisions for Non- Performing Assets (NPA) also declined to Rs.12,408 crore in FY 2020-21 from Rs.16,405 crore in FY 2019-20. The Bank posted a net profit of Rs.829 crore, an increase of 51.83% over the previous financial year. This year Bank has optimised its branch network after amalgamation. Branches and ATMs which were in close proximity to each

other have been brought together under one roof thus reaping synergies from the merger. The Bank's other operating expenses declined over the year.

From the Comparative Income analysis, it was very clear that, where Provisions for NPAs and Written Off NPAs were low there was a profit and where Provisions for NPAs were in high amount there was a loss. The study found that, Non-Performing Assets are eating a lion share of profits of banks. If banks credit monitoring and their assessment nature while disbursing loans improve, then banks can earn substantial profits.

This study also found, the Bank of Baroda has taken great initiatives to reduce the non-performing assets in between the period of the study such are Lakhshya, OTS [One Time Settlement Schemes], Sankalp-X, MSME OTS, Lakhsya-II etc.

Technology should be used effectively to get the early signals. A proper mechanism should be used by the government to identify the unseen NPAs. Banks should resort to forensic audits to know the intention of the borrower. There are many other steps taken by the government to resolve this unending issue however, it is a long way to eradicate this issue out of the country. This study suggests for future studies, analyse for a lengthy period, then you will get accurate results than short period of study.

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