Unveiling the Impact of COVID-19 on NPAs: A Stakeholder Assessment of Punjab National Bank

[1]Mr. Animesh Priyadarshi
[1]Assistant Professor
[1]Department of Economics
[1]Sarala Birla University, Ranchi, Jharkhand, India
[1]animesh.priyadarshi@sbu.ac.in

Abstract— **The study examines the impact of the COVID-19 pandemic on Punjab National Bank's (PNB) non-performing assets (NPAs). The study objectives include assessing stakeholder perceptions, determining NPA escalation, and offering actionable insights. Primary data has been collected via structured questionnaires from 140 key stakeholders, selected through purposive sampling, while secondary data was sourced from PNB's annual reports and financial records. Data analysis has been conducted using SPSS 26. Findings reveal a significant relationship between stakeholder opinions and the pandemic's effect on NPA management. PNB's gross and net NPA trends showed variations influenced by COVID-19. The study identifies a knowledge gap in the effect and offers useful suggestions for regulators and policymakers. The findings of the study help PNB and other stakeholders develop strategies to effectively address post-pandemic non-performing asset (NPA) issues. The study offers valuable contributions to addressing NPA issues in the banking sector during and after the pandemic.**

Index Terms— **Asset Ratio; Bank efficiency; COVID-19; Gross NPA; Net NPA; Banking; Non-Performing Assets (NPAs); PNB (Punjab National Bank); Public Sector Banks (PSB's); Reserve Bank of India (RBI); Stakeholders.**

I. INTRODUCTION

An economy's overall health is ensured by the banking sector's efficient operation [1]. Any nation's financial system functions like a blood-nerve, and NPAs are obstructing the nerve of India's banking system and causing a bottleneck in the free flow of funds [2]. NPAs are the primary metrics used to assess the accomplishments of the banking industry. COVID-19 has dealt the Indian economy a serious blow, especially to the banking industry and its non-performing assets (NPAs). Although the effects of COVID-19 on the banking industry are difficult to measure, some sources claim that they may assess these effects. For example, Based on the available information, it has been seen that the "COVID-19 pandemic" had a significant influence on the performance of banks, leading to a deterioration in their asset quality. Based on the "Financial Stability Report (FSR) of December 2020" published by the Reserve Bank of India (RBI), it is projected that the Gross Non-Performing Assets (GNPAs) of banks may see a significant increase to 13.5 percent, which is over double the 7.5 percent recorded during the corresponding period of 2019-20 [3].

The pandemic caused by the COVID-19 virus has shaken every industry globally. The most affected sector during this period was the banking industry. As mediators of all economic transactions, banks are instrumental in maintaining the financial stability of an economy; however, the situation becomes all the more sensitive and vulnerable when crises arise. One of the biggest challenges they face nowadays is the exponential growth of NPAs, mainly concerning PSBs. Punjab National Bank is one of the oldest and largest PSBs in India. This highlights the systemic challenges that the pandemic has brought, including a surge in NPAs, which threatens financial stability and operational efficiency.

NPAs are essentially loans or advances where the principal or interest remains unpaid for some time, and such a measure of bank health has become crucial over the years. High NPAs negatively affect profitability, credit flows, and the confidence of stakeholders. The Indian banks, before the pandemic, had been already dealing with structural weaknesses such as a weak credit appraisal system and lapses in governance [2]. These problems worsened because of the economic disturbance created by the COVID-19 pandemic. Gross NPAs, as projected by the Reserve Bank of India (RBI), would increase from 7.5% in 2019 to 13.5% by 2021, signifying the size of the challenge [4,3].

COVID-19 has disproportionately affected the economies of emerging markets, like India. The underdeveloped financial market infrastructure has created massive challenges for NPAs. A nationwide lockdown that followed due to an economic slowdown caused serious disruption in the supply chain along with reduced business activities and the most severe problem was job loss; hence borrowers could not fulfill their obligations in terms of repaying, mainly the areas of hospitality, tourism, aviation, and the most significant, small medium enterprises or MSME [5,6]. Gross NPAs of PNB have risen from ₹73,478.76 crores in the year 2020 to ₹104,423.42 crores in 2021. In the same period, net NPAs increased from ₹27,218.89 crores to ₹38,575.70 crores, reflecting the profound impact of the pandemic on its asset quality [7].

Financial institutions worldwide have adopted different measures to face the crisis, ranging from loan moratoriums and debt restructuring to liquidity support measures [8]. For example, the profitability of European banks declined on account of a decline in interest incomes, as they adopted measures to ease regulation and digital solutions to mitigate risks. Similarly, Chinese banks adopted strong credit monitoring systems to control defaults from loans, displaying the potential for technological adaptation to mitigate pandemic-related risk [9,10]. Nevertheless, the Indian banking sector has faced unique challenges that have worsened regarding NPAs, including an over-reliance on traditional lending practices and limited digital adoption [11].

From the country's perspective, COVID-19 affected every type of industry nationwide. The country's economy had been weak beforehand and the COVID-19 breakout further weakened the economy as a result of a complete halt in the operation of the economic sector and a complete state lockdown. During the COVID-19 pandemic, individuals faced significant health challenges and financial difficulties. This can be due to the reason that they have yet to clear an old loan. The majority of people have lost their jobs due to the COVID-19 pandemic, which is a very serious challenge for both individuals and governments as they are trying to figure out how to keep paying their loans. It has been the reason both public and private Indian banks have a problem with non-performing loans at present [12].

Prior literature related to Punjab national banks has mainly focused on an analysis of the "Non-Performing Assets (NPA)" of "Punjab National Bank (PNB)" [13]. Moreover, a newer and distinct body of literature demonstrated the impact of COVID-19 on banks [5,14,15] whereas very few studies have considered the Impact of COVID-19 on NPAs in banks [7,3], and finally, it has been found that there has been no study showing the impact of COVID-19 on NPAs in Punjab National Bank.

To help policymakers take an early cure on unpaid debt at the bank (micro) level in the next years, academics and researchers must understand and outline the decade-long situation of NPAs in the banking system of India. Recent observations indicate a consistent decline in the quality of assets held by banks, with particular concern expressed regarding public sector banks. This weakening is placing significant stress on the banking industry as a whole [13], thus the present study focuses on the Punjab National Bank (PNB) because PNB is one of India's largest and oldest public sector banks which makes it an ideal case for investigation. The findings from a study of PNB's NPAs during COVID-19 can offer valuable insights into broader trends within the Indian banking industry, thus, the present study aimed to analyze the Impact of COVID-19 on NPAs in Punjab National Bank. The study focuses on PNB as a representative case to examine the pandemic's impact on NPAs. Unlike most other studies, the present study draws on the voices of the various stakeholders, which means that this work is the most comprehensive as compared to earlier works. This would mean bank officials, borrowers, and regulators can all shape policy and operational strategies concerning NPA management [16]. Such perceptions and opinions can also be used in determining the possible solution to solve such operational bottlenecks to attain greater financial stability.

The importance of stakeholder involvement when handling NPAs is crucially highlighted during crises. According to Das (2023), stakeholder-inclusive strategies can help refine the credit assessment process, enhance regulatory supervision, and strengthen resilience [4]. For PNB, stakeholder feedback indicates some major lacunas in its current process, such as a lack of close monitoring of risky loans and a slow pace of restructuring. They need to adopt data-driven analysis solutions by implementing AI-based predictive analysis and introducing real-time monitoring tools.

There are seven sections to the paper. Section 1 contains the introduction to the paper. An overview of the research on the impact of COVID-19 on bank non-performing assets (NPAs) is provided in section 2. Section 3 lays up the objectives and hypotheses of the investigation. Data and procedures, including variables and a model, have been reviewed in Section 4. Section 5 provides a full account of the empirical findings. In section 6, a description of the findings follows. Section 7 contains conclusions, consequences, limits, and suggestions for more research. Finally, references have been included.

II. Literature review

This section of the study comprises assessments of previous studies that have been undertaken in order to get insight into the current state of the subject matter. To enhance clarity, the following section has been subdivided into three distinct segments:

- "Impact of covid 19 on the banking sector"
- "Determinants of NPAs in the banking sector"
- "Impact of covid 19 on NPAs in the banking sector"

Impact of Covid 19 on the Banking sector

A pandemic of diseases like COVID-19 can erode the stability of a banking system as it affects institutions in far-reaching and varied ways [17]. Similarly, Baret et al. (2020) discovered that aside from the risk of default, a liquidity crisis for banks could result from the occurrence when many depositors are forced to withdraw their cash for the provision of necessities, such as food and medicine, brought about by the pandemic [18]. In the context of this, Cheney et al. (2020) claimed that banks' capacity to lend out money can be constrained if this scenario of COVID-19 prevails for quite a long period [19]. Further, Ryan et al. (2020) pointed out that if businesses decrease their activities and production, demand for both short- and long-term financings may drop drastically with little hope of recovery until the whole economic system gets back to its normal state because of COVID-19 [20]. Additionally, Yousufani et al. (2020) found that banks in several nations have already started "reducing fees and penalties, raising credit card limits, providing mortgage payment holidays, and granting access to fixed savings accounts" to assist their clients in surviving the epidemic due to which interest revenues might further decline [8]. Finally, Barua & Barua (2021) revealed that interest income, capital adequacy ratios, and risk-weighted asset values have all been anticipated to decrease for all banks, both on an individual and industry basis due to COVID-19 [6].

The COVID-19 pandemic put banking systems under significant stress, with bank stocks underperforming domestic markets and non-bank financial firms [9]. The Covid-19 outbreak had detrimental impacts on financial performance and stability in the global banking sector, with a signal of recovery during the second quarter of 2020. The COVID-19 outbreak significantly decreased bank performance, with a higher adverse effect on smaller, undercapitalized, and less diversified banks [10]. COVID-19 initially increased systemic risk in banking sectors, but policy responses helped contain it, except for China, which showed some recovery [21]. During the pandemic period of COVID-19, high non-performing loan rates, holding more liquid assets, hedging capital, and inappropriate bank size lessened banks' profitability, while low leverage position and inflation rate enhanced it [22]. COVID-19 had a large impact on bank profitability, with a stronger influence on the Islamic banking system [23]. COVID-19 led to short-term, long-term, and systemic risks in the Chinese banking sector, requiring increased credit support and digital transformation for pandemic prevention and control [24]. The COVID-19 pandemic led to a credit crunch in the banking sector in Indonesia, with credit delivery decreasing more during the pandemic than during the non-pandemic period [25].

Determinants of NPAs in the Banking Sector

Das (2023) found that negative economic conditions, lax banking rules and supervision, poor corporate governance, and lax market monitoring were some of the main macroeconomic factors that contributed to NPAs [4]. On the other hand, Bawa et al. (2019) and Ozili (2019) noted that Operational inefficiencies, loan quality, earning management, and capital sufficiency were bank-specific variables that contributed to NPAs [26,27]. Additionally, Chawla & Rani (2021) revealed that the FDI inflows, external debt, and GDP growth rate were the key macroeconomic factors that helped explain the NPAs [28]. In contrast, Singh & Arora (2023) showed that intermediation cost had a positive and substantial impact on NPA, but bank size, net interest margin, capital adequacy tier I, and burden ratio had negative and significant effects on NPA [29]. Lastly, Sharma et al. (2023) indicated that the exchange rate was very important with a positive link to NPA, whereas the return on assets, the credit-deposit ratio in bank-specific variables, and inflation in macroeconomic indicators were the most significant factors with a negative correlation [30]. Faulty earning management and deterioration in loan quality are determinants of high NPAs in India's banks, including Public Sector Banks (PSBs) [4]. Macroeconomic and bank-specific factors, along with relative weight analysis, are major determinants of NPAs in the Indian banking sector [31]. Profitability ratio, operational capacity, cost efficiency, and aggressive lending are negatively affecting NPAs. The other variables affecting them are lending rates and credit growth [32]. Business freedom and Financial development have emerged as the leading determinants of non-performing assets in the Indian banking sector [11].

Profitability ratio, operational capacity, cost efficiency, and aggressive lending practices were the negative practices of the two, significantly affecting the lending rates and credit growth [32]. Macroeconomic and bank-specific factors, along with relative weight analysis, were major determinants of NPAs in the Indian banking sector [31]. Employee earnings mismanagement and bad loans as the reasons for NPAs running high in Indian Banks, including Public Sector Banks (PSBs) [4]. Priority sector loans and collateral have results showing significant differences in determining NPAs among banks. The empirical evidence suggests that recovery on illiquid collateral is lower in private-sector banks [33]. The leading determinants of non-performing assets in the banking sector in India are business freedoms and economic growth [11]. Deterioration in the quality of loan assets or loans granted to downgrade NPA status and non-repayment of loans for borrowers is primarily because of adverse economic conditions [34].

Impact of Covid 19 on NPAs in the Banking Sector

Baret et al. (2020) discovered that the COVID-19 issue could have made many debtors intentional defaulters and thereby increased the credit risk of the banks [18]. The market value of the collaterals pledged may have diminished since COVID-19, increasing the overall credit risk and risk of possibly defaulting by the banks. Along similar lines, Panchal (2021) found that non-performing assets had soared in India mainly due to COVID-19, increasing the demand for loans while, at the same time, affecting profitability [5]. However, by examining the repayment capacity of the Mudra loan borrowers, Shinde and Jadhav (2023) found that the COVID-19 pandemic did not affect the repayment of Mudra loans as they stood in the same position after the disaster as they were before [35]. On the other hand, Koche (2021) said while examining the financial well-being of any banking organization, that non-performing assets constitute one decisive factor [36]. Due to the unfavorable scenario caused by the COVID-19 epidemic over the world, the NPA experienced a significant rise. Indian banks reported an increase in NPAs and demand for credit, which in turn impacted profitability due to the liquidity crisis [5]. COVID-19 caused financial stress and limited lending agility in Indian banks, resulting in more non-performing loans and lower performance [37]. The COVID-19 pandemic significantly decreased bank performance, with a higher impact on smaller, undercapitalized, and less diversified banks, while better institutional environments and financial development increased strength and resilience [10]. Banks in Central Eastern South Europe were well-capitalized and able to maintain capital requirements with a 12% increase in non-performing loans, with higher resilience in non-EU countries [38].

Indian banking and insurance sectors needed revival strategies to address credit risk, NPAs, and business continuity after COVID-19, with digital payment options aiding business continuity [39]. COVID-19 led to high volatility in financial markets, liquidity constraints, and lags in credit flow, highlighting the need for strong fiscal measures to revive the Indian banking sector [40]. COVID-19 significantly impacted the Indian banking system, presenting unprecedented challenges for industries, governments, and individuals, with financial services firms playing a crucial role in helping consumers and businesses weather the economic downturn [41]. The COVID-19 pandemic negatively impacted the financial performance of banks in GCC countries, with lower profitability, credibility, and financial leverage ratios [42].

The impact of COVID-19 on non-performing assets (NPAs) in Indian banks remains a critical yet underexplored area of research. The existing literature reviewed so far deals specifically with only the pre-existence factors contributing to NPAs, like macroeconomic variables, governance inefficiencies, and the global financial crisis of 2008. While these reviews provide valuable insights into the structural vulnerabilities of the banking sector, they overlook the fundamental challenge posed by the COVID-19 crisis. The pandemic actuated unprecedented disruptions, including wider economic stagnation, liquidity crises, and sectoral declines, which importantly changed the course of NPA performance across the Indian banking sector. Although the effects of the pandemic have meant substantial changes, little research has taken the problem of NPAs from the perspective of changing economic uncertainties and COVID-19-laid financial stress. Studies often overlook how borrower behavior, credit risk profiles, and regulatory interventions, such as moratoriums and restructuring schemes, shaped NPA trends during the COVID-19 era. Furthermore, the study has inadequately addressed the perspectives of key stakeholders, including borrowers and policymakers, in understanding NPA dynamics. This gap necessitates an integrated approach to assess the multifaceted implications of COVID-19 on NPAs, making it essential to explore these unresolved issues comprehensively to strengthen the resilience of India's banking sector.

III. HYPOTHESIS

The study has two primary objectives; first, to gather stakeholder input for assessing NPA management amid the COVID-19 pandemic in “Punjab National Bank;” and second, to examine the trends in “non-performing assets (Gross and Net NPAs) of Punjab National Bank (PNB)” before and after the outbreak of COVID-19.

The Central Hypothesis of the Current Study is:

Null Hypothesis (H0): There is no significant relationship in stakeholder input regarding NPA management amid COVID-19 in Punjab National Bank.

Alternative Hypothesis (H1): There is a significant relationship in stakeholder input regarding NPA management amid the COVID-19 in Punjab National Bank.

IV. RESEARCH METHODS

Primary and secondary sources of information were utilized to establish “the Impact of COVID-19 on NPAs in Punjab National Bank.” Primary information was gathered through the use of a structured questionnaire via purposive sampling that has been employed to ensure that key stakeholders are included. The questionnaire has been created on the “basis of demographic components and the variables of the study” (i.e., perceptions, opinions, and assessments of various stakeholders regarding NPA and bank policies, practices, and strategies employed for managing NPAs). A total of 385 questionnaires were issued to key stakeholders through the offline method, from which 302 respondents responded. Ultimately, information from 140 respondents who completed the questionnaire in its entirety was selected for the study. “The secondary data for the study” has been collected via various “Annual reports of the Punjab National Bank, the bank's financials available on websites, Newspapers, Articles, and various Internet Media and other reliable sources." The research design included a "combination of qualitative and quantitative methods." The data has been analyzed using the SPSS 26 and Excel software. The statistical tools mean, SD and correlation have been used to test the study's hypothesis.

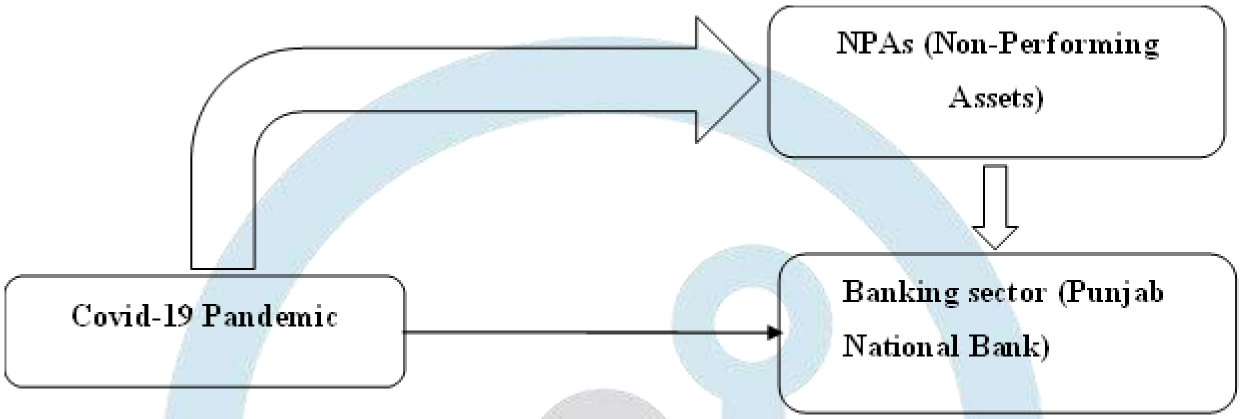

Figure 1: Research Model

V. Results and Interpretations

This section provided a summary of the data's interpretation and conclusions. The results have been categorized using the demographics, goals, and hypotheses utilized. Included under the objectives and hypotheses is a table that presents the findings along with an explanation of them.

Table 1 Demographic Profile of the Respondents

S No.	Demographic Characteristics	Category	N	%
1	Gender	Male	105	75%
		Female	35	25%
2	Marital Status	Married	67	47.9%
		Other	17	12.1%
		Single	56	40%
3	Age (in years)	18-24 years	18	12.9%
		25-34 years	59	42.1%
		35-44 years	43	30.7%
		Above 45 years	20	14.3%
4	Locality	Rural	57	40.7%
		Urban	83	59.3%
5	Occupation	Businessmen	43	30.7%
		Employed	32	22.9%
		Self-employed	27	19.3%
		Retired	15	10.7%
		Other	23	16.4%
6	Education	Primary education	15	10.7%
		Secondary education	16	11.4%
		Bachelor's degree	62	44.3%
		Postgraduate degree	34	24.3%
		Other	13	9.3%
7	Duration of Relationship with Punjab National Bank	1-5 years	64	45.7%
		Less than 1 year	40	28.6%
		More than 5 years	36	25.7%

Table 1 shows "the demographic characteristics of the respondents" in terms of their "gender, marital status, age group, locality, occupation, educational qualifications, and duration of relationship with Punjab National Bank." According to Table 1, 75% of responders were males and 25% were females. Married people made up 47.90% of all respondents. The bulk of respondents (42.1%) were between the ages of 25 and 34 years old. The bulk of responders (59.3%) came from cities. The majority of responders (30.7%) were businesspeople. The bulk of respondents, 44.3%, hold bachelor's degrees. According to the data, 45.7% of respondents have had a relationship with Punjab National Bank for 1-5 years.

Obj.1 To gather stakeholder input for assessing NPA management amid the COVID-19 pandemic in Punjab National Bank.

H0: There is no significant relationship in stakeholder input regarding NPA management amid COVID-19 in Punjab National Bank.

H1: There is a significant relationship in stakeholder input regarding NPA management amid COVID-19 in Punjab National Bank.

Table 2 Descriptive Statistics

Descriptive Statistics			
	Mean	***Std. Deviation***	***N***
Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA	43.1857	8.51371	140
COVID-19 Impact on NPA Management	40.7714	10.45053	140

Table 2 shows the descriptive Statistics of the Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA and the COVID-19 Impact on NPA Management. Descriptive statistics represent the standard deviation and mean values of the variables. According to Table 2, the mean value of Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA is 43.1857, which shows that the average response regarding the variable "Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA" is 43.1857 and the mean value of COVID-19 Impact on NPA Management is 40.7714, which shows that the average response regarding the variable "COVID-19 Impact on NPA Management" is 40.7714.

Table 3 Correlations

Correlations			
		Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA	***COVID-19 Impact on NPA Management***
Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA	Pearson Correlation	1	.179*
	Sig. (2-tailed)		.035
	N	140	140
COVID-19 Impact on NPA Management	Pearson Correlation	.179*	1
	Sig. (2-tailed)	.035	
	N	140	140
*. Correlation is significant at the 0.05 level (2-tailed).			

Table 3 is the Correlations table, which shows the correlation between Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA and the COVID-19 Impact on NPA Management. As per Table 3, there is a significant relationship between the Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA and the COVID-19 Impact on NPA Management., "as the significant value is 0.035, which is smaller than 0.05".

Obj.2 To examine the trends in non-performing assets (Gross and Net NPAs) of Punjab National Bank (PNB) before and after the outbreak of COVID-19.

Table 4 Trend of GNPAs and NNPAs in Punjab National Bank Before and After COVID-19

	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**
Gross NPA	92,448.04	104,423.42	73,478.76	78,472.70	86,620.05	55,370.45	55,818.33
Net NPA	34,908.73	38,575.70	27,218.89	30,037.66	48,684.29	32,702.11	35,422.57

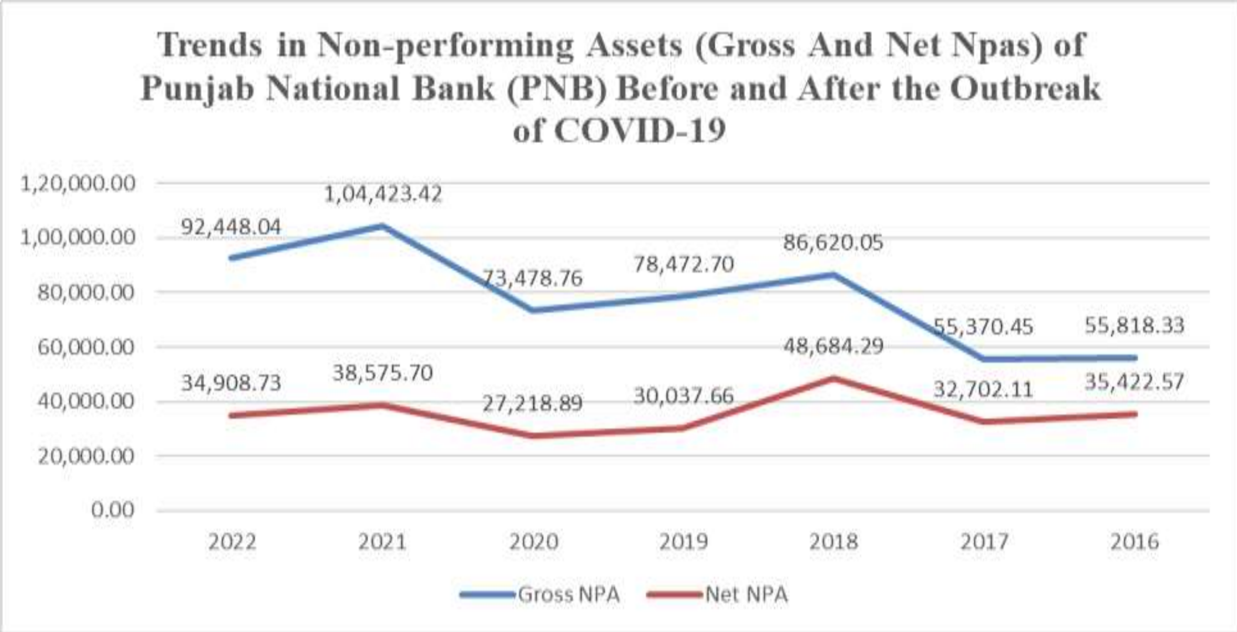

Figure 2: Trend of GNPAs and NNPAs in Punjab National Bank Before and After COVID-19

Table 4 (figure 2) shows the Trends in Non-performing Assets (Gross And Net NPAs) of Punjab National Bank (PNB) Before and After the Outbreak of COVID-19 from 2016 to 2022. From Table 4 (figure 2), it can be interpreted that before the onset of the COVID-19 pandemic, there was a fluctuating pattern in NPAs. A surge in 2018 was followed by a slight recovery in subsequent years. The pandemic seemingly impacted the bank's asset quality, leading to a rise in both Gross and Net NPAs in 2021 and 2022. Economic disruptions and financial hardships experienced by borrowers likely contributed to this increase in non-performing assets during these pandemic-affected years.

VI. Discussion

The Indian commercial banking industry, particularly public sector banks, has experienced a significant decline in asset quality over the past few year. However, these have demonstrated significant progress in addressing this issue amidst the COVID-19 pandemic [43]. Considering these impressive facts, the study's main objective was to evaluate the “The Impact of COVID-19 on NPAs: of Punjab National Bank from the perspective of Stakeholders.” The study's significant findings were identified through a careful process of data acquisition and analysis, employing several tools (MS Excel and SPSS) and techniques like correlation analysis.

The present study found a substantial association between the perceptions, opinions, and assessments of various stakeholders about NPA and the effect of COVID-19 on NPA administration (the significant value is 0.035, which is smaller than 0.05) as shown in Table 3. When compared with the previous studies it has been found that the present study is unique as it has examined the relationship in stakeholder input regarding NPA management amid COVID-19 in Punjab National Bank whereas the previous study by Mohamadian, et al., (2022) sought to determine and evaluate the stakeholders involved in the management and control of COVID-19 [16]. The present study highlights the significant oversight of stakeholder input in the management of Non-Performing Assets (NPA) during the COVID-19 pandemic. Additionally, there is a lack of research on this topic, establishing a foundation for future studies on stakeholder involvement in NPA management amid the challenges posed by COVID-19.

Further, the finding of the present study revealed that PNB's gross and net non-performing asset trend revealed variations in non-performing assets over time, with “the COVID-19 pandemic” having a significant influence on these trends as shown in Table 4 and Figure 2. The study has found that the gross and net NAPs increased in 2021 (i.e., 104,423.42 from 73,478.76 and 38,575.70 from 27,218.89 respectively) after “the onset of the COVID-19 pandemic” (which hit globally in 2020). The findings are similar to the findings of several studies. For example, Nishat (2022) discovered that the COVID-19 pandemic has had a detrimental effect on India's financial industry and economy[44]. Similarly, Goswami, (2022) discovered that during the pre-crisis and crisis eras, net NPAs and gross NPAs as a proportion of gross advances decreased [43]. The post-crisis period saw a reversal of this downward trend of non-performing assets (NPA), which once again supported the state of asset quality throughout the COVID-19/20 years. This point of view has been favored by Gulati et al. (2019) and Goswami (2022) [45,43]. This study is one of the few that examines the largest public sector bank, PNB, making it a valuable contribution to understanding its operations and impact.

Previous studies have explored the “impact of COVID-19” on Non-Performing Assets (NPAs) within the “Indian banking sector,” including Punjab National Bank (PNB). For example, Mehta et al. (2023) analyzed asset quality across public sector banks and found a moderate increase in NPAs during the pandemic, highlighting policy interventions but neglecting specific organizational factors affecting PNB [46]. Similarly, Pon (2022) examined banking performance and mergers during the COVID-19 pandemic but focused primarily on structural changes, overlooking the direct relationship between NPAs and stakeholder impacts [47]. Rawat and Sharma (2023) addressed bootstrapped efficiency in Indian banks, identifying rising NPAs as a threat to profitability; however, their findings lacked insights into regional and sectoral variations [48]. The present study fills these gaps by adopting a stakeholder perspective to evaluate how COVID-19 affected NPAs in PNB. By integrating qualitative insights from stakeholders and quantitative trends, the present study provides a nuanced understanding of the pandemic's impact on NPAs and offers recommendations for mitigating risks in similar crises.

The analysis indicates that COVID-19 significantly impacted PNBs and the non-performing assets (NPAs) of the Indian banking industry. Moreover, there is a significant relationship between the Perceptions, Opinions, and Assessments of Various Stakeholders regarding NPA and the COVID-19 Impact on NPA Management. On comparing the present studies with past studies, it has been found that the current study has explored the variables from the perspective of Various Stakeholders of the PNB bank which has not been seen in past studies.

VII. CONCLUSION

The global economy, including financial institutions and markets, is suffering from the "COVID-19" epidemic. For the banking sector, the pandemic causes many issues, most noticeably rising default rates. In developing nations with inadequate financial market infrastructure, it is probably going to be worse. Thus the present study primarily "aimed to examine the Impact of COVID-19 on NPAs of Punjab National Bank of India." Furthermore, the coordinated actions of important stakeholders are critical to managing and preventing this pandemic, hence the study evaluated the opinions of stakeholders. The study concludes that the COVID-19 pandemic significantly influenced the non-performing assets (NPAs) of Punjab National Bank (PNB), with a notable rise in gross and net NPAs during the pandemic years. Data analysis highlighted a substantial correlation between stakeholder perceptions and the pandemic's impact on NPA management, emphasizing the pandemic's financial strain on borrowers. Despite these challenges, the findings suggest that PNB and similar institutions are recovering from these setbacks. The study fills a notable gap in understanding stakeholder roles in NPA management during crises, offering practical recommendations. These include improving due diligence, loan assessments, and credit monitoring systems while leveraging existing regulatory measures to maintain asset quality. The study underscores the importance of proactive measures for financial institutions to mitigate risks in similar future crises, contributing valuable insights for policymakers and regulators.

The study findings have demonstrated that the Perceptions, Opinions, and Assessments of Various Stakeholders about NPA have a significant relationship with the COVID-19 Impact on NPA Management. Additionally, the study determined that PNB's gross and net non-performing asset trends presented variations in non-performing assets over time and were heavily affected by the influence of the COVID-19 pandemic.

The outcome of the study is that Banking institutions such as Punjab National Bank (PNB) in India have been impacted during the COVID-19 epidemic period, particularly concerning bank Non-Performing Assets. The pandemic has impacted the world's financial environment. However, the data shows that the banks are bouncing back at a pretty rapid rate from the adverse impact of the covid 19 as shown in Figure 2. Lastly, the study advised that to curb the rising tide of non-performing loans (NPAs), financial institutions should incorporate preventative measures along with making appropriate use of the available regulatory measures, like improving the systems for due diligence practices, credit appraisal, loan assessment, and post-sanction credit monitoring system, to ensure quality assets. The study concluded that the COVID-19 pandemic greatly affected banking institutions such as Punjab National Bank in India, particularly in terms of Non-Performing Assets (NPAs). However, data shows that the banks are bouncing back rapidly from the negative effects of the pandemic. The study highlighted that PNB and other banks faced NPAs challenges because of COVID-19 but are now bouncing back. The study also advocated that financial institutes take proactive actions, such as enhancing their due diligence, credit assessment, and loan monitoring that would prevent further rising of NPAs.

Implications

The study provides valuable input for regulators and policymakers to devise efficient strategies for addressing NPAs during pandemics. The study enlightens on the linkages between stakeholder perceptions and trends in NPA, thus validating the designing of specific interventions meant for enhancing credit appraisal, loan monitoring, and compliance with regulation. Such outcomes would help the banks improve resilience towards shocks from economic crises and consequently promote financial stability. These suggestions by the study further support the banking sector to handle the challenge posed by post-pandemic times and reduce potential future risks toward the maintenance of quality assets robustly across the institutions.

Limitations

The study limits itself to an institution, Punjab National Bank (PNB), as well as time, 2016–2022. Stakeholders are just a few in this sample size and thus cannot make generalizations concerning various banking cases. The study does not account for regional, sectoral, or institutional variations, which limits the comprehensiveness of its findings. These limitations underscore the necessity for broader research efforts to obtain deeper insights.

Recommendations for Further Studies

Future research should explore the pandemic's impact on NPAs across multiple banks, encompassing both public and private institutions, to capture a wider range of dynamics. Longitudinal studies covering extended timeframes are needed to analyze long-term repercussions. Additionally, incorporating diverse stakeholder groups and geographical areas will enhance the generalizability of findings, offering a more complete understanding of banking resilience during global crises.

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