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Non-performing Assets of Commercial Banks in Tripura: A Comparative Analysis of Priority Sector Lending and Mudra Loans

Dr. Supriya Dam
Associate Professor
Department of Commerce
Netaji Subhash Mahavidyalaya, Udaipur, Gomati, Tripura.
Email: mrsupriya7dam@gmail.com

Abstract

The study dwells on a comparative analysis of NPAs resulting from the PSL and Mudra loans concerning Tripura. Test results show a contrasting pattern of growth of NPAs from the PSL and NPL. Findings suggest PSBs' obligation towards extending PSL lengthens NPAs, whereas PvSBs' thrust on NPLs results in much higher NPAs than PSL. This study observed a shifting role of commercial banks towards non-priority sector lending, not equally rewarding as expected from the resultant growth of NPAs. PvSBs' higher funding in Shishu and Kishore schemes indicates its changing role in extending micro finances with low NPAs than PSBs.

Keywords: Priority Sector Lending, Mudra Loans, Commercial Banks, Non-performing Assets.

1. Introduction

Over the years, the magnitude of Non-Performing Assets (NPAs) in the banking sector continues to accrue irrespective of well-pronged regulatory mechanisms and self-sustaining measures adopted. Besides weakening liquidity and profitability of banking concerns, the pilling of NPAs impairs the asset quality of commercial banks, thereby reducing the 'edge' over rival banks in terms of market share and coverage. Although the Gross Non-Performing Assets (GNPA) of scheduled commercial banks registered a decline of 2.94 percent during 2019-21 (PIB, 2022), however, the magnitude of GNPA of the public sector banks stands at three times the same vis-a-vis private banks (RBI, 2022). The Net NPAs (NNPAs) for the corresponding public sector banks (PSBs) have gone up to 3.54 times in comparison to the private sector banks (PvSB), presenting a sorry state of affairs more than ever before.

Tripura houses a total of 29 commercial banks incurring NPAs of 117293.42 Crore INR as of 31st March 2022, 16 of these banks are in private sector accumulating total NPAs of 30926.49 Crore INR, with a ratio of 3.79: 1 (SLBC, 2022). The urban-centric approach of PvSBs, with due cognizance of the debt recovery mechanism, stands them in good stead in contrast to PSBs. The PSBs catering services to the priority sector (PSL) enhanced the level of NPAs more than the PvSBs. The PvSBs conversely take a lead role in disbursement, particularly under Pradhan Mantri Mudra Yojana (PMMY), have a ratio of 5.76: 1 in comparison to the PSBs (SLBC, 2022).

The present study looks into possible fundamental changes due to the accumulation of NPAs of four commercial banks in Tripura, two each from the public and private sectors since 2018, and its impact on the overall banking sector in Tripura. The preliminary study has given us the impression that creeping NPAs have weakened the liquidity and profitability of these four commercial banks over the years. However, NPAs of PSBs are more pronounced than PvSBs raising questions about inadequate recovery. The abovementioned causes prompted us to go for the present study.

The objectives of the study are four fronts: a) to make an overview of the accumulation of NPAs in the banking sector in Tripura; b) to distinguish between the NPA management of PSBs vis-à-vis PvSBs; c) to make an assessment of priority sector lending and mudra loans as reasons for accrual of NPAs; and d) to provide a general outline for banks healthy asset management system.

The paper is arranged as Section I introduces the study outlining the objectives pursued, followed by a review of the literature and database, and methodology in Sections II and III. Section IV summarizes the present status of NPAs of commercial banks in Tripura, followed by a comparative assessment of the impact of priority sector lending and mudra loans in the accrual of NPAs in Section V. Section VI sheds light on the issues cropped up and conclusion of the study.

2. Review of Literature

Agarwala and Agarwala (2019) observed that the poor asset quality of banks affected their financial performance indicators, directly impacting shareholders' wealth. The adverse impact of NPAs affects the lending rate of banks and extends decisive control over deposit rates for compensating such losses (Laveena and Malhotra, 2014), driving the lending rate to the high end for the clients. Findings suggest a strong negative correlation between NPAs and return on assets (ROA) and return on equity (ROE), the prime impediment to garnering profits for the sector (Gaur & Mahapatra: 2021), and establishes a negative relationship between the NPAs and Gross Domestic Product (GDP) (Das and Dey, 2017). In addition, the accumulation of NPAs in PSBs can push them to the brink of mergers and acquisitions with the larger ones (Singh and Sneha, 2021), losing their customer base more than otherwise.

Striking a balance between the priority and non-priority sectors has been a core issue impacting the banking sector in the country. PSBs experience the high impact of NPAs vis-à-vis the PvSBs (Bharadwaj and Chaudhary, 2018), leaving a sluggish recovery mechanism, particularly from corporate and institutional borrowers (Rai, 2012). Studies observe that the complete wipeout of NPAs concerning PSBs is impossible due to the recurrence of government welfare schemes routed through it (Gurumurthy and Sudha, 2012), jeopardizing the recovery aspects of it. Jain et al (2015) stressed on reprioritization to stave off adverse and external shocks that had arisen out of monetary and banking policies pursued.

Prevalence of NPAs, courtesy of aggressive lending practices of banks and the rise of willful non-payers (Mohanty and Acharya, 2019), saw the advent of laws and strictures like corporate debt restructuring, higher provisioning on the part of banks, and imposition of penalties to the defaulting customers (Tandon et al, 2017). For PSBs, the timely appraisal of the bank's quality of assets, phase-wise reduction of bad loans, and restructuring of policy measures (Mohan and Roy, 2022) in addressing NPAs. The suggested 'Health Code System' of the Ghosh Committee and categorization of standard assets, substandard assets, doubtful assets, and loss assets following Narasimham Committee reports, along with setting up of Debt Recovery Tribunal and Lok Adalats aimed at plugging the loopholes impairing the banking sector (Singla, 2015). Bawa et al (2019) outlined the need for ratios at the bank's functional and monitoring level, particularly in operational, liquidity, solvency, and quality of assets, and stressed that an aggressive growth strategy results in a higher accumulation of NPAs than otherwise. To rein in the buildup of NPAs of PSBs, the quarterly review of bank-centered variables and a clear distinction between good and bad loans, coupled with a comprehensive lending policy (Goyel and Bhati, 2017), augurs well for banks.

Pradhan Mantri Mudra Yojana (PMMY) loans to Micro, Small, and Medium Enterprises (MSMEs) have gained momentum in recent years, providing loans on simple terms to prospective entrepreneurs, particularly women, by banking institutions. Mudra loans have the propensity to enhance NPAs unless due care is not exercised from the outset (Nagra, 2022), with Shishu loans accounting for a higher share of repayment issues than the Kishore and Taruns (Shinde and Jadhav, 2022). The reasons for such default are attributable to a lack of education and skill among the recipient of Shishu loans, besides business failures that led to the accumulation of NPAs on that front (Sharma and Gupta, 2021). Commercial banks, the concerned government, and the Reserve Bank of India (RBI) can converge in curtailing NPAs emerging from Mudra loans (Gupta, 2021). The present study sheds light on the NPAs have emerged out of priority sector lending and Mudra loans of commercial banks operating in Tripura and provide a generic outline for redressal.

3. Methodology and Hypotheses

This descriptive study largely relies on published reports in newspapers and journals, annual and published reports of the Reserve Bank of India (RBI), and State Level Bankers Committee (SLBC) reports on Tripura, including other print and internet publications relating to this field of study. In addition, the Annual Reports of concerned banks and the Economic Review of Tripura brought out by the Department of Economics and Statistics, Government of Tripura, form an integral part of this analysis. The information derived from sources was processed, analyzed, and reinterpreted using standard statistical tools like Chi Square, ANOVA and Correlation test as per the need of the study. The secondary source of data forms the core of this paper, and much of its conclusions are partially attributable to the reliability of the sources from which it was compiled.

4. Present Status of NPAs

The following table throws light on the status of gross advances and NPAs resulting from priority sector lending (PSL) and non- priority sector lending (NPL) of scheduled banks.

Table 1: Gross Advances and NPAs of Priority and Non-priority Sector of Scheduled Banks

(Amount in Rupees Crore)

Year	Priority Sector			Non-priority Sector		
	Gross Advances	Gross NPAs	NPAs %age over advances	Gross Advances	Gross NPAs	NPAs %age over advances
Public Sector Banks						
2013	1297000	66900	42.9	2776900	89000	57.1
2014	1519298	79192	36.5	3071161	137547	63.5
2015	1685954	93685	35.7	3159315	169060	64.3
2016	1873748	128116	25.5	3208408	373952	74.5
2017	1959915	154276	24.1	3182309	486780	75.9
CAGR	8.61 %	18.19 %	-10.89 %	2.76 %	40.47 %	5.86 %
Private Sector Banks						
2013	315700	5200	26.00	730900	14800	74.00
2014	383056	6055	26.60	828676	16689	73.40
2015	442762	7211	22.80	994577	24365	77.20
2016	561977	10139	21.00	1229704	38241	79.00
2017	652004	13293	18.0	1462876	60549	82.00
CAGR	15.61 %	20.65 %	-7.09 %	14.89 %	32.55 %	2.07 %

Source: RBI.

Table 1 shows PSBs registered an increase in gross advances by 1.51 times in the PSL during 2013-17 at a compound annual growth rate (CAGR) of 8.61 percent. The gross NPAs for the same period have climbed up to 2.31 times at a CAGR of 18.19 percent. However, the percentage rate of gross NPAs over gross advances declines from 42.9 percent to 24.1 percent during 2013-17, indicating a reduction in extending loans and advances to the PSL. PSBs gross advances and gross NPAs for the NPL registered incremental rises by 1.15 times and 5.47 times each, leaving a CAGR of 2.76 percent and 40.47 percent apiece. The NPAs percentage over gross advances for the non-priority segment has gone up from 57.1 percent to 75.9 percent for 2013-17. The PSB's gross advances to the PSL for 2017 totaled 24.1 percent vis-à-vis 75.9 percent for the NPL, indicating the phase-wise reduction of NPAs.

PvSBs recorded 2.07 times increment in gross advances to the PSL and 2.56 times in gross NPAs during 2013-17, leaving 15.61 percent and 20.65 percent of CAGR each. Total NPAs of the PSL, as a percentage of gross advances, have diminished from 26 percent in 2013 to 18 percent in 2017, registering a decline of 8 percent during 2013-17. Conversely, NPLs gross advances and gross NPAs for PvSBs move up to two times and 4.09 times each, leaving CAGR of 14.89 percent and 32.55 percent apiece. The rate of growth of NPAs for the NPL has also gone up to 82 percent, showing the same trend as displayed by PSBs for the period. The reduction of PSL for PSBs and PvSBs has left a sizeable portion of mobilized funds to invest in profitable avenues, and the increase in NPAs for NPL is indicative of banks' failure to optimize the desired benefits from the latter for successive periods. RBI’s Financial Stability Report 2023 suggests the volume of Gross NPAs (GNPAs) and Net NPAs (NPAs) of banking sector has gone down from 11.5 percent and 6.1 percent in March, 2018 to 3.9 percent and 1 percent apiece in March, 2023, shows better financial indicators for the sector in five years time.

Table 2: Comparative Analysis of Priority Sector and Non Priority Sector Lending of Scheduled Banks

Year	Public Sector Banks (PSBs)		Private Sector Banks (PvSBs)	
	Priority sector NPAs %age over advances	Non-Priority sector NPAs %age over advances	Priority sector NPAs %age over advances	Non-Priority sector NPAs %age over advances
2013	42.9	57.1	26.00	74.00
2014	36.5	63.5	26.60	73.40
2015	35.7	64.3	22.80	77.20
2016	25.5	74.5	21.00	79.00
2017	24.1	75.9	18.0	82.00
	Chi Square statistic: 14.3364			
	P value: 0.279741			

Source: Calculated from Table 1.

Table 2 presents a comparative analysis of NPA growth over advances for PSBs and PvSBs during 2013-17. A closer look at the growth rate suggests PSL NPAs have shown a diminishing trend for PSBs and PvSBs, yet the decline is more noticeable for PvSBs than the PSBs. On the contrary, NPAs resulting from NPL have depicted an increasing trend for scheduled commercial banks during 2013-17, but the PvSBs have a more pronounced rate of growth of NPAs than the PSBs. Let us test the following hypothesis by applying the Chi-Square test.

H_1: There are no significant difference between the NPAs arising from PSL and NPL of scheduled commercial banks.

The test result shows a Chi-square statistic of 14.3364 and P value of 0.279741 at 5 percent level. The calculated P value of 0.279741 is higher than the critical value of 0.05 (0.279741>0.05), demonstrating an insignificant relationship among the variables. Therefore, the supposition of 'there are no significant differences between the NPAs arising from the PSL and the NPL of scheduled commercial banks' stands rejected. Alternatively, the NPAs resulting from the PSL and NPL of scheduled commercial banks show contrasting scale at 5 percent level of significance.
Table 3 depicts the status of NPAs in the banking sector from March 2012 to March 2022 for Tripura. Gross Advance and Gross NPAs registered a rise of 4.81 times and 6.59 times from March 2012 to March 2022. The compound annual growth rate (CAGR) of GA's for 11 years stands at 12.84 percent, and the CAGR of Gross NPAs, and its percentage growth represents 15.62 percent and 2.47 percent each. The NPAs as a percentage of gross advances for the state are significantly lower than the national level statistics (Table 1) for the same during 2013-17.

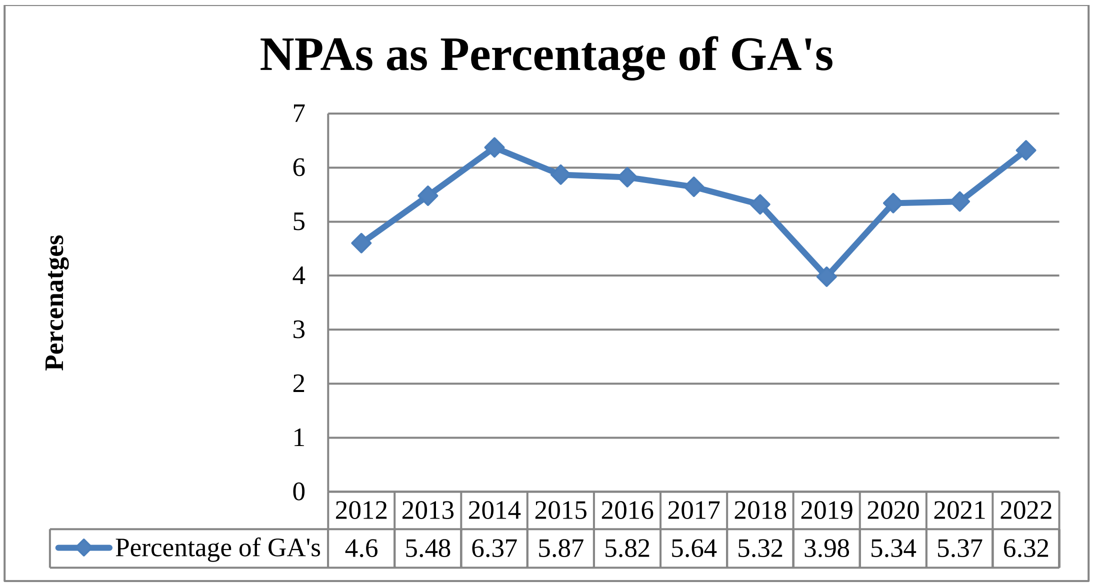
Table 3: Gross Advance and Gross NPAs of Commercial Banks in Tripura (Rs in Crores)

Year as on 31st March	Gross Advance (GA)	Gross NPAs	
		Total amount	Percentage of GA
2012	3,857	177.78	4.60
2913	4,590	251.92	5.48
2014	5,771	368.13	6.37
2015	7,108	417.41	5.87
2016	8,415	490.16	5.82
2017	9.586	540.46	5.64
2018	11,518	613.19	5.32
2019	14,411	574.13	3.98
2020	16,220	866.94	5.34
2021	16,884	906.99	5.37
2022	18,546	1,172.93	6.32
CAGR	12.84%	15.62%	2.47%

Source: 142nd SLBC Tripura.

Following Figure 1 depicts NPAs as a percentage of gross advances during 2012-22 concerning commercial banks in Tripura. During the first three years (2012-14), the increase of NPAs as a percentage of Gross Advance registered a progressive rise in growth rates. However, from 2015 onwards till 2019, the percentile of GA's recorded a gradual decline and the lowest is revealed at 3.98 percent during 2019, suggesting efficient realization of NPAs vis-à-vis advances by banks in Tripura. Since then, the ratio of Gross Advances to Gross NPAs displayed an upward trend for three years (2020-22) 2020 onwards, covering the peak pandemic period, with the highest recorded at 6.32 percent in 2022. However, the peak rate of Gross NPAs has never gone beyond 6.37 percent during 2014 beyond the national average of 4.1 percent as on 31st March, 2014.

Figure 1: NPAs as Percentage of Gross Advances.



5. Priority Sector Lending and Pradhan Mantri Mudra Loans

The growth of NPAs of PSL and Pradhan Mantri Mudra Loans (PMMLs) left a differential impact upon the PSBs and PvSBs concerning Tripura since 2018 on four commercial banks, two each from public and private sectors. Table 4 sheds light on the sectoral distribution of lending of four commercial banks and the resultant growth of NPAs throughout 2018-22.

Table 4: Demand and Recovery Status of PSLs in Tripura

(Rs/Lakhs)

Sectors	December 2018		December 2019		December 2020		December 2021		December 2022	
	Demand	Recovery	Demand	Recovery	Demand	Recovery	Demand	Recovery	Demand	Recovery
A & A	73137.2	40915.2 (55.94%)	92466.3	56437.6 (61.04%)	109769.1	67916.6 (61.86%)	129358.7	71396.5 (55.19%)	176787.8	90263.1 (51.06%)
MSME	72891.5	49904.9 (68.47%)	76302.6	44672.3 (58.55%)	105817.5	63781.4 (60.28%)	72392.5	39139.9 (54.07%)	93482.0	44574.3 (47.68%)
Other PSL	54657.9	37729.0 (69.03%)	45091.0	23358.7 (51.8%)	87413.4	54963.3 (62.88%)	51803.3	20090.5 (38.78%)	105409.1	45246.3 (42.92%)
Total	200686.5	128549.1	213859.9	124468.7	303003.9	186661.3	253554.5	130626.9	373970.8	179232.1

Source: State Level Bankers Committee (SLBC), Tripura 131, 135, 139,142.

AA: Agriculture and Allied, MSME: Micro Small and Medium Enterprises, PSL: Priority Sector Lending.

Table 4 states the demand and recovery status of PSLs in Tripura during 2018-22, covering specific sectors like Agriculture and Allied (AA), MSME, and Other PSL. The percentage recovery rate of A & A was 55.94 percent in 2018, ascended to 61.86 percent in 2020, and then declined to 51.06 percent in 2022. The MSME registered the highest recovery rate of 68.47 percent in 2018, slumping down to 60.28 percent in December 2020 and further down to 47.68 percent in December 2022. The recovery rate of the Other PSL stood at 69.03 percent in December 2018, had gone down to 62.88 percent in December 2020, ends at 42.92 percent in December 2022. Incidentally, all the sectors recorded over 60 percent growth in recovery rate of PSL during the peak pandemic period of 2020, leaving a decline in recovery during the post-pandemic period of 2021 and 2022. The MSME's recovery documented the highest mean value of 57.81 percent, closely followed by AA (57.02 percent and Other PSL (53.08 percent) down the order.

Table 5: Status of NPAs of Four Commercial Banks in Tripura

(Amount in Rupees Lakhs)

Banks/ Year	Type of NPAs	Public Sector Banks		Private Sector Banks		Average
		PNB*	TGB	Bandhan Bank	Ujjivan Bank	
31.12.18	TPS	9161.52	28167.26	0	32.49	9034.318
	NPS	219.38	2058.51	16.40	14.25	577.135
31.12.19	TPS	9886.05	22852.33	0	62.82	8200.3
	NPS	923.98	95.34	0	5.15	256.118
31.12.20	TPS	11353.35	19137.80	364.39	56.44	7727.995
	NPS	1042.24	1724.05	40.45	0	701.685
31.12.21	TPS	18000.53	19493.62	19896.39	784.61	14543.788
	NPS	1301.28	1639.68	7528.19	112.25	2645.35
31.12.22	TPS	17449.77	14695.48	4855.50	376.20	9344.238
	NPS	1011.97	5573.36	7231.95	81.03	3474.578
Mean		7035.007	11543.743	3993.327	152.524	
F Value						4.62898
P value						0.007728

*Note: Punjab National Bank (PNB) and United Bank of India (UBI) are merged together from 2020 onwards. The total for PNB for 2019 and 2018 are arrived at by adding together the total NPAs of PNB and UBIs. TGB: Tripura Gramin Bank.

Source: State Level Bankers Committee (SLBC) Reports, Tripura.

Table 5 highlights the status of NPAs of four select commercial banks of Tripura for 2018-22. The figures demonstrate that the total PSL of commercial banks are noticeable for PSBs than the PvSBs. On the contrary, NPL is soaring for PvSBs than the PSBs. Individual bank-wise analysis suggests PSL for PNB peaked during 2021 and then declined to 17,449.77 lakhs INR in 2022. The NPL of PNB has gone up by five times in five years. TGB has the highest score of TPS among the four banks and could reduce the magnitude of total PSL by two times during the five years. However, the NPS of TGB has shot up by 2.5 times during the same period.

Of the two PvSBs, Bandhan Bank was the top drawer in providing total PSL among the four banks, particularly during the peak pandemic period in 2021. The bank could decline the magnitude of total PSL by 2.5 times in the next year. The NPL for the Bandhan Bank registered a steady growth rate in five years and was the highest among the banks in 2022. The Ujjevan Bank, on the other, had a reasonable share of total PSL and NPL throughout five years. TGB has the highest mean score of NPAs among the banks, followed by PNB, Bandhan, and Ujjevan banks in that order. Let us test the following hypothesis by applying ANOVA at 5 percent level of significance.

H_2: PSBs take a lead role in providing total PSL loans over PvSBs.

The derived F and P values stand at 4.62898 and 0.007728 each (Table 5) at 5 percent level. The P value of 0.007728 is less than the critical value of 0.05 (0.007728 <0.05) shows significant result. Thus, the presumption 'PSBs take a lead role in providing total PSL over PvSBs' stands accepted at 5 percent level of significance.

Table 6: Descriptive Statistics of Mudra Loans across India

Year	No of loan sanctioned	Amount sanctioned (in INR Crore)	Amount disbursed (in INR Crore)	NPAs (in INR Crore)
2016-17	39701047	180528.54	175312.54	0
2017-18	48130593	253677.10	246437.40	0
2018-19	59870318	321722.79	311811.88	285.00
2019-20	62247606	337495.53	329715.03	356.07
2020-21	50735046	321759.25	311754.47	80.70
2021-22	53795526	339110.35	331402.20	82.04
2022-23	62310598	456537.98	450423.66	NA
Mean	53827247.71	315833.08	308122.45	200.95
CAGR	6.65%	14.17%	14.43%	-26.75%

Source: www.mudra.org.in

Table 6 spells out descriptive statistics of Micro Units Development and Refinance Agency Ltd (MUDRA) bank loans launched on 8th April 2015 as Non-Banking Financial Institution (NBFI). Mudra Bank was instituted to refinance scheduled commercial banks, regional rural banks, microfinance institutions, and Non-banking financial companies in extending micro-loans to the MSME sector. The loans are provided under three schemes- Shishu (coverage upto 50,000 INR), Kishore (50,000-5,00,000 INR), and Tarun (5,00,000-10,00,000 INR) at collateral-free liberalized interest rates to micro-entrepreneurs including women.

The descriptive statistics of Mudra loans suggest the number of loans sanctioned, amount sanctioned, and disbursed have grown in strength since 2016-17, targeting micro-entrepreneurs. The number of loans approved has a mean score of 53827247.71 and a compound annual growth rate (CAGR) of 6.65 percent. The mean score of the amount approved and amount disbursed stands at 315833.08 and 308122.45 each, registering respective CAGR of 14.17 percent and 14.43 percent. Incidentally, the NPAs resulting from Mudra loans declined from 386.07 Crore INR in 2019-20 to 82.04 Crore INR during 2021-22, recording a negative CAGR of 26.75 percent.

Table 7: Status of Mudra Loans in Tripura during 2020-22

(Amount in Lakhs INR)

Bank Groups	Shishu		Kishore		Tarun		Total NPA
	As on 31st December 2020						
	Outstanding	NPAs	Outstanding	NPAs	Outstanding	NPAs	
PSBs	3388.96	627.29	20948.16	2762.15	9895.46	460.36	3849.80
PvSBs	29197.18	108.79	111580.32	121.52	3239.64	25.85	256.15
RRBs	12845.28	2463.07	35461.13	2636.26	4464.66	450.32	5549.65
Cooperative Bank	126.00	0	344.83	7.80	00	00	7.80
Total	45566.42	3199.14	168334.44	5527.73	17599.76	936.53	9663.40
	As on 31st December 2021						
PSBs	5669.82	2037.78	34358.39	7085.23	11095.33	1075.31	10198.32
PvSBs	21727.94	6352.21	23348.32	1419.85	1585.55	64.26	7836.32
RRBs	13779.37	2236.36	43225.13	2596.07	5453.42	496.45	5328.88
Cooperative	321.08	0	267.06	8.40	81.47	14.08	22.48

Bank							
Total	41498.20	10626.36	101198.90	11109.54	18215.77	1650.10	23386.00
	As on 31st December 2022						
PSBs	4388.77	2240.05	34994.09	7723.70	14125.87	1163.19	11126.94
PvSBs	23998.66	1171.95	139477.58	10775.29	1579.56	206.28	12153.47
RRBs	9885.65	1671.21	29915.87	2060.87	4637.37	152.73	3884.81
Cooperative Bank	544.86	0	471.86	11.25	130.78	16.08	27.33
Total	38817.94	5083.21	204859.40	20571.11	20473.58	1538.27	27192.55

Source: SLBC 134, 138, 142, Tripura.

Table 7 depicts the bank group-wise status of Mudra loans and the consequent fallout of NPAs concerning Tripura for 2020-22. An analysis of percentage NPAs to the total Mudra loans suggests PvSBs (0.18 percent) have the lowest bad loans for 2020, followed by Cooperative banks (1.66 percent), RRBs (Tripura Gramin Bank) (10.52 percent), and PSBs (11.25 percent) in that order. Bank group-wise NPAs for 2021 demonstrate that barring RRBs (8.53 percent), the percentage rate of NPAs for Cooperative banks (3.36 percent), PvSBs (16.79 percent), and PSBs (19.95 percent) have recorded an increase in magnitude from 2020. For 2022, Cooperative banks could register the lowest NPAs (2.38 percent) among the four banking groups, followed by PvSBs (7.36 percent), RRBs (8.74 percent), and PSBs (20.79 percent) in that order. The PvSBs invested the highest amount during 2020 and 2022 and have a reasonable accumulation of NPAs, except for Cooperative banks. The RRBs have taken the lead in investment during 2021 and ranked third in order of bad loans. Except for 2020, PSBs could register a sizeable volume of NPAs throughout three years, irrespective of being the third largest investor for Mudra loans during 2020-22. On the contrary, the PvSBs and RRBs parked higher amounts than the PSBs, leaving fewer NPAs than the government banks for the period.

The size of investment in the Shishu, Kishore, and Tarun in respective bank groups reveals the strategy pursued by banks over the last three years. The PvSBs parked substantial funds in the Kishore schemes ranging from 50,000 to 500000 culminating in better composite NPAs of 4.49 percent over the three years. Although, PvSBs registered the least composite NPAs of 1.82 percent from their lowest investment in Tarun, its second preferred investment in Kishore fetched 10.19 percent of NPAs during 2020-22. RRBs parked their highest funds in Kishore producing its best composite NPAs of 6.72 percent in three years. Its second-best accumulated investment in Shishu results in a composite NPAs of 17.45 percent for the period, while its minimum investment in Tarun brings about 8.25 percent of composite NPAs. PSBs fared reasonably well by investing in Tarun, causing 7.69 percent of composite NPAs during 2020-22. PSBs primarily bank on investment in Kishore schemes resulting in 19.46 percent of composite NPAs its lowest investment Shishu fetched 36.48 percent of composite NPAs, the highest among all bank groups operating in Tripura. The overall trend suggests the Shishu scheme of Mudra loan has the highest NPAs across the banking groups during 2020-22, followed by Kishore and Tarun in descending order.

Table 8: Status of Mudra Loans of Four Commercial banks in Tripura during 2020-22

(Amount in Lakhs INR)

Banks	Shishu		Kishore		Tarun		Total NPA
	As on 31st December 2020						
	Outstanding	NPAs	Outstanding	NPAs	Outstanding	NPAs	
PNB	2089.59	407.98	9313.94	469.64	4283.88	152.64	1030.26
TGB	12845.28	2463.07	35461.13	2636.26	4464.66	450.32	5549.65
Bandhan Bank	18483.87	0	101853.77	0	2385.12	0	0
Ujjivan Bank	7821.49	85.27	7821.49	85.27	0	0	130.54
	As on 31st December 2021						
PNB	3778.39	1417.15	12743.12	3337.89	3790.39	530.15	5825.78
TGB	13779.37	2236.36	43225.13	2596.07	5453.42	496.45	5328.88
Bandhan Bank	5958.33	660.58	15065.97	1089.59	785.58	14.31	1764.48

Ujjivan Bank	7324.29	1008.57	5893.37	321.72	0	0	1330.29
	As on 31st December 2022						
PNB	3252.71	1781.50	14377.98	3990.57	5818.91	568.14	6340.20
TGB	9885.65	1671.21	29915.87	2060.87	4637.37	152.73	3884.81
Bandhan Bank	14671.23	739.79	128007.11	10461.02	553.59	56.40	11257.21
Ujjivan Bank	7260.71	316.90	9592.27	218.06	0	0	534.96
R	0.0413		0.6194		0.8277		
R^2	0.0017		0.3837		0.6851		
P value	0.898594		0.031721		0.000889		

Source: SLBC 134 138, 142, Tripura.

Table 8 sheds light on a relationship between different facets of Mudra loans and consequent NPAs of four commercial banks in Tripura. Among the Shishu loans, Bandhan Bank has emerged as a prime investor in 2020, banked on its experience gained from microfinance schemes to perfection, resulting in zero NPAs from 18483.87 lacks INR invested for the year. During the pandemic, the Shishu scheme did not work well for the Bank as it incurred NPAs of 660.58 lakh INR in 2021 from one-third of its investment in 2020, representing 11.09 percent of the total. In 2022, the Bandhan Bank again parked the highest amount among the four banks for the scheme resulting in 5.04 percent of NPAs emerging as one of the rewarding schemes for the Bank. TGB, second in order, infused 12845.28 lacks INR for the Shishu scheme in 2020, generating 19.18 percent of NPAs, parked the highest amount in 2021, culminating in 16.23 percent of NPAs. An increase in NPAs for the Bank in successive years prompted a reduction in investment for the scheme in 2022; still, the NPAs (16.91 percent) could not peg back from the Shishu scheme. Ujjevan Bank has emerged as the best performer in relation amount infused in the Shishu scheme and the consequent percentage of NPAs over three years. The Bank recorded 1.09 percent of NPAs from the amount invested in 2020, rose to 13.77 percent in 2021, and then decreased to 4.37 percent during 2022, while maintaining stable investment in the Shishu scheme throughout three years. Despite being one of the largest nationalized banks in India, the PNB lends a meager 5.07 percent of total funds invested for Shishu loans in 2020, resulting in 19.53 percent NPAs, rose to 54.77 percent NPAs for 2022 from the total funds parked.

Barring 2021, Bandhan Bank infused 65.95 percent of the total funds invested for Kishore schemes in 2020, which rose to 70.38 percent of the total in 2022, generating bad loans of 0 and 8.17 percent each. The NPAs of TGB from the funds invested in the Kishore scheme ranged between 7.43 percent in 2020 and 6.89 percent in 2022. PNB, third in order, enhanced its investment in the Kishore scheme by infusing 6.03 percent of the total investment in 2020, rose to 16.57 percent in 2021, and then went down to 7.91 percent in 2022. PNB's NPAs for the periods stand at 5.04 percent, 26.19 percent, and 27.76 percent each. Ujjevan Bank, again, retains its best position in terms of percentage NPAs from its meager investment in the Kishore scheme. The Bank's NPAs ranged between 1.09 percent in 2020 to 2.27 percent in 2022.

For the Tarun scheme, all four banks have scaled down their magnitude of investment vis-à-vis Shishu and Kishore schemes during 2020-22. TGB infused 45.24 percent of the total funds invested in the Tarun scheme, followed by PNB (43.18 percent of the total) and Bandhan Bank (11.58 percent) down the order. Bandhan Bank, again, has the least NPAs (1.9 percent), followed by TGB (7.55 percent) and PNB (9 percent) each, in ascending order. The Ujjevan Bank did not invest in the Tarun scheme for the period.

Let us test the following hypothesis by applying correlation test at 5 percent level of significance.

H_3: There is positive appreciation in NPAs with the increase in investment.

Table 8 further sheds light on the results of correlation tests on the Shishu, Kishore, and Tarun schemes of Mudra loans. The available results of Shishu schemes show the lowest correlation score of 0.0413, followed by R^2 of 0.0017 and a P value of 0.898594 at a 5 percent level. As the derived P value is more than the alpha value of 0.05 (0.898594>0.05), the proposition of 'positive appreciation of NPAs with the increase in investment' stand rejected. For the Kishore scheme, the R stands at 0.6194, showing an average correlation between the amount invested and the resultant NPAs, in which R^2 is explained at 38.37 percent. The outcomes are indicative of touch and go situation for the bankers as the P value (0.031721) is less than the critical value at the 5 percent level. The Tarun schemes result in the highest R, R^2 values and the lowest P values of 0.000889 at a 5 percent level. The outcomes point to a strong positive correlation between the amounts invested and the resultant growth of NPAs, with R^2 explained at 68.51 percent. The result is consistent with the hypothesis drawn (0.05>0.000889), which might propel bankers to avoid it, as evidenced by the investment patterns of PvSBs like Ujjevan and Bandhan Banks for 2020-22. The PSBs, on the other, pile up on NPAs resulting in 7.55 and 9 percent of NPAs for the TGB and PNB.

6. Conclusion

The study dwells on a comparative analysis of NPAs resulting from PSL and Mudra loans concerning four commercial banks in Tripura. Banks' performances indicate a leading role played by the PSBs in PSL. PvSBs, on the other, offset it with renewed investment in the NPL resulting in higher NPAs than its PSLs. Mudra loans also draw sizeable investment from the PvSBs, higher than the PSBs, particularly in the Shishu and Kishore schemes.

A detailed analysis of NPAs over gross advances concerning commercial banks suggests a negative relationship between the growth of bad loans from the NPL and PSL during 2013-17. NPAs resulting PSL recorded a consistent decline for the banks till 24.1 percent, while NPL registered incremental increase as high as 82 percent for PvSBs during 2017. Test results show a contrasting pattern of growth of NPAs from the PSL and NPL. Aggregate growth gross advances (GA) and gross NPAs of commercial banks signifies percentage GAs ranging between 3.98 and 6.37 percent during 2012-22, well above the national average, particularly in 2022. The overall status of NPAs of the four commercial banks during 2018-22 shows PSB's dominance in bad loans over PvSBs, duly accorded by test results.

For Mudra loans, PvSBs like Bandhan Bank championed micro finances, content with extending small loans in a range of 50,000-500,000 INR, covering Shishu and Kishore schemes in particular, resulting in a meager growth of NPAs. PSBs are subjected to proportionate funding of all the Mudra segments irrespective of their volatility. Test results approved the usefulness of the Shishu scheme in the likelihood of having fewer NPAs than the other two. While examining the merit of PSL and Mudra loans, this study observed a shifting role of commercial banks towards NPL, not equally rewarding as expected from the resultant growth of NPAs. PvSBs' higher funding in Shishu and Kishore schemes indicates its changing role in extending micro finances with low NPAs than otherwise.

References

Agarwala, V. and Agarwala, N. (2019). A Critical Review of Non-performing Assets in the Indian Banking Industry. *Rajagiri Management Journal*. *13*(2), 12-23.

Annual Report (AR) (2021-22). Mudra Bank Annual Report 2021-22. Retrieved from www.mudra.org.in on 25th June, 2023.

Bawa, J. K., Goyel, V., Mitra, S. K. and Basu, S. (2019). An Analysis of NPAs of Indian Banks: Using a Comprehensive Framework of 31 Financial Ratios. *IIMB Management Review*, *31*, 51-62.

Bharadwaj, P. and Chaudhary, I. (2018). A Study of Non-performing Assets of Commercial Banks and its Recovery in India. *International Journal of Research and Analytical Reviews*, *5*(2), 1365-73.

Das, J.K. and Dey, S. (2017). Non-performing Assets of Public and Private Sector Banks in India: An Empirical Study. *Business Studies, 38* (1 & 2), 1-19.

Gaur, Dolly & Mahapatra, Dipti Ranjan (2021). Non-Performing Assets and Profitability: Case of Indian Banking Sector, *Vision: The Journal of Business Perspective*, *25*(2), 180-91.

Goyel, C. K. and Bhati, G. (2017). Determinants of Non-performing Assets: An Empirical Study of Public Sector Banks in India. *Unnayan: International Bulletin of Management and Economics*, *7*, 1-7.

Gurumurthy, T.R. & Sudha, B. (2012). Non-Performing Assets (A Study with reference to Public Sector Banks), *Indian Journal of Applied Research*, *2*(2), 7-9.

Gupta, S. (2021). Controlling NPAs of Mudra Loans: Analysis and Suggestions. *Vinimaya*, *41*(1), 20-30.

Jain, S., Parida, T. K. and Ghosh, S. K. (2015). *Rethinking Priority Sector Lending for Banks in India*. Final Report, IIBF Macro Research Papers for the year 2014-15, Mumbai.

Laveena & Malhotra, Meenakshi (2014). Empirical Analysis of Non-Performing Assets related to Private Banks of India. *International Journal of Management Excellence*, *3*(4), 386-91.

Mohan, R. and Roy, P. (2022). *The Roller Coaster Ride of Non-performing Assets in Indian Banking*. CESP Working Paper 22, January, New Delhi: Centre for Social and Economic Progress.

Mohanty, D. and Acharya, D. (2019). An Empirical Study of the Comparative Trends of Stressed Assets in Public and Private Sector Commercial Banks. *Srusti Management Review*, *12*(2), 38.47.

Nagra, S. (2022). Relevance of Mudra Scheme on NPA in Indian Economy. *International Journal of Creative Research Thoughts*, *10*(1), 62-69.

Press Information Bureau (PIB) (2022). Gross Non-Performing Assets of Commercial Banks have Declined. Ministry of Finance, Retrieved from: https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1796299 on 25th April, 2023.

Rai, K. (2012). Study on Performance of NPAs of Indian Commercial Banks. *Asian Journal on Research on Banking and Finance*, *2*(12), 16-26.

Reserve Bank of India (2022). Movement of Non-performing Assets of Scheduled Commercial Banks. Table No. 6. Retrieved from: https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#!4 on 25th April, 2023.

Reserve Bank of India (RBI) (2023). *Financial Stability Report 2023*, Issue No. 27. Mumbai.

Sharma, S. and Gupta, R. (2021). Impact of Pradhan Mantri Mudra Yojana on Indian Banking Sector. *International Journal of Multidisciplinary Educational Research*, *10*(3), 95-101.

Shinde, D. and Jadhav, B. (2022). A Study on the Status o Non Performing Assets in Selected Mudra Banks before and after the Covid 19 Pandemic. *Journal of Pharmaceutical Negative Results*, *13*(9), 7459-67.

Singh, N. K. and Sneha (2021). NPA is the Indicator of Performance of Banks- A Study of Public Banks and Private Banks. *Turkish Online Journal of Qualitative Enquiry*, *12*(8), 7918-37.

Singla, M. L. (2015). An Evaluation of Non Performing Assets: A Study of Banking Sector in India. *International Journal of Advance Research in Management and Social Sciences*, *4*(6), 225-39.

Tandon, D., Chaturvedi, A. and Vidyarthi, H. (2017). Non-performing Assets and Profitability of Indian Banks: An Econometric Study. *International Journal of Business Competition and Growth*, *6*(1), 60-76.