ASSET QUALITY OF INDIAN BANKING SECTOR AND THE ROLE OF GOVERNMENT DIRECTED CREDIT SCHEMES

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Abstract: In the past few years, the asset or credit quality of banks in India is deteriorating due to rise in Non-Performing Assets (NPA). Many studies have found the root of this problem in the government directed credit schemes or priority sector lending (PSL). Thus, the present study aims to investigate the association that NPA has with PSL. The study has used proportion of PSL in total credit extended by banks as the major determiner of NPA, while controlling for certain other bank-specific and macroeconomic factors predicting NPA. The sample includes 46 commercial banking institutions operating in India, studied over a time span of 14 years (2005-2018). The findings have revealed that contrary to expectations, PSL bears, though insignificant but negative impact over NPA.

Keywords: Banking sector, Directed credit, Non-performing assets, Priority sector, panel data

I. Introduction

An imperative role is played by banks for the development of an economy, as they expedite the mobility of funds and encourages creation of capital. In the economies with less developed capital markets, banking institutions are the only source for individuals and businesses to raise finance [1]. A paramount role is played by commercial banks in the dispensation of financial resources for economic activities. Also, an efficient and productive banking sector is vital for sustainable acceleration of a country. Positive financial performance by banks persuades their shareholders to make investments more rigorously, which in turn brings an upward movement in the economic acceleration of a country.

Towering Non-Performing Assets (NPA) is becoming a major predicament for the growth and survival of the banking industry in India. As described by Rinaldi and Sanchis-Arellano, 2006, advances that are outstanding for at least three months are known as Non- Performing Loans [2]. The issue of bad loans or NPA is getting unmanageable with every passing day. Schedule Commercial Banks' (SCBs') have recorded an upward shift in their gross NPA ratio, which was 10.2 percent for September 2017, whereas for March 2018, the figure stands at 11.6 percent (Financial Stability Report, June 2018). Many studies have found the root of this problem in the credit extended for the priority sector.

Many developing and developed economies have utilized directed credit schemes or priority sector lending (PSL) to channelize funds at concessional interest rates for certain specified sectors which are an imperative for the balanced and sustainable development of the concerned economy [3]. Thus the primary objective of priority sector lending is to secure adequate and timely availability of credit to vulnerable sectors of society [4]. The objective of mandated credit or PSL was first considered by the Central Banking Enquiry Committee, 1931. However the need to encourage the participation of banking entities in the matter of providing credit to specified sectors was

accentuated at a National Credit Council meeting held in July 1968 [5]. In November 1974, the target for PSL to be provided by commercial banks was defined at 33%. However, in later years it was increased to 40%. In addition to it, banks are also required to satisfy the sub-targets laid down for the categories included in priority sector. Narasimham Committee II in 1998 came out with the conclusion that the proportion of directed credit in bad loans of the banking sector is comparatively more than the bad loans of non-priority sector and thus is responsible for deteriorating asset quality of banks. Hence the committee recommended that credit to the priority sectors should be extended taking into account the commercial considerations, instead of fulfilling target requirements blindly. However, as per the data revealed by RBI, for the year 2017, the priority sector is responsible for only 23.3% of total NPAs. In comparison to this, the contribution of the non-priority sector in total problem loans is almost three-fold. RBI has stated in many of its reports, that banks are neither reaching the mark for overall priority sector lending, nor for the sub-sectors included in priority sectors. The reason for this hesitation in lending to these specified sectors can be attributed to the NPA faced in these sectors.

The primary motivation for the present study comes from the fact that in the extensive literature available on the concerned subject matter, there exist contrasting views on the contribution of PSL in rising NPA. Providing credit to these specified sectors, which includes agriculture, micro and small enterprises, housing, etc., is crucial for the balanced economic growth of a country like India. Thus, by analyzing the determining power of PSL for NPA, the relation between these two can be established. By examining the influence of PSL on problem loans corrective actions can be planned accordingly so that the issue of NPA can be curbed without compromising on the credit directed towards priority sectors. Also, it is important for individual banks to help promote the development of weaker sectors by channelizing loans toward them. However, for the purpose of safeguarding themselves from the exposure to probability of non-repayment of the loans provided to priority sectors, commercial banks tend to use priority sector lending certificates (PSLC) for meeting their required targets of PSL. Analyzing the impact of PSL on NPA will help understand how significant PSL is, in determining inflating NPA. For the purpose of examining the link between PSL and NPA, proportion of PSL in gross advances of banks has been considered as the major determiner of NPA, while controlling for certain other internal and external factors having impact on NPA.

The structure followed for the remainder of the study is as follows: relevant studies concerning the impact of PSL and other determining factors influencing NPA are reviewed under Section 2. Research methodology and the necessary model specifications employed have been discussed in Section 3. Section 4 provides the results of the analysis made and interpret the same. Lastly, the conclusions drawn and their implications for various stakeholders have been furnished in Section 5.

II.   Review of Literature

The sluggish growth achieved by policymakers in the area of managing credit risk is becoming a prominent quandary for the Indian banking institutions. In their study, Sengupta and Vardhan (2017) opinioned that it is desirable for financial intermediaries to keep the NPA to a manageable level because NPA beyond a certain level can cause erosion of banks' profits and capital [6]. Numerous studies have found directed credit or PSL mandated by Government, responsible for the problem of ever-rising NPA [7]. Since its inception in 1968, many researchers have carried out studies to analyse the progress and impact of these credit schemes on the performance of banking sector. However, despite the views of Narsimham Committee II, the recent movement of loan losses of banks corresponding to directed credit has shown a significant decline. Thus, the discussion under this section will be regarding the evolution of PSL in India and the conclusions drawn by various researchers for the influence of PSL on NPA.

2.1.   *Priority Sector Lending: The Concept and Significance*

Post- Independence, the initial economic plans were aimed at ensuring social ownership of means of production and redistribution of resources for the benefits of weaker sections of society. For attaining these societal aims, nationalization of 14 commercial banks took place in July 1969 and then again in April 1980, 6 banks were nationalized [8]. Selective Credit or Priority Sector Credit was taken as the primary intent by these nationalized banks. The theoretical justification for Priority Sector Credit lies in efficiency and equity consideration. Efficiency consideration argues that in the absence of these programs, sectors with "high social returns but low private returns" will be deprived of the required credit. On the other hand, equity consideration, states that disparity with regard to the availability of resources among various groups of society causes the economic gap to widen and encourages the concentration of wealth in a few privileged hands only [3]. Using a Meta- Frontier approach, Arora

et al., (2018) have concluded that bad loans of commercial banks have not arrived at a panic level where they can negatively affect the technical efficiency of banks [9]. Thus, public sector banks, in particular, can continue lending to the priority sector, even though their NPAs in this sector are rising. In his study Naastepad (2001) has shown that a decrease in priority sector lending has spillover impact for non- priority sectors and government and causes stagflation to rise in the economy [10]. Thus, there will be a significant negative effect of reduction in directed credit over GDP growth. Critically examining RBI's reports for the year 1996-97, Shajahan (1998) states that the reason, the fraction of total NPAs contributed by Priority Sector came out to be so blown up in the report is attributed to the netting procedure of NPAs adopted by RBI [11].

2.2. *Directed Credit Schemes and Non-Performing Assets*

Analyzing bad loans of three groups of banks, namely, government owned public sector, privately owned banks and foreign sector banks, Vallabh *et al.,* (2007) examined the variables influencing non- performing loans [12]. Using the Altman model and taking into account both macro and micro determinats, the study concludes that banks' exposure to government directed credit actually diminishes NPAs. The studies conducted by Amsden and Euh (1993); Vittas and Cho (1996); Preston (1993) and others have acknowledged the significant contribution made by directed credit programs in the booming industrialization and development of Taiwan, Japan, and South Korea [13] [14] [15]. However, they are a number of studies which have shown that lending to priority sector encourages NPA ratios. Examining sector wise NPAs, Rajeev and Mahesh, (2010) states that in India, banks are known for harnessing the social welfare motive [16]. The results have shown that problem loans contributed by the government specified sectors are indeed higher than the NPAs of non-priority sector. World Bank (1989) favors doing away with Directed Credit Programs, quoting the example of countries like Argentina, Chile, and Uruguay [17]. It states that countries can perform better and can channelize funds for high return projects by curtailing the number of such programs and promoting more market-based allocation of credit. However, the conclusions drawn by Ranjan and Dhal (2003) stated that the proportion of total NPAs coming from PSL and that of non-priority credit are not significantly distinguished [18]. Thus, banks should consider the financial and economic performance of the prospective borrowers before disbursal of loans. Various studies regarding PSL and other determinants of non-performing assets have been catalogued in Table 1.

Table 1. Summary of few studies regarding PSL and other determinants of NPA

S. NO	Study	Banking System Considered	Time Period	Findings
1.	Sinkey and Greenawalt (1991)	US Commercial banks	1984-1987	Banking institutions having adequate or higher capital are less likely to suffer inflated NPA rate.
2.	Berger and DeYoung (1997)	US Commercial banks	1985-1994	Banks with higher profits tend to avoid financing risky projects so as to shield themselves from the possibility of default loans.
3.	Salas and Saurina, (2002)	Spanish banking sector	1985-1997	An advantageous effect of real GDP growth on credit quality of banks exists.
4.	Hu et al., 2004	Taiwanese commercial banks	1996-1999	Size of the individual banks is found to be impacting the credit quality negatively
5.	Vallabh et al., (2007)	Indian banking sectior	2000-2005	Banks' exposure to government directed credit actually diminishes NPAs.
6.	Misra and Dhal (2010)	Indian public sector banks	1996-2009	Due to "balance sheet constraint", larger banks tend to have relatively higher NPA.
7.	Buncic and Melecky, 2013)	Banks of 54 high and middle	1994-2004	A higher economic growth indicates an increase in business activity which in turn

		income countries		ensures timely repayment of loans and a lesser possibility of credit default.
8.	Makri *et al,* (2014)	Eurozone	2000-2008	Profitability of banks does not bear any significant influence over their bad loans.
9.	ElBannan (2015)	Egyptian banking sector	2000-2011	Banks which are more stable in terms of capital strength faces less struggle with respect to loan non-repayment.
10.	Beck et al., 2015	75 Countries' banking sector	2000-2010	GDP bears a negative effect on the NPA.
11.	Goyal et al., 2016	Indian banking sector	2001-2013	PSL mandated by Government enhances the NPA trends significantly.
12.	Ozili (2018)	African banking sector	1996-2015	More diversified income structure makes banks less dependent on loan income and thus decreases their exposure to NPA.

Source. Author's compilation

2.3.   *Other Determinants of Non-Performing Assets*

Apart from PSL, various internal and external factors impacting NPA have been studied by researchers and policymakers [19] [20]. Internal factors are those bank related characteristics which can be controlled by bank management and their impact can be regulated by the individual banking institutions, for example, capital strength, size, profitability, etc. [21] [22]. On the other hand, the country-specific or macroeconomic variables, like, inflation, Gross Domestic Product, exchange rate, etc., which cannot be controlled or regulated by commercial banks constitute the external factors [23] [24]. Among the bank-level variables, profitability is one of the primary determinants of NPA. Applying Granger-Causality approach, Berger and DeYoung (1997) tried to examine the relationship between NPA and efficiency of banks [25]. The conclusions drawn stated that banks with higher profits tend to avoid financing risky projects so as to shield themselves from the possibility of default loans. On the contrary, Rajan (1994) has suggested that banks making profits become liberal in their credit policies and thus face the probability of non-repayment of loan by their borrowers [26]. There is no general agreement regarding the direct relationship between NPA and the strength of capital structure of a bank. However, while studying American banks, Sinkey and Greenawalt (1991) have concluded that banking institutions having adequate or higher capital are less likely to suffer inflated NPA rate [27]. Size of the individual banks is found to be impacting the credit quality negatively [28] [29]. Stating "balance sheet constraint" as the reason for the larger banks to have relatively higher NPA, contrary results are presented by Misra and Dhal (2010) [30]. Studying the importance of macroeconomic indicators for NPA in context of 75 select nations, Beck *et al.,* 2015 concluded that GDP bears a negative influence on the NPA of banks [31]. While analysing Spanish banking sector, Salas and Saurina, 2002 found a negative association of real GDP growth with NPA [32]. A higher economic growth indicates an increase in business activity which in turn ensures timely repayment of loans and a lesser possibility of credit default [33] [34].

Thus, no clear evidence is present in the existing literature regarding whether advances made to priority sector results in higher NPA. Hence, the impact of government directed credit or PSL on the performance of the banking entities is still a grey area, which should be researched further. Also, the studies concerning analysis of NPA with reference to priority sector particularly are very limited. Against this backdrop, to fill this gap of grave importance, the present study aims to study the trends of contribution made by priority sector lending in the rising NPA.

III.   Research Methodology

2.4.   *Model*

In the present study, panel data model has been applied. As mentioned in a study by Hsiao (1985), panel data models enable researchers to examine both cross-sectional and time series effects of the data set simultaneously

[35]. In order to draw the results for required association between NPA, PSL and other determinants of NPA, following regression model of linear form has been employed in the present study:

$$NPA_{it} = \alpha + \beta_1 ExpPSL + \beta_2 Captl + \beta_3 Pftb + \beta_4 IncDiv + \beta_5 S + \beta_6 GDP + \beta_7 Intrt + \varepsilon_{it}$$

………………….. (1)

Where, NPA_{it} represents NPA level of bank i in the year t. α represents the constant term. $\beta_1, \beta_2 ……, \beta_6$ represent regression coefficients of respective independent variables. ExpPSL indicates banks' exposure to priority sector lending. Capital strength has been shown by the variable Captl whereas Pftb indicates profitability of banks.

Figure 1. Model of NPA Determinants
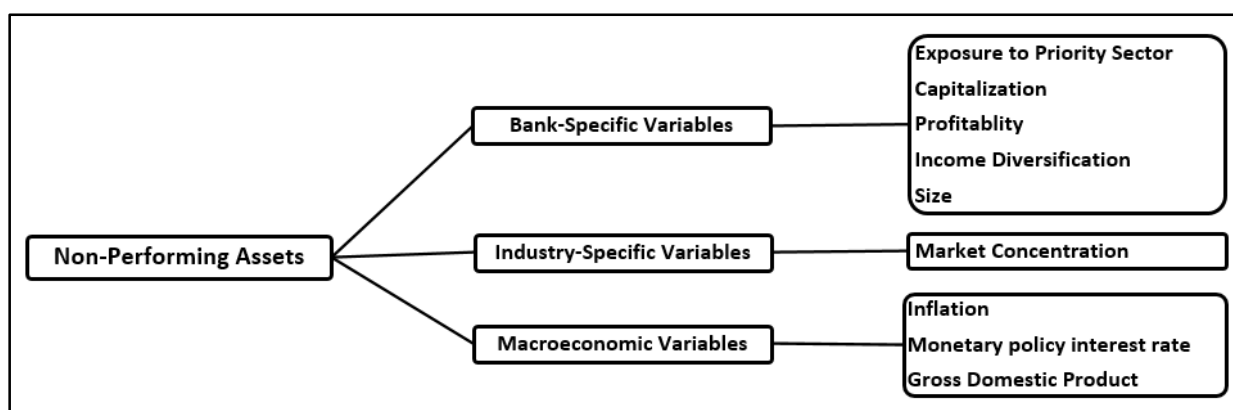
Source: Author's Compilation

IncDiv represents income diversification. The scale or size of operations of a bank is shown by the variable S. Macroeconomic variables gross domestic product and interest rates are shown by GDP and Intrt, respectively. ε_{it} is the error term. Figure 1 shows the model applied for the present study.

3.2.   *Variable Description*

Information regarding the measurement and prior expectations of the variables incorporated in the model used for the present study are registered under Table 2. The explained variable NPA is represented by two alternative factors, namely Gross NPA ratio (GNPA) and Net NPA ratio (NNPA). NNPA is derived from GNPA by deducting certain factors like provision for bad and doubtful debt, balance in interest suspense account, etc.

Table 2. Description of variables

Dependent Variables	Calculation	Description	
Gross Non-Performing Assets (GNPA)	Gross NPA/ Gross advances	GNPA is the total of loans on which principal and/or interest is not paid for 90 days or more.	
Net Non-Performing Assets (NNPA)	Net NPA/ Net advances	NNPA is the sum of NPA netted for provision for doubtful debts and other factors.	
Independent Variables	**Calculation**	**Description**	**Expected sign**
Exposure to PSL (ExpPSL)	Priority sector advances/ Total advances	It shows the proportion of total loans advanced to priority sector specifically.	(+)
Capitalization (Captl)	Equity/ Total assets	It shows the proportion of owners' capital to total assets. Higher the	(-)

		proportion of equity, stronger will be the capital structure of the banks.	
Profitability (Pftb)	Return on assets (Net Income/ Total assets)	Profitability, as indicated by return on assets (ROA), shows the income generated by banks utilizing the given assets.	(-)
Income Diversification (IncDiv)	Non-interest income/ Total assets	It shows the revenue earned by a bank from non-traditional activities.	(-)
Size (S)	Natural log (Total assets)	It measures the scale of banking activities by taking total assets as the proxy.	(-)
Market Concentration (CR3)	Assets of 3 largest banks/ Total banking assets	Market concentration is a measure of how competitive the industry is. Higher the concentration, lesser competition there will be in the market.	(-)
Inflation (Infln)	Growth in Consumer price index	It shows the increase in prices from one period to another.	(+)
Monetary policy interest rate (InttRt)	Average repo rate	It shows the rate of interest charged by RBI for providing credit to commercial banks	(-)
Gross domestic product (GDP)	Natural log (GDP at current price)	It indicates the level of economic activities in a nation.	(-)

Source: Author's compilation

The explanatory variables comprise of various bank related (internal) and macro (external) factors influencing NPA. The primary predicting variable considered is the exposure to priority sector lending measured by taking the ratio of credit provided for priority sectors to gross advances. Marginal farmers and other such borrowers, who are granted loans under directed credit schemes, are generally perceived to lack stable financial standing and thus, loan repayment capacity. This also might be the reason of hesitation shown by private banks in extending credit to these specified sectors. Hence more of credit extended to such borrowers are expected to bring a similar change in NPA level of banks. A strong capital base acts as a buffer which enables a bank to withstand losses due to uncertain shocks. Less capitalized banks need to raise additional capital from the market, which is available to them at inflated rates. In order to overcome this excess spending, such banks tend to get lured with riskier projects where they can lend at higher interest rates. Thus, more of capital may indicate better NPA ratios. Similar to capitalization, profitability can help curb rising NPA figures. The banks earning a good proportion of their revenue from non-traditional fee-based activities are expected to suffer less from bad loan issues. Small banks operating at a low level of business activities are generally faced with loan defaults due to their liberal credit policy. Industries characterised by high concentration of market power shows that a large proportion of market share is in the hands of a few player, banks with larger share tend to have stricter credit policies and are selective while extending loans. Among the macroeconomic factors GDP representing economic growth is primary. With economic acceleration comes the phase of credit expansion and subprime lending, which may further result in losses to lenders due to non-repayment issues. In addition to it, higher inflation makes the loans expensive for the borrowers and might be the cause for the loans going bad under inflationary pressure.

3.3. *Data*

The present study uses secondary data extracted from various reports published by RBI, IMF database and financial statements of banking institutions. The study has been conducted for 46 commercial banks including 37 domestic banks and 9 foreign banks, over the time frame of 14 years (2004-2018).

IV.   Empirical Results and Interpretation

3.4.   Descriptive Statistics

The descriptive summary of the variables considered under study is registered in Table 3. The results indicate that GNPA and NNPA are as high as almost 5 percent and 2.35 percent, respectively. Though the average NPA level does not seem very high, however, they are impacted by the outliers, since in a specific year, a particular bank had NPA as high as 100% or 0%.

Average lending to priority sector stands at 34 percent which is far less than the target of 40%. However, highest standard deviation is registered in this variable and some banks are lending as high as around 79 percent of their loanable funds to priority sector, whereas some other banks are having negligible funds lent to the said sector.

Table 3. Descriptive Summary

Variable	Mean	Standard Deviation	Minimum	Maximum
GNPA	4.9522	6.9830	0	100.0000
NNPA	2.3504	4.6142	-0.0500	98.7900
ExpPSL	34.0089	8.2475	0	78.7276
Captl	9.3588	7.5445	2.8016	59.9113
Pftb	0.7729	1.1028	-7.6800	4.0800
IncDiv	1.3797	1.5503	-0.3681	14.9268
S	12.9859	1.9981	5.7063	16.1801
CR3	23.6123	1.7953	21.5961	27.0161
Infln	4.5879	0.3096	4.0769	5.0016
InttRt	6.8945	0.9143	5.0833	8.0000
GDP	18.2985	0.5067	17.4246	19.0517

Source: Author's Calculation

4.2.   Correlation Matrix

Table 4 given below shows correlation between independent variables. Exposure to priority sector lending (ExpPSL) is having very low degree of correlation with other independent variables. Though ExpPSL is significantly related with Captl, Pftb, S, and Intrt, but the coefficient of correlation is very small. None of the explanatory factors stands in high correlation with others.

Table 4. Pairwise correlation matrix

	ExpPSL	Captl	Pftb	IncDiv	S	CR3	Infln	InttRt	GDP
ExpPSL	1.00								
Captl	-0.10**	1.00							
Pftb	-0.11**	0.46**	1.00						
IncDiv	0.07	0.44**	0.49**	1.00					
S	-0.25**	-0.35**	-0.09*	-0.10**	1.00				
CR3	0.16**	-0.04	-0.05	0.09*	-0.18**	1.00			
Infln	0.05	0.10*	-0.27**	-0.09*	0.38**	-0.36**	1.00		

InttRt	-0.12**	0.01	0.09*	-0.18**	0.02	0.06	-0.02	1.00	
GDP	0.05	0.10*	-0.27**	-0.09*	0.39**	0.35**	0.01**	-0.02	1.00

Source: Author's Calculation

Notes: Pairwise correlation has been calculated using Spearsman correlation

    ** Significant at 1% level

     * Significant at 5% level

Variables showing highest correlation between them are income diversification (IncDiv) and profitability (Pftb) as measured by ROA. Strength of the relationship between these two factors is coming out to be 0.493, which is a moderate degree of correlation. Thus, it can be inferred that there is no issue of multicollinearity between independent variables.

4.3. *Diagnostic Tests*

Using Hausman test, suitability of Fixed Effect (FE) and Random Effect (RE) has been investigated. The results of Hausman test favours FE model for both the dependent variables, GNPA and NNPA. The proposed model has been assessed for appropriateness using various diagnostic tests, results of which have been registered under Table 5. Unit root testing for stationarity has been performed using Levin-Lin-Chu test [36]. All the explanatory variables are calculated to be stationary at level. However, many studies are of the opinion that panel data stationarity is not a requirement when number of cross-sectional entities is larger than time period.

Table 5. Model selection and Diagnostic test

Test Performed	GNPA		NNPA	
Hausman Test (Fixed Effect or Random Effect)	$\chi^2(9) = 369.89$	Prob $> \chi^2 = 0.00$	$\chi^2(9) = 99.71$	Prob $> \chi^2 = 0.00$
Model accepted	Fixed-Effect		Fixed-Effect	
Modified Wald Test (heteroskedasticity)	$\chi^2(1) = 10871.46$	Prob $> \chi^2 = 0.00$	$\chi^2(1) = 88161.59$	Prob $> \chi^2 = 0.00$
Wooldridge Test (Autocorrelation)	$F(1, 45) = 46.83$	Prob $> F = 0.00$	$F(1, 45) = 1.61$	Prob $> F = 0.21$
Variation Inflation Factor (Mean)	1.79		1.79	

Source. Author's Calculation

Modified Wald test has been employed for examining presence of any group-wise heteroskedasticity in fixed effect models. The null hypothesis for the test has been rejected for both GNPA and NNPA models, indicating existence of heteroskedasticity. Wooldridge test checks the presence of autocorrelation issue. It can be inferred from the results that GNPA model consists autocorrelation problem, whereas no such issue is registered for NNPA model. Multicollinearity checks for any correlation present between independent variables and tested using Variance Inflation Factor (VIF). The mean VIF for explanatory factors employed in the study is coming out to be 1.79, which indicates that none of these variables are correlated with each other and thus there is no multicollinearity issue.

4.4. *Regression Results and Findings*

Findings of the panel regression are registered under Table 6. Part (i) of the table provides results taking GNPA as the dependent variable. The model proposed is found fit on the basis of its statistics. The overall model is significant as indicated by F-statistic and Prob $> F$. R^2 of the model is moderately high at 0.63. It implies that the model has performed well in respect of explaining variations in the predicted variable, GNPA.

Table 6. Regression Results

Variables	(i)	(ii)

	GNPA		NNPA	
	Coefficient	**Robust Standard Error**	**Coefficient**	**Robust Standard Error**
ExpPSL	-0.2123	0.1399	-0.0869	0.0803
Captl	0.6147***	0.3390	0.2403	0.1484
Pftb	-3.2814*	0.4801	-1.1272*	0.2916
IncDiv	-0.0917	0.5442	-0.1428	0.4693
S	-4.3971*	1.6121	-2.6684*	0.8642
CR3	0.8994*	0.1984	0.4397*	0.1072
Infln	7.0595	12.0690	7.2838***	4.2797
InttRt	-1.0328*	0.2257	0.6536*	0.2251
GDP	3.6767	8.2847	1.2069	3.2886
Constant	-47.6000	81.1946	-22.6025	32.2042
F (9,45)	25.18		16.70	
Prob > F	0.0000		0.0000	
Corr (u_i, Xb)	-0.89		-0.91	
R-Square (Within)	0.63		0.30	

Source: Author's Calculation

Notes: * Significant at 1% level

           ** Significant at 5% level

           *** Significant at 10% level

The primary determinant of NPA considered for this study, ExpPSL, is found to be insignificant for GNPA. However, the impact is negative as shown by its regression coefficient (-0.2123). Inference from this can be drawn that an increase in lending to the government specified sectors actually reduces GNPA proportion in total loans of the banks. These results are consistent with the study of Vallabh *et al.,* (2007) [12]. However, Shabbir and Mujoo (2014) have presented contrary finding regarding priority sector credit [37]. As expected profitability is having a negatively significant influence on GNPA, which implies that highly profitable banks face less of NPA issue. These results contradict the conclusion drawn by Makri *et al.,* (2014), which stated that the impact of profitability of NPA is insignificant [38]. As per the results shown highly capitalized banks are expected to have relatively more of bad loans. ElBannan (2015) have provided contrary results regarding capital strength and problem loans [39]. Income diversification and size have shown a negative association with GNPA ratio. With respect to income diversification and NPA, similar results have been propounded by Ozili (2018) [40]. However, in the present study impact income diversification is found insignificant and bank's asset size has a significant impact over its GNPA. Banks generating revenue from fee based activities and resources other than interest bearing assets, are more likely to put a control over their GNPA ratio. In addition to diversified revenue structure, banks can try to manage their problem loans by expanding their asset base. The role of market power for GNPA is found to be significant. Industry competition is found to be affecting bad loans negatively. In a highly competitive banking market individual banks tries to gain market share by extending larger credit, which may sometimes lead to sub-prime lending. As expected, inflation causes addition in GNPA, as with the increase in inflation loans become expensive to repay. Lastly, higher monetary policy interest rates reduces the GNPA ratio. Whereas GDP is found to be having a positive influence over GNPA.

Part (ii) of Table 6, showing results for NNPA as the predicted variable has registered similar findings as Part (i). R-square is doing fairly well at 0.30. The impact of PSL is still negative, however, the influence is not significant. Other variables have also explained NNPA in a similar manner as GNPA.

V.   Conclusion and Implications

In the present study for the purpose of examining the significance of PSL for NPA, 46 commercial banks in India over the time span of 14 years (2005-2018) have been studied. NPA has been measured with two ratios namely, GNPA and NNPA.

Taking the proportion of priority sector credit in the total loans advanced by a bank, as the major determinant of NPA, the study finds that PSL is actually impacting NPA negatively. The regression coefficient of Exposure to PSL is showing a negative sign for GNPA and NNPA. Thus, it is playing a detractor for NPA instead of encouraging it. Though there might be an increase in NPA contributed by priority sector in absolute terms, however, the NPA of the said sector is declining in relative terms. Most of the loan defaulters topping the list of NPA are actually corporate borrowers, as reported by many banks. Hence banking institutions should be encouraged to lend more to these specified sectors so as to ensure regular growth of these particular sectors. However, proper monitoring of the financed projects and loan repayment should also be taken care of in order to safeguard lending banks from the issue of problem loans. Commercial worth and creditworthiness of the borrowers should be ensured before the disbursal of loan.

For the balanced growth of the Indian economy, it is important to secure timely and adequate credit at concessional rates for the needy sections of the society. With the inflating population and the changing demographic structure of the present scenario, the number of job-seeking people is increasing. It will not be just to expect the organized sector to assimilate all of the unemployed class. Many of the unemployed people can find their appropriate place in self-employment positions, instead of regular jobs. A number of policy initiatives like Start-Up India, Mudra Yojana, etc. have been taken up the government for the purpose of nourishing and strengthening the priority sector. Formal credit provided by banks plays an imperative role for the upliftment of this sector. Thus, lending to the specified sectors like agriculture, micro and small enterprises, etc. should be promoted.

VI.   Limitations and Scope for Future Studies

Due to data unavailability and other constraints, an ownership-based comparison was not made in the present study. More rigorous and comprehensive results can be reached by studying the effect of ownership and origin, if any, for the association between PSL and NPA. Also, taking up a varied set of factors under the study can help make the understanding of this issue more comprehensible. Making a cross country analysis can bring better light for the concerned subject matter.

VII.   References

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