



## Unravelling the drivers of priority sector lending for inclusive economic growth: Evidence from India

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### Abstract

This research aims to explore the factors influencing Priority Sector Lending (PSL) in India, with a specific focus on both bank-specific and macroeconomic variables. By delving into the determinants shaping the implementation of PSL, the study seeks to understand why PSL levels have fallen below mandated targets in recent years. The study examines PSL data from 18 institutions spanning the years 2007 to 2020. The study looks at connection between factors specific to banks, macroeconomic variables, and the distribution of credit to support priority sectors using a random effects model that takes into account the different types of variables. The analysis reveals a noteworthy positive correlation between deposits and PSL. However, the study finds insignificance in the relationship between bank-specific variables and PSL. These findings shed light on the complexities surrounding meeting PSL targets, underscoring the necessity for comprehensive policy interventions, capacity-building initiatives, and improved stakeholder coordination to bolster the effectiveness of PSL. Understanding the challenges and opportunities associated with achieving PSL targets is crucial. The research underscores the need for proactive policy measures, efforts to enhance institutional capacities, and better coordination among stakeholders. Implementing these measures could significantly augment the efficacy of PSL and foster inclusive growth by ensuring financial access to underserved segments of society in India.

## 1. Introduction

Directed Credit Programs (DCP) have gained widespread adoption in numerous nations, including Japan, India, China, Philippines, Brazil, Nigeria, Nepal, Pakistan, the United States, and Korea, as an instrument for channelling economic resources towards specific economic segments in need of a boost for their sustained development and prosperity (Kohli, 1997). These programs, known as 'Priority Sector Lending' (PSL), aim to provide targeted recognition sustenance to designated subdivisions within separate economies, ensuring inclusive and sustainable growth.

In the case of India, the Reserve Bank of India (RBI) introduced the PSL policy following the nationalization of banks in 1969. This policy mandates that a minimum of 40% of the average net bank credit or the credit equivalent amount of off-balance sheet exposures, whichever is higher, be allocated to a choice group of sectors. These priority sectors encompass agriculture, Micro, Small & Medium Enterprises (MSMEs), housing, education, and social infrastructure, as outlined by the RBI.

The PSL policy in India plays a pivotal role in promoting inclusive growth and facilitating access to finance for underserved and marginalized sections of society. By directing financial resources towards these priority sectors, the policy aims to address the specific needs and challenges faced by these sectors, ensuring their development and contribution to the overall economy. It recognizes the importance of supporting agriculture, the spine of the Indian economy, along with fostering the progress of MSMEs, a vital source of employment and innovation.

However, recent years have witnessed PSL levels in India falling below the mandated targets set by the RBI. This discrepancy between the desired and actual levels of PSL allocation necessitates a comprehensive understanding of the determinants that influence PSL implementation. Exploring these determinants is crucial for improving the effectiveness of the policy and aligning it with its intended objectives of inclusive growth and equitable access to finance. The paper is structured as follows: i) a critical perusal of existing literature on the topic; ii) objectives, hypotheses, and research methods adopted; iii) results and discussion; and iv) a conclusion with implications and scope for further study.

## 2. Literature Review

Several studies have examined the effects of Directed Credit Programs (DCP) on inclusive growth at the national level and across multiple sectors. Eastwood and Kohli (1999) and Burgess, Pande, and Wong (2005) have provided insights into the impact of DCP on inclusive growth. Additionally, Satyasai (2008) highlighted that, despite the crucial role played by banks in lending to several sectors of the Indian economy, informal foundations of credit, especially in rural areas, remained the dominant credit providers. Cooperatives and commercial banks, plus Regional Rural Banks, accounted for a considerable portion of institutional credit. Pradhan (2013) indicated that though the proportion of informal credit to total rural credit had decreased from 92.8% in 1951 to 42.9% in 2002, cooperatives and commercial banks (as well as Regional Rural Banks) accounted for roughly 91% of the remaining 57.1% of institutional credit. Factors such as flexible repayment terms, availability of collateral-free loans, and ease of credit access were identified as reasons for the continued dependence on informal sources of credit in rural zones.

In the context of Priority Sector Lending (PSL), bank lending practices have evolved. Studies by Roy (2006); Rao, Das, and Singh (2006); Uppal (2009) and Raman (2013) have highlighted that banks tend to provide credit more towards industries excluding agriculture, Small-Scale Industries (SSI), and weaker sections, primarily driven by profitability and perceived risk. The preference for segments other than weaker sections and agriculture was based on the belief that they offer higher profitability and lower risk. Kaur, Chitsimran, and Mahajan (2023) analysed trends and performance patterns of PSL in India from 2004-05 to 2017-18 and provided a comparative analysis of PSL provided by public and private banks. While a positive environment prevailed, there was a lack of social intent in private banks.

Research on the influence of bank size on lending practices within the PSL framework indicated that smaller banks had a competitive advantage in lending to minor borrower companies. Smaller banks leverage qualitative data, such as personal relationships and character-based evaluations, which are more relevant for smaller businesses that lack financial transparency and collateral (Berger, Miller, Petersen, Rajan, & Stein, 2005). Larger banks, instead, tend to rely on quantitative data and transaction-based lending, which is better suited for larger businesses. This difference in lending approaches may explain why larger banks allocate a smaller share of their loan assets to smaller borrowers.

The literature also sheds light on the importance of considering ownership type, lending environment, and macroeconomic factors while studying the determinants of PSL allocation. Studies by Kumar, Batra, and Deisting (2016); Panda, Panda, and Swain (2017) and Gaur and Mohapatra (2021) have explored various determinants, including bank-specific factors, macroeconomic indicators, and regulatory changes, that influence PSL allocation by Indian banks. These studies highlight the need for effective policies that consider these determinants to help banks achieve PSL targets and promote inclusive growth.

Additionally, studies examining the determinants of PSL allocation have primarily focused on quantitative factors, such as financial indicators and macroeconomic variables, while overlooking the role of qualitative factors and contextual nuances. Large banks frequently use uniform standards that prioritise quantitative

evaluation of monetary data, leading to a 'cookie cutter' strategy for lending. Smaller banks, in contrast, rely more heavily on qualitative data, such as character-based lending, which gives them more flexibility in their choices for lending (Cole, Goldberg, & White, 2004). Berger and Black (2011) also point out that smaller banks may have a competitive advantage in 'judgement' advancing, where the lending officer's expertise and training play a vital part in loan appraisal and extension. Therefore, there is a need to delve deeper into the qualitative dimensions that influence PSL allocation by PSBs. Factors such as the banks' understanding of local conditions, borrower profiles, social and cultural factors, and the effectiveness of outreach programs can significantly shape the implementation of PSL policies.

Furthermore, the existing literature primarily provides a static perspective on PSL allocation and examines the determinants at a particular point in time. However, the dynamic nature of the banking sector and changing economic conditions necessitate an understanding of how these determinants evolved and how they interact with each other. Studies that look at how PSL allocation changes over time and the factors that affect it can help us understand how the policy changes overtime and how it affects growth for everyone.

Moreover, while the focus of PSL is on priority sectors, there is limited research on the specific subsectors within these priority sectors. Understanding the variations in PSL allocation across different subsectors, such as agriculture subcategories or types of MSMEs, can provide a more nuanced understanding of the factors influencing lending decisions. Berger and Udell (2005) conducted a thorough study on the availability of credit to small and medium-sized businesses. Lending technologies, which include information gathering, evaluation, loan structuring, and monitoring, are seen as a means of converting governmental regulations and financial systems into credit availability for SMEs. The study highlights the significance of taking ownership type and lending environment into account in addition to bank size when attempting to understand the diversity in lending technologies and availability of credit for smaller enterprises. Such insights can inform targeted interventions and policies to address the specific needs and challenges faced by different subsectors.

Lastly, the literature has predominantly focused on the supply-side determinants of PSL allocation, i.e., factors influencing banks' lending decisions. Bhatia and Mahendru (2019) found that bank size, profitability, capital adequacy, and loan portfolio concentration significantly influenced the allocation of PSL by Indian banks. Bag, Ray, and Roy (2022) assessed the relationship between profitability and the banks' priority sector lending, employing the Hausman test, and found that there was no significant relationship between profitability and PSL in public sector banks in India. Behera and Dash (2018) found that inflation, economic growth, and government spending on agriculture significantly influence the PSL of banks. Kaur, Mukherjee, and Ekka (2018) found that macroeconomic factors such as interest rates, exchange rates, and GDP growth affected PSL allocation by banks. Moreover, several studies have examined the impact of regulatory changes on PSL allocation by banks. Gupta, Bansal, Hothi, and Shashidharan (2021) proved that the introduction of the priority sector lending certificate (PSLC) scheme significantly affected the allocation of PSL by Indian banks. Kumar et al. (2016) proved that the RBI's mandate to increase PSL targets for banks led to a significant increase in PSL allocation by PSBs in India.

This research paper aims to assess the determinants of PSL in India. By examining the factors that influence the allocation and implementation of PSL, this study seeks to provide valuable insights into the challenges and opportunities associated with achieving the mandated targets. Finally, policymakers, financial institutions, and other important people will be able to improve the implementation of PSL by learning more about the factors that affect it. This will make sure that it has the biggest possible effect on India's growth and socio-economic development.

### **3. Methodology**

#### **3.1. Data**

This descriptive research relies primarily on secondary data obtained from the authorized websites of the Reserve Bank of India (RBI) and the World Bank. The data includes information on PSL allocation, bank-specific variables, and macroeconomic variables. The present study encompasses a period spanning from 2007 to 2020. This particular timeframe was deliberately selected under the alterations in priority sector lending regulations, which officially came into effect on April 30, 2007. The study's culmination in the year 2020 is a result of practical considerations, primarily related to data availability, as it was constrained due to the amalgamation of several banks. This consolidation process entailed the merger of Allahabad Bank through Indian Bank, United Bank of India with Punjab National Bank (PNB), and Oriental Bank of Commerce with Punjab & Sind Bank, and it occurred on April 1, 2020. Within the realm of public sector banking, this study's sample is derived from a pool of 18 institutions. Specifically, the research focuses on ten distinct public sector banks: the State Bank of India (SBI), Bank of Baroda (BOB), Punjab National Bank (PNB), Canara Bank (CNB), Union Bank of India (UBI), UCO Bank, Allahabad Bank, Bank of Maharashtra (BOM), United Bank of India (UBI), and Punjab & Sind Bank (PSB). The criteria governing the inclusion of these specific banks in the study's sample are contingent upon their priority sector lending volumes, specifically for the year 2020. Notably, this selection methodology takes into account the top five and bottom five banks according to their performance in priority sector lending during that particular year. Table 1 provides information regarding variables used, references, and sources of data.

Table 1. Variable's description and sources of data.

Key variables	Variables/Indicators	Reference is taken from	Sources of data
Dependent variable			
Priority sector lending (PSL)	Priority sector lending (PSL)	Dhar and Bakshi (2015); Kumar et al. (2016) and Panda et al. (2017)	RBI
Independent variables			
Bank-specific variables	Deposits (DEP)	Kumar et al. (2016) and Panda et al. (2017)	RBI
	Capital adequacy ratio (CAR)	Kumar et al. (2016) and Panda et al. (2017)	RBI
	Return on assets (ROA)	Srairi (2013) and Farooq, Elseoud, Turen, and Abdulla (2019)	RBI
	Net interest margin (NIM)	Radivojevic and Jovovic (2017) and Koju, Koju, and Wang (2018)	RBI
	Credit-deposit ratio (CDR)	Kumar et al. (2016) and Panda et al. (2017)	RBI
	Net non-performing assets to total asset ratio (NNPA)	Kumar et al. (2016) and Panda et al. (2017)	RBI
Macro-economic variables	Gross domestic product (GDP)	Ozili (2018) and Kotte, Reddy, and Bolagani (2022)	World development indicators (WDI)
	Inflation (INF)	Bardhan and Mukherjee (2016); Upadhyaya and Roy (2017) and Kotte et al. (2022)	World development indicators (WDI)
	Interest rate (IR)	Kotte et al. (2022)	World development indicators (WDI)

### 3.2. Objective of the Study and Hypotheses Development

The objective of this study is to assess the effect of bank-specific variables and macroeconomic variables on priority sector lending. By examining the relationship, this study aims to provide insights into the factors influencing lending decisions and their impact on inclusive growth. The following are the hypotheses developed to achieve this objective.

- NH1: DEP has no impact on PSL.
- NH2: CAR has no impact on PSL.
- NH3: ROA has no impact on PSL.
- NH4: NIM has no impact on PSL.
- NH5: CDR has no impact on PSL.
- NH6: NNPA has no impact on PSL.
- NH7: GDP has no impact on PSL.
- NH8: INF has no impact on PSL.
- NH9: IR has no impact on PSL.

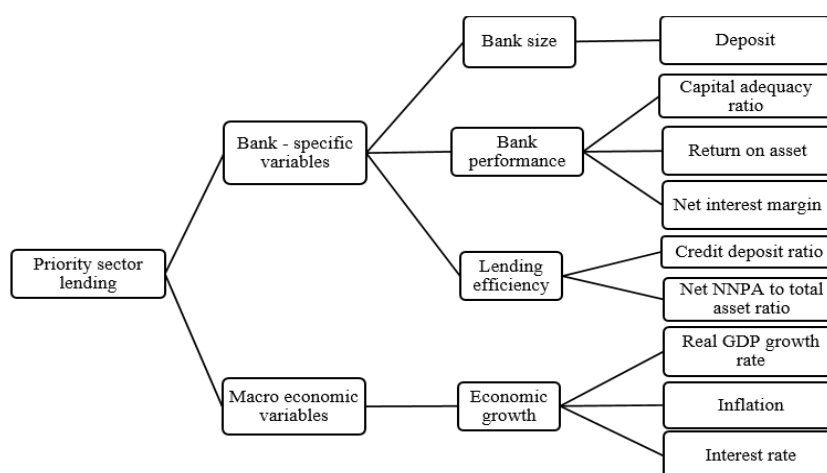


Figure 1. Conceptual model.

### 3.3. Empirical Model

Figure 1 shows the conceptual model of the study. Unlike many prior studies, our model incorporates a broader set of macroeconomic variables, such as Gross Domestic Product, Inflation and Interest Rate. We

believe that macroeconomic variables can significantly impact the dynamics of priority sector lending. Moreover, we refined the measurement of Net Non-Performing Assets (NNPA) to offer a more nuanced assessment of asset quality, addressing the limitations of prior studies in capturing the multifaceted nature of non-performing assets. Pooled OLS regression was primarily used to assess whether bank-specific variables and macroeconomic variables significantly predict priority sector lending. The pooled OLS regression model developed is as follows:

$$PSL_{it} = \beta_1 + \beta_2 DEP_{it} + \beta_3 CAR_{it} + \beta_4 ROA_{it} + \beta_5 NIM_{it} + \beta_6 CDR_{it} + \beta_7 NNPA_{it} + \beta_8 GDP_{it} + \beta_9 INF_{it} + \beta_{10} IR_{it} + u_{it}$$

In pooled OLS regression the estimated coefficients may be inconsistent and biased as the individuality of each bank  $\alpha_i$  is subsumed in the disturbance term  $u_{it}$ . To account for heterogeneity for each bank, a one-way fixed effects model was used. The intercepts were allowed to vary among banks using dummy variables. Therefore, the fixed effect Least-Squares Dummy Variable model is

$$PSL_{it} = \alpha_1 + \alpha_2 D_{1i} + \alpha_3 D_{2i} + \alpha_4 D_{3i} + \alpha_5 D_{4i} + \alpha_6 D_{5i} + \alpha_7 D_{6i} + \alpha_8 D_{7i} + \alpha_9 D_{8i} + \alpha_{10} D_{9i} + \beta_2 DEP_{it} + \beta_3 CAR_{it} + \beta_4 ROA_{it} + \beta_5 NIM_{it} + \beta_6 CDR_{it} + \beta_7 NNPA_{it} + \beta_8 GDP_{it} + \beta_9 INF_{it} + \beta_{10} IR_{it} + u_{it}$$

Where  $D_{ij} = 1$  for bank  $i$ , 0 otherwise and so on. For 10 banks, 9 dummy variables were created. The base here is the 10<sup>th</sup> bank.

To ascertain the appropriate specification regarding the employment of a common intercept for all banks versus distinct intercepts for individual banks, a restricted F-test was performed. The restricted F-test results underscored the imperative to address bank heterogeneity. So, the adoption of a pooled Ordinary Least Squares (OLS) regression model was excluded from consideration. Subsequently, a Hausman test was applied, and its outcome favoured the utilization of a random effects model.

Table 2. Descriptive statistics.

Variables	Minimum	Maximum	Mean	Std. deviation
PSL	4.33	6.43	5.31	0.42
DEP	4.40	6.51	5.36	0.42
CAR	0.75	1.19	1.08	0.05
ROA	-1.70	0.62	-0.21	0.38
NIM	0.02	0.54	0.36	0.08
CDR	1.68	1.94	1.84	0.05
NNPA	-0.99	0.85	0.17	0.43
GDP	0.49	0.93	0.80	0.13
INF	0.52	1.08	0.82	0.18
IR	0.12	0.88	0.62	0.22

Note. PSL: Priority sector lending, DEP: Deposits, CAR: Capital adequacy ratio, ROA: Return on assets, NIM: Net interest margin, CDR: Credit-deposit ratio, NNPA: Net non-performing assets to total asset ratio, GDP: Gross domestic product, INF: Inflation, IR: Interest rate.

#### 4. Results and Discussion

Table 2 shows the descriptive statistics of bank-specific variables and macroeconomic variables. In particular, PSL and DEP have very similar central tendencies, with means of 5.31 and 5.36, and standard deviations of 0.42. This suggests that these two variables are stably related. Conversely, ROA and NNPA display moderate variability, underscoring potential fluctuations in the banking sector's profitability and asset quality. Furthermore, the CAR presents a narrow range and a small standard deviation of 0.05, signifying consistent financial stability. The moderate standard deviations observed in GDP, INF, and IR denote moderate economic stability factors.

Table 3. Correlation matrix.

Variables	PSL	DEP	CAR	ROA	NIM	CDR	NNPA	GDP	INF	IR
PSL	1									
DEP	0.985**	1								
CAR	0.065	0.117	1							
ROA	-0.244**	-0.242**	-0.046	1						
NIM	0.130	0.145	0.299**	0.072	1					
CDR	0.352**	0.358**	0.311**	-0.163	0.679**	1				
NNPA	0.391**	0.320**	-0.469**	-0.338**	-0.472**	-0.253**	1			
GDP	0.033	0.028	-0.159	-0.079	-0.087	0.077	0.199*	1		
INF	-0.378**	-0.317**	0.431**	0.356**	0.435**	0.247**	-0.794**	-0.348**	1	
IR	0.257**	0.215*	-0.431**	-0.303**	-0.345**	-0.123	0.561**	-0.117	-0.667**	1

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

PSL: Priority sector lending, DEP: Deposits, CAR: Capital adequacy ratio, ROA: Return on assets, NIM: Net interest margin, CDR: Credit-deposit ratio, NNPA: Net non-performing assets to total asset ratio, GDP: Gross domestic product, INF: Inflation, IR: Interest rate.

The correlation matrix presented in Table 3 illustrates the relationships between various financial and macroeconomic variables. Notably, there is a highly significant positive correlation (0.985) between DEP and PSL, implying that an increase in deposit levels within the banking system is closely associated with a heightened commitment to allocate funds to priority sectors. Furthermore, a substantial positive correlation (0.679) exists between the CDR and NIM, underscoring the centrality of lending activities in enhancing a bank's net interest income. Banks that deploy a larger share of their deposits for lending purposes tend to yield greater net interest income. Conversely, there is a negative correlation (-0.794) between INF and NNPA. There is a strong negative correlation (-0.667) between IR and INF; as IR increases, INF tends to decrease. This phenomenon aligns with standard monetary policy theory, where central banks often use higher interest rates as a tool to combat inflation. By raising interest rates, central banks aim to reduce borrowing and spending in the economy, which can help temper inflationary pressures. Conversely, lower interest rates can stimulate economic activity but may also contribute to inflationary tendencies.

Table 4. Results of pooled OLS regression.

Variable	<i>B</i>	$\beta$	<i>SE</i>
DEP	0.927***	0.925	0.016
CAR	-0.065	-0.008	0.129
ROA	0.038*	0.034	0.016
NIM	0.094	0.019	0.099
CDR	0.519**	0.058	0.186
NNPA	0.086***	0.088	0.023
GDP	-0.138*	-0.043	0.056
INF	-0.186**	-0.080	0.067
IR	-0.057	-0.030	0.042
Constant	-0.280		0.290
<i>R</i> <sup>2</sup>	0.981		
<i>F</i> (9,120)	688.777***		

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . PSL: Priority sector lending, DEP: Deposits, CAR: Capital adequacy ratio, ROA: Return on assets, NIM: Net interest margin, CDR: Credit-deposit Ratio, NNPA: Net non-performing assets to total asset ratio, GDP: Gross domestic product, INF: Inflation, IR: Interest rate. SE: Standard error.

Table 4 presents the results of pooled OLS regression. The results of the regression indicated the bank-specific variables and macroeconomic variables explained 98.1% of the variance,  $R^2 = 0.981$ ,  $F(9,120) = 688.777$ ,  $p < .001$ . However, the individuality of each bank  $\alpha_i$  is subsumed in the disturbance term  $u_{it}$ . Therefore, the estimated coefficients may be biased and inconsistent as  $u_{it}$  is correlated with any of the regressors.

Table 5. Results of fixed effects least square dummy variable (FE-LSDV) regression.

Variable	<i>B</i>	$\beta$	<i>SE</i>
D1	0.106*	0.075	0.052
D2	0.003	0.002	0.037
D3	0.106**	0.076	0.034
D4	0.165***	0.118	0.033
D5	0.117***	0.083	0.028
D6	0.054*	0.038	0.021
D7	0.100***	0.071	0.021
D8	0.070***	0.050	0.017
D9	0.026	0.018	0.020
DEP	0.878***	0.876	0.039
CAR	0.005	0.001	0.092
ROA	0.014	0.012	0.012
NIM	0.127	0.025	0.083
CDR	0.231	0.026	0.157
NNPA	0.070**	0.071	0.020
GDP	-0.129**	-0.040	0.040
INF	-0.221***	-0.095	0.051
IR	-0.045	-0.024	0.030
Constant	0.363		0.352
<i>R</i> <sup>2</sup>	0.992		
<i>F</i> (18,111)	748.583***		

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . PSL: Priority sector lending, DEP: Deposits, CAR: Capital adequacy ratio, ROA: Return on Assets, NIM: Net interest margin, CDR: Credit-deposit ratio, NNPA: Net non-performing assets to total asset ratio, GDP: Gross domestic product, INF: Inflation, IR: Interest rate.

Table 5 presents the results of the Fixed Effects Least Squares Dummy Variable (FE-LSDV) regression. The results of the regression showed that bank-specific variables and macroeconomic variables explained 99.2% of the variance,  $R^2 = 0.992$ ,  $F(18,111) = 748.583$ ,  $p < .001$ . The results revealed that Deposits and Net Non-Performing Assets positively predicted Priority Sector Lending. Whereas Gross Domestic Product and Inflation negatively predicted Priority Sector Lending.

4.1. Diagnostic Test

A restricted F test was conducted to determine whether to use pooled OLS regression or fixed effects model,

$$F = \frac{(R^2_c - R^2_R)/k^*_c}{(1 - R^2_c)/(n - k_c)}$$

$$R^2_c = 0.99183$$

$$R^2_R = 0.98101$$

$$k^*_c = 9$$

$$k_c = 19$$

$$n = 130$$

Critical value at  $\alpha = 0.05$

$$F = \frac{(0.99183 - 0.98101)/9}{(1 - 0.99183)/111} \approx 16.336$$

The null hypothesis for the restricted F test assumes that all the differential intercepts are equal to zero. At  $\alpha = 0.05$ ,  $F(9,111) = 1.97$ . Therefore, the null hypothesis is rejected because the calculated  $F(16.336)$  is greater than the critical value of  $F$ , which is 1.97 and  $p < .05$ . This implies that including differential intercepts significantly improved the model. So, FE-LSDV is better than the pooled OLS model because it takes into account the different ways that bank-specific variables and macroeconomic variables affect lending to the priority sector.

Table 6. Results of the Hausman test.

Test summary	Chi-sq. statistic	Chi-sq. d.f.	Prob.
Cross-section random	3.583	9	0.937

To choose the appropriate model for panel regression, the Hausman test was applied. Table 6 shows the results of the Hausman Test. The null hypothesis of the Hausman test is accepted since the  $p$ -value is greater than 0.05. The Hausman test favours the application of the random effects model.

Table 7. Results of random effects model.

Variable	B	SE	Hypothesis	Findings	Hypothesis decision
DEP	0.900***	0.031	NH1	Positively significant	Reject
CAR	0.011	0.091	NH2	Not significant	Fail to reject
ROA	0.017	0.012	NH3	Not significant	Fail to reject
NIM	0.118	0.081	NH4	Not significant	Fail to reject
CDR	0.265	0.154	NH5	Not significant	Fail to reject
NNPA	0.064**	0.019	NH6	Positively significant	Reject
GDP	-0.125**	0.040	NH7	Negatively significant	Reject
INF	-0.215***	0.051	NH8	Negatively significant	Reject
IR	-0.043	0.029	NH9	Not significant	Fail to reject
Constant	0.245	0.315			
$R^2$	0.968				
$F(9,120)$	402.284***				

Note. \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . PSL: Priority sector lending, DEP: Deposits, CAR: Capital adequacy ratio, ROA: Return on assets, NIM: Net interest margin, CDR: Credit-deposit ratio, NNPA: Net non-performing assets to total asset ratio, GDP: Gross domestic product: INF: Inflation, IR: Interest rate.

Table 7 presents the results of the Random Effects Model. The random effects model showed that bank-specific variables and macroeconomic variables explained 96.8% of the variance,  $R^2 = 0.968$ ,  $F(9,120) = 402.284$ ,  $p < .001$ . The highly significant and positive relationship between DEP and PSL indicates that an increase in deposits positively influences Priority Sector Lending. This is contrary to the findings by Panda et al. (2017) and underscores the role of a robust deposit base in facilitating lending to priority sectors and contributing to inclusive economic growth. The effect of bank-specific variables such as CAR, ROA, NIM, and CDR on PSL is found to be insignificant. In contrast to the study by Gaur and Mohapatra (2020), which found an insignificant and negative relationship between NNPA and PSL, our study reveals a substantial and

statistically significant positive association. Our findings indicate that financial institutions may be more inclined to lend to priority sectors even when faced with higher levels of non-performing assets. This departure from the previously perceived insignificance underscores the need for a nuanced understanding of the factors influencing lending decisions, challenging conventional assumptions about the impact of NNPA on PSL. The negative and significant link between GDP and PSL implies that rapid economic growth may negatively impact Priority Sector Lending. This highlights the need for targeted policies to ensure that priority sectors receive adequate credit during economic expansions. The negative and significant relationship between INF and PSL suggests that higher inflation levels may hinder Priority Sector Lending. Policymakers may need to consider inflation control measures to support lending to priority sectors. IR is found to be insignificant, indicating that IR may not be a direct driver of Priority Sector Lending.

## 5. Conclusion

In this study, we embarked on an exploration of the determinants of PSL within the domain of public sector banks in India. Our analysis, spanning 13 years from 2007 to 2020, sought to shed light on the complex interplay of bank-specific variables and macroeconomic factors that affect the allocation of credit to priority sectors, a cornerstone of inclusive growth in the Indian economy.

### 5.1. Implications

The empirical evidence yielded from the random effects model underscores several significant theoretical implications for PSL within India's public sector banks. The positive relationship between deposits and PSL underscores the importance of a robust deposit base for facilitating lending to priority sectors, emphasizing the financial institutions' role in fostering a conducive deposit environment. The insignificance of bank-specific variables (CAR, ROA, NIM, and CDR) suggests that internal banking dynamics may not be the primary drivers of PSL decisions within this context, prompting the need for further theoretical exploration. The positive association between NNPA and PSL highlights the importance of effective asset quality management in meeting PSL objectives. Additionally, the negative impact of GDP growth on PSL and the hindrance posed by inflation call for specialized theoretical examination and policy considerations during economic expansions and periods of rising prices.

### 5.2. Limitations

The Indian banking sector is vast and encompasses various structural, ownership, and administrative segments. This study focused on the public sector banks due to their social thrust and inclusive policies. However, generalizing the findings of this study to the broader banking sector might be limited due to variations in operational models, objectives, and governance structures among private, cooperative, and international banks.

### 5.3. Future Research Suggestions

This study has paved the way for future research such as the impact of inclusive policies on directed credit, a comparison of different segments of the Indian banking sector in their PSL, an exploration of sustainable financing—a sector needing immediate attention, and regional comparisons of directed credit.

The theoretical insights of this study provide a foundation for policymakers, financial institutions, and researchers to refine their understanding of PSL dynamics and advance the goals of financial inclusion and inclusive growth.

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