

MACMILLAN
Advanced
Research
Series

Anatomy of PUBLIC POLICY REFORMS and DEVELOPMENT

Editors
N U Khan
Sigamani P

ANATOMY OF PUBLIC POLICY REFORMS AND DEVELOPMENT

Editors

N.U. KHAN
SIGAMANI P.



Interrelationship Between Credit Accessibility, Poverty Reduction and Achievement of Inclusive Growth – A State-wise Analysis in India

R. Annapoorani, S. Gandhimathi and G. Mookambigai

Department of Economics, Avinshilingam Deemed

University for Women, Coimbatore

E-mail: drannapoorani@gmail.com

ABSTRACT

Inclusive growth aims at poverty reduction and to achieve this it is essential to broaden access to economic opportunities in terms of credit. There is a bidirectional cause and effect relationship between poverty and credit accessibility. Credit inaccessibility causes poverty and poverty causes low demand for credit. This paper was designed with the objectives of analysing the trends in the percentage of people below poverty line, trends in provisions of credit, number of branches, number of bank accounts and analyzing the impact of credit accessibility on poverty reduction. The study is related to the period 1990-2009. The study tried to estimate compound growth rate of poverty and credit accessibility and estimated Theils inequality index of credit accessibility and prevalence of poverty. The study tried to identify the impact of credit accessibility on

poverty reduction. The study found out that credit accessibility has a significant impact on poverty reduction in many states of India. Hence, it is essential to develop inclusive financial system for poverty reduction.

INTRODUCTION

The Eleventh Five Year Plan of India envisages inclusive growth as a key objective. Inclusive growth aims at poverty reduction and to achieve this, it is essential to broaden access to economic opportunities in terms of credit. According to recent World Bank estimates, India had 456 million people, or about 42 percent of the population living below the new international poverty line of US \$ 1.25 per day. There is a bidirectional cause and effect relationship between poverty and credit accessibility. Credit inaccessibility causes poverty, and poverty causes low demand for credit.

Financial inclusion is an integral inclusive growth process and poverty reduction. Financial inclusion as a catalyst, since economic opportunity is strongly intertwined with financial access. In India, it is believed that financial inclusion implies access to a bank account, access to affordable credit and payment system. Hence, it is well recognized that if the fruits of the development of the country are to reach to the lowest segment of the society, credit accessibility is the vehicle through which it can be achieved. In this context, a research study on "*Interrelationship between Credit Accessibility, Poverty Reduction and Achievement of Inclusive Growth- A State-wise Analysis in India*" was designed with the following objectives.

OBJECTIVES

1. To analyse the trends in the number of people below the poverty line, trends in provisions of credit, number of bank offices, and amount of credit distributed.
2. To analyze the impact of credit accessibility on poverty reduction and inclusive growth.

METHODOLOGY

The study is based on secondary data. The secondary data for the period 1999-2000 and 2004-2005 were collected from the statistical tables relating to banks in India and the Planning Commission's various issues. The state wise data on poverty and the distribution of credit by the scheduled commercial

banks were available only for this period. To fulfill the above objectives, the following statistical and econometric tools were used.

1. Theils Inequality Index
2. Probit Regression Analysis

(a) Theils Inequality Index

The Theils inequality index used in the study is

$$\text{Theils inequality index} = \text{Log } N - \sum \text{Log } (1/x) * x$$

$$x = X/\sum X$$

X = Amount of credit distribution by scheduled commercial banks (Amount in Rs. crores) and the number of persons (In lakhs) living below the poverty line.

(b) Probit Regression Analysis

To identify the relationship between inclusive growth and the distribution of credit, probit regression analysis was employed. The probability of a state included in the growth is estimated based on the distribution of credit and the variables relating to the banking sector using the probit equation

$$G^* = \gamma z + \varepsilon$$

where G = Probability of a state is included in the economic growth (1 if the poverty had declined between the period 1999-2000 and 2004-2005, 0 if the poverty had increased in the same time period)

γ = parameter co-efficient

Z = Change in the amount of deposits, change in the amount of credit, change in the number of offices of scheduled commercial banks between the period 1999-2000 and 2004-2005, ε is a random disturbance term.

If $G^* > 0$, the state is included in the economic growth and if $G^* < 0$, the state is not included in the economic growth.

RESULTS AND DISCUSSION

The results pertaining to the impact of credit provided by the scheduled commercial banks are discussed under the following heads:

Table 1: Distribution of Credit by the Scheduled Commercial Banks and Number of Persons Below Poverty Line

States	Credit distribution 1999-2000 (Rs. Crores)	Credit distribution 2004-2005 (Rs. crores)	Number of persons below poverty line 1999-2000 (In lakh persons)	Number of persons below poverty line 2004-2005 (In lakh persons)
Haryana	7061.38	19163	32.1	17.34
Himachalpradesh	1413.72	4420	6.36	5.12
Jammu and Kashmir	3507.38	6673	5.85	3.46
Punjab	15062.96	30242	21.63	14.49
Rajasthan	11105.06	29892	134.89	81.83
Chandigarh	3311.11	11362	90.96	0.51
Delhi	68226.04	142525	2.03	11.49
Arunchal Pradesh	88.96	264	126.8	119.01
Assam	2668.90	6219	55.77	94.55
Manipur	167.80	398	3.95	7.19
Meghalaya	221.48	1316	317.38	8.23
Mizoram	77.32	368	1.18	1.85
Nagaland	118.45	294	3.99	5.49
Tripura	326.03	786	6.38	13.02
Bihar	8304.42	11453	369.15	425.64
Orissa	5062.15	16591	178.49	169.09
Sikkim	70.49	365	1.14	2.05
West Bengal	27370.58	59313	208.36	213.49
Andaman and Nicobar	56.04	197	0.92	82
Madhya Pradesh	22538.40	26344	249.66	298.54
Uttar Pradesh	15134.35	50137	590.03	529.89
Goa	1499.13	2912	2.01	0.7
Gujarat	30152	45643	90.69	67.89
Maharashtra	128201.00	365925	317.36	227.99
Dadra and Nagar Haveli	36.48	148	0.84	0.33
Daman and Diu	57.87	76	0.21	0.06
Andhra Pradesh	2955.095	73987	126.1	3.96
Karnataka	2794.913	81106	138.89	104.4
Kerala	1646.501	39351	49.6	41.04
Tamil Nadu	4922.967	108605	145.62	130.48
Lakshadweep	47.4	9	0.11	0.11
Pondicherry	457.16	1088	2.37	2.41

Source: 1. Statistical tables relating to banks in India, 1999-2000 and 2004-2005
2. Planning Commission Report, various issues.

Distribution of Credit Provided by the Scheduled Commercial Banks, and, Number of Persons below the Poverty Line

It was hypothesised that the distribution of credit and poverty will vary across states. Hence, an attempt was made to analyse the distribution of credit by the scheduled commercial banks and poverty is shown in Table 2.

Table 1 shows that the highest amount of credit distribution by the scheduled commercial banks was observed in Maharashtra (Rs. 128201 crores) followed by the Union Territory of Delhi (Rs. 68226.04 crores) and Tamil Nadu (Rs. 4922967 crores) in 1999-2000. In 2004-2005 also, the same states dominated the other states in terms of credit distribution. The number of persons living below the poverty line was higher in the state of Uttar Pradesh (590 lakhs) and Bihar (369.15 lakhs) in 1999-2000. The level of poverty had declined in Uttar Pradesh in 2004-2005. But, in the state of Bihar, the number of persons living below the poverty line had increased. In many of the states, the level of poverty had declined in the study period.

Inequality in the Distribution of Credit by the Scheduled Commercial Banks and Poverty Among States

The prevalence of inequality in the distribution of credit and poverty among the states was assumed. The inequality in any of the economic variables will create imbalanced economic growth. Table 2 shows the inequality in the distribution of credit by the scheduled commercial banks and poverty.

Table 2: Estimated Theils Inequality Index in the Distribution of Credit by the Scheduled Commercial Banks and Poverty Among States

<i>Variables</i>	<i>Theils Inequality index in 1999-2000</i>	<i>Theils Inequality index 2004-2005</i>
Amount of credit distribution	0.44	0.48
Poverty	0.33	0.46

Table 2 shows that the inequality in the distribution of credit had increased from 0.44 in 1999-2000 to 0.48 in 2004-2005. Similarly, the inequality in poverty had also increased from 0.33 in 1999-2000 to 0.46 in 2004-2005. It shows that the inequality in the distribution of credit had increased the inequality in the distribution of poverty.

Impact of Credit Provided by the Scheduled Commercial Banks on Inclusive Growth – Probit Analysis

There was a strong relationship between the banking sector and development. The banking sector is responsible for the inclusive growth in India.

Table 3 shows the impact of credit provided by the scheduled commercial banks on inclusive growth and the results of probit co-efficients.

Table 3: Impact Of Credit Provided By The Scheduled Commercial Banks on Poverty Reduction –Probit Analysis

Variables	Probit coefficient	t value	Significant level
Constant	-0.0299	-.093	In significant
Change in Deposits	-0.00005	-2.170	Significant at 5 % level
Change in Credit	0.0038	2.173	Significant at 5 % level
Change in Number of Banking Offices	-0.0025	-1.048	In significant
Chi-squared value	16.3335	Significant at 1 % level	

The results of the probit co-efficients show that the change in the amount of deposits and change in the amount of credit were statistically significant in determining inclusive growth. The amount of deposits had a negative relationship with inclusive growth. It means that an additional amount of credit would reduce inclusive growth. But, the amount of credit provided had a positive relationship with inclusive growth. The increase in the amount of credit would increase inclusive growth. The overall model is statistically significant to determine inclusive growth. It shows a better fit of the model. The banking sector, particularly the scheduled commercial banks, had greater impact on inclusive growth.

CONCLUSION

To conclude, the disparity in the amount of credit distribution leads to disparity in poverty among states in India. The amount of credit distribution was a statistically significant factor to determine poverty reduction and inclusive growth.

It had positive relationship with credit distribution. It implies that the banking sector had significant impact on inclusive growth through poverty reduction.

REFERENCES

- Statistical Tables Relating to Banks in India, 1999-2000 and 2004-2005, Reserve bank of India, Bombay.
- Planning Commission Report, Various issues, Government of India, New Delhi.
- Sinha, K.K. (2006), Poverty of Economics-India and the Poverty Dilemma, Manak Publication Pvt Ltd, New Delhi, pp. 32-45.
- Hanumantha Rao, C.H., (2006), Growing Regional Disparities in Development In India- Post reform experience and challenges ahead, *The Indian Economic Journal*, Vol.54, No1, pp.52-56.
- Bhattacharya, B.B. and Sakthi Vel, S., (2004), Regional growth and disparity in India –comparison of pre- and post-reform decade, *Economic and Political Weekly*, Vol.29, No.10.
- Sameer Kochhar (2009), Speeding Financial Inclusion, Academic Foundation, Newdelhi, pp. 32, 45, 54-58.