An Analysis of Impact of Credit on the Performance of J&K State Economy Output

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Abstract: In this study an attempt has been made to an analysis of impact of credit on the performance of J&K state economy output. For the measurement purpose simple and a multivariate regressions have been employed and the results of both the model confirms that credit plays an important role in improving the performance of our state economy output. Therefore, policy makers should make optimum utilization of credit so that growth rate of output of our state economy can be still improved which finally enhance the standard of living of the people in our state economy.

Key Words: Credit, Impact, Performance, Output, regression models, etc.

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I. INTRODUCTION

Finance is an essential input required for the growth and development of all key sectors, viz., agriculture, industry and services sectors of the economy. These sectors need finance both for carrying on day-to-day activities and also for its growth and progress.

Agriculture is a way of life, a tradition, which for centuries has shaped the thought, the outlook, the culture and the economic life of the people of Jammu & Kashmir State. The rapid growth of agriculture sector is essential not only to achieve self-reliance but also for household food security at state level. Its growth and development is also essential to bring about equity in the distribution of income and wealth which finally results in rapid reduction in poverty levels in the state in general while as rural areas in particular.

In Jammu & Kashmir State, a vast majority of cultivators are small and marginal cultivators and nearly 50 per cent of the rural households are landless agricultural laborers. There are also poor artisans who are carrying on industrial activities allied to agricultural operations carpentry, black smithy, pottery, etc.

Rural credit has been the history of the movement of rural society from non-institutional to institutional framework. This involved a shift in the sources and purposes of credit from traditional moneylenders' to modern banks and from unproductive to productive purposes. It is the lack of proper resources with the rural people which compelled them to borrow money for the fulfillment of their daily, occasional and seasonal needs, thus falling a pray in the hands of various lending systems of the landlords, money lenders, shopkeepers and the traders. Rural credit has its roots in the exploitative rural set-up having feudal base and cannot be viewed in isolation.

Rural credit system is mainly agriculture oriented. The agriculture system is mainly being financed directly or indirectly by the government institutions, cooperative banks and private financing agencies.

OBJECTIVES

1. To examine the impact of credit on performance of J&K state economy output.

2. To examine the impact of credit on performance of J&K state economy output disbursed by different financial institutions

ECONOMETRIC TOOLS/METHODS

The following Econometric Tools/Methods have been used to examine the impact of credit on performance of J&K state economy output disbursed by different financial institutions

1. Simple Regression Model-I

 $X = a + b_1 X_1 + u_1$

Where dependent variable X = State Economy Out-put (in Rs. Crores at Constant Prices) $X_{1=}$ Credit Disbursed

 u_1 = error term assumed to follow normal distribution with zero mean and constant variance.

Multi-variate Regression Model-II

 $X = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_{4+} b_5 X_5 + u_1$

Where dependent variable X = State Economy Out-put (in Rs. Crores at Constant Prices)

 $X_{1 =}$ Credit Disbursed BY Cooperative Banks (X₁)

 X_{2} = Credit Disbursed by**PRBs** (X_2)

 $X_{3=}$ Credit Disbursed by**LDBs(X_3)**

 $u_1 = error term$ assumed to follow normal distribution with zero mean and constant variance

Models to Measure the ImpactOf Credit On J&K State Economy Output (NSDP)

To know the impact of credit on J&K STATE ECONOMY OUTPUT (NSDP), a time series data from 1995-96 to 2014-15 has been taken and a simple regression equation has been estimated in which NSDP at constant prices has been taken as dependent variable (proxy variable for output) and Credit Disbursed to our economy by different financial institutions has been taken as an independent variables (proxy variable for input). The estimated equations are given as under

Simple Regression Model-I

$\mathbf{X} = \mathbf{a} + \mathbf{b}_1 \mathbf{X}_1 + \mathbf{u}_1$

Where dependent variable X = State Economy Out-put (in Rs. Crores at Constant Prices)

 $X_{1 =}$ Credit Disbursed

 u_1 = error term assumed to follow normal distribution with zero mean and constant variance.

The regression equation is: $X = -8143.6 + 0.029 X_1$

Predictor	Coefficient	St. Dev.	Т	Р
Constant	8143.6	413.2	19.71	0.00
X1	0.029	0.005	5.81	0.00
R-Sq = 65.2%		R-Sq(adj) =	= 63.3%	
F= 33.80		P= 0.000		

It is apparent from the results of regression analysis that the explanatory variable i.e., credit disbursed to key sectors of the state economy has a significant influence on state economy production as the F-statistics and *R*value are quite significant. The high Adjusted*R*2 value suggests that over 63 per cent of variations in the state economy output is explained by the explanatory variable included in the model. The coefficient for credit is positive (0.029) and statistically significant at 0.00% level of significance with P value 0.00. Itsuggests that institutional credit affects state economy output positively in J&K economy. But the degree of responsivenessof credit to NSDP is small. One per cent increase in the disbursement of institutional credit would induce an increase of about 0.029 per cent in total production in the J&K state, or in other words the credit elasticity of growth of agricultural production is 0.029, i.e. inelastic.

Multi-variate Regression Model-II

 $X = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_{4+} b_5X_5 + u_1$ Where dependent variable X = State Economy Out-put (in Rs. Crores at Constant Prices) $X_{1=}$ Credit Disbursed BY **Cooperative Banks** (X₁) $X_{2=}$ Credit Disbursed by**PRBs** (X₂)

 $X_{3=}$ Credit Disbursed by **LDBs(X_3)**

1. $u_1 = \text{error term}$ assumed to follow normal distribution with zero mean and constant variance

Predictor	Coefficient	St. Dev.	Т	Р
~			1	
Constant	6854.7	431.2	15.90	0.00
Cooperative	1.05	0.01	10.70	0.00
Banks (X ₁)	1.00	0.01	10.70	0.00
PRBs (X ₂)	0.01	0.001	1.69	0.10
LDBs(X ₃)	-2.42	1.50	-2.11	0.05
R-Sq = 89.5%		R-Sq(adj) = 87.5%		
F= 45.50			P= 0.000	

The regression equation is:			
$X = 6854.7 + 0.029 X_1 + 1.05 X_2 + 0.01$	X3-	-2.42	X

It is apparent from the results of regression analysis that the explanatory variables i.e., credit disbursed to key sectors of the state economy by different financial institutions have a significant influence on state economy production as the F-statistics and *R*value are quite significant. The higher Adjusted*R*2 value suggests that about 90 per cent of variations in the state economy output is explained by the explanatory variables included in the model. The coefficient for **Cooperative Banks** credit and **PRBs** are positive as well as statistically significant at 0.00% and 0.10 level respectively. The results of regression model suggests that **Cooperative Banks** (X_1)credit affects state economy output positively as well as it is more responsive to NSDP which becomes clear from its coefficient which is about 1.05. But the degree of responsiveness of PRBs credit to NSDP is very small. However, the impact of LDBs credit is negative on state economy output and the reason of it may be its mis-use which affects our economy negatively and for which State Government should take actions so that these credits should be used for the purposes for which they are to be given.

II. FINDINGS AND CONCLUSION

1. It is apparent from the results of regression analysis that the explanatory variable i.e., credit disbursed to key sectors of the state economy has a significant influence on state economy production as the F-statistics and *R*value are quite significant.

2. The high Adjusted R^2 value the results of our regression model also suggests that over 63 per cent of variations in the state economy output is explained by the explanatory variable included in the model.

3. The coefficient for credit is positive (0.029) and statistically significant at 0.00% level of significance as P value is 0.00. It suggests that institutional credit affects state economy output positively in J&K economy. But the degree of responsiveness of credit to NSDP is small. One per cent increase in the disbursement of institutional credit would induce an increase of about 0.029 per cent in total production in the J&K state, or in other words the credit elasticity of growth of agricultural production is 0.029, i.e. inelastic.

4. It is apparent from the results of our second regression model analysis that the explanatory variables i.e., credit disbursed to key sectors of the state economy by different financial institutions have a significant influence on state economy production as the F-statistics and R-value are quite significant. The higher Adjusted R2 value suggests that about 90 per cent of variations in the state economy output is explained by the explanatory variables included in the model.

5. The coefficient for **Cooperative Banks** credit and **PRBs** are positive as well as statistically significant at 0.00% and 0.10 level respectively. The results of regression model suggests that **Cooperative Banks** (X_1)credit affects state economy output positively as well as it is more responsive to NSDP which becomes clear from its coefficient which is about 1.05. But the degree of responsiveness of PRBs credit to NSDP is very small. However, the impact of LDBs credit is negative on state economy output and the reason of it may be its mis-use which affects our economy negatively and for which State Government should take actions so that these credits should be used for the purposes for which they are to be given.

REFERENCES:

- [1]. Digest of statistics; Directorate of Economics and Statistics; Govt. of J&K, various issues.
- [2]. J & Economic Survey 2014-15.
- [3]. J&K, State Level Bankers Committee, various issues.

- [4]. Ministry of Finance and Commerce, Government of Jammu and Kashmir various issues
- [5]. Official websites of RBI and NABARD.ie, www.rbi.org.in and www.nabard.org
- [6]. Basic Statistical returns of scheduled commercial Banks,RBI
- [7]. www.indiastat.com
- [8]. www.iba.org.in

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