Volume : 2 | Issue : 3 | Mar 2013 • ISSN No 2277 - 8179

Research Paper

Investigation of The Influence of Public Spending on the State Per Capita Income in Gujarat Economy During the Post Reforms Period From 1991 to 2005

Economics

KEYWORDS : Investigation, Influence, Public Spending, State Per Capita Income, Cross-Sectional

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ABSTRACT

In this paper attempt is made to investigate the influence of public spending in Gujarat State on the State Per Capita Income in the Gujarat Economy during the Post Reforms period of 1991 to 2005. Cross-sectional relationship is expected between year-wise Public Spending and year-wise number of State Per capita income in the Gujarat Economy, for the study period of 1991 to 2005. The relationship between cross-sectional Public Spending and year-wise number of State Per Capita Income in the Gujarat Economy is estimated by a two variable regression model analysis. Cross-sectional analysis of data showed significant causal relationship between year-wise number of Public Spending and State Per Capita Income. Increase in Public Spending in Gujarat Economy has increased State Per Capita Income.

1. INTRODUCTION

These days analysis of macroeconomic variables and their interrelationship has become very important area and aspect of modern studies. Continuous debate is going on for a very long period of time on causal relationship among macro economic variables among economic thinkers and writers in developed and developing countries as well as world as whole. It is important to state that for a very long period of time scientific studies were confined to very few macro variables, particularly in the areas of public finance, mainly to the trends of Government revenues and expenditure and budgets. But now recently attempts are made to study the behaviour of public spending on the basis of empirical data and historical facts to investigate the influence of public spending on economic growth in the country and its regions and states. Rise in Economic growth raises, National income and Per Capita income in country as well as states like Gujarat. Thus increase in public spending in country like India increases national income and per capita income. But unfortunately there has been a general tendency among the economist is to think worry and write about National Problems and National level studies are undertaken and not about regional and state level problems and changes taking place due to changes in country and world as a whole. It is true that macro economic problems are more important but state level problems are also essential and attention must be paid to them also, at least to remove regional disparities.

This study is about the influence of public spending on per capita income in Gujarat Economy. Gujarat is a developed economy and recently it has become vibrant state. It is industrially developed economy. State gross domestic product in Gujarat is higher as compared to other less developed states in India. Higher state Gross domestic product has enabled the government of Gujarat to increase public spending. This increase in public spending has increased state per capita income in Gujarat.

The remaining of the paper is organized into nine sections including earlier introduction. Section two presents theoretical foundation of the study, Section three describes the objective of study, Section four is about hypothesis, and Section five describes methodology and model specification. Section six, is about sources of data, Section seven, reviews literatures. The empirical findings are reported in Section eight, Section nine presents conclusion.

2. THEORETICAL FOUNDATION

Economic development of economic system of any country depends on efforts of the government and people of the that country, with efforts government also spends on various development projects and development programmes. Public spending is an important instrument in the hands of government and that can be used in maximising health and also welfare of the people. Increase in Public spending increases health of the people. This increase in the health of people increases productivity of people and also increases national Domestic product. Increase in national domestic product increases per capita income. This happens at national as well as regional and also state levels.

All economic principles and theories state that there is a significant relationship between economic growth and growth of public spending. Some economists like classical thinkers state that economic growth leads to increase in public spending. Wagner also advocated in his law that public spending depends on National income.

Keynes argued in his General Theory of Employment, Interest and Money that increase in public spending increases national income. During depression of 1929-33 investment was very low. Entrepreneurs were not taking risk for making investment and it was very difficult to come out of depression, As a solution to the problem Keynes gave the idea that when no private entrepreneur enter is coming a head and take risk and make the investment government should come a head and make the investment. Thus he gave a new idea of emergence of public sector investment. Thus if government makes the investment by increasing public spending. It will increase the income of the people. Increase of the people income will increase demand, production, employment, investment and national income also. This increase in national income will increase per capita income. Thus increase in public spending will increase per capita income.

In this paper we have attempted to examine influence of public spending on state Per Capita Income in Gujarat economy during post reform period from 1990 to 2005.

3. OBJECTIVE OF THE STUDY

The main objective of this paper is to Empirical investigate the influence of public spending on the State Per Capita Income in Gujarat Economy during the post reforms period from 1991 to 2005

4. HYPOTHESIS OF THE STUDY

The present paper aims at examining Empirical investigation of effects of public spending on State Per Capita Income in Gujarat Economy During 1991 to 2005 for which we have the following hypothesis:

Increase in public spending has increased State Per Capita income in Gujarat Economy

5. METHODOLOGY OF ANALYSIS

In this paper, empirical analysis is undertaken with a view to establish cross -sectional relationship between Public spending and State per capita income in Gujarat Economy for the study period 1991 to 2005. This has been carried out with the help of year-wise secondary data. For this purpose, the statistical regression models analysis have been adopted. This paper has been designed so as to examine the hypotheses as mentioned earlier in this study. Here, statistical regression is employed as a tool for the analysis of relationship between the variables which we are predominantly concerned with. The increase in Public spending in Gujarat (GSPEND) is independent variables in this model which is the year-wise total number of State Per Capita Income (SPCIG) (in Rs. Crores) over fifteen years in Gujarat

Economy. On the other hand, the dependent variables are the year-wise number of State Per Capita Income in Gujarat State (SPCIG). In this study, we have estimated a Two Variables Model and fitted double natural logarithmic (log) equations for Public Spending (GSPEND) and State Per Capita Income in Gujarat (SPCIG) below with the corresponding statistical values of students t-statistics, R2,R2, F-value ,D-W Statistics and the regression coefficients.

6. SOURCES OF DATA

The sources of data are exclusively built on secondary survey. The required statistical information (secondary data) would be collected from various sources, and has been used for analysis purpose, and those are from the following sources:

(1) Gujarat Government Budgets
(2) Reserve Bank of India (RBI), Annual Reports.
(3) Economic and Financial statistics Review (Reserve Bank of India)
(4) Indian Economic Survey (Fiscal and Real Sector), the Ministry of Finance, "Government of India" New Delhi. And also data collected from other reliable sources.

7. REVIEW OF LITERATURE

A lot of studies have been carried out in national and international level which are of greater significance. Among a few significant studies on Government spending and State Per Capita Income, mention may be of following works:

Poulomi Roy expounded that one of the important features of the Indian economy is the disparate growth of state domestic product (SDP). In India regional disparity in growth of output has increased mainly in the post reform period. Given the fact that inter state disparity in growth rate among the Indian states exists and persists, it has now become very essential to give a close look at the individual state level. The empirical part of the paper evaluates the effect of public capital on economic growth of four states in India. This paper highlights the role of public productive spending policy on economic growth of the four states in India. This paper highlights the role of public productive spending policy on economic growth of the four states in India. This study also helps us to check which sector, public or private, plays crucial role in the high growth state. This will help the poorer states to decide their strategy so that they can also achieve higher growth as in the high growth states. It was observed that during the period 1981-2000 public capitals did not play any significant role on economic west Bengal. Therefore it was observed that allocative inefficiency in resource allocation is present. It was observed that inefficiency in the allocation of real plan expenditure thus private capital is existing in these states.

Basant found that the major findings are summarized in the context of other macro changes in the economy and related to the available literature on the subject. An analytical description of the trends and patterns of rural non-agricultural employment in Gujarat is presented. Both macro and micro data are used for this purpose. First, on the basis of secondary data, the patterns in Gujarat are compared with those at the all India level. Subsequently, the published data are used to analyze the changes in rural non-agricultural employment in the districts of Gujarat. Finally, micro-level profile of the broad diversification processes suggested by the survey data is presented. The study looks at the production by artisans in rural Gujarat. It provides a macro-view of changes in rural household manufacturing sector, and presents a micro profile of artisan households in the survey villages. This is devoted to the analysis of the determinants of non-agricultural employment in rural Gujarat at the macro and micro levels.

Bhatt and Shah observed that party politics has played havoc with the functioning of Gujarat State Finance Commission. Not only was it dissolved before it could submit its full report, but the recommendations made show that the commission has protected the interest of the state government at the cost of Panchayat Raj institution.

Kundu suggest that both proponents and critics of new development strategy agree that urban growth in the post liberalization phase would be very high, although the critics hold that this will be associated with low productive employment and poverty and a negative effect on quality of life in the cities. It is important therefore to assess empirically the impact of economic liberalization on the nature and pattern of urban growth. This article attempts an analysis of the trends and patterns of urbanization in Gujarat, a rapidly industrializing state, taking account of the changes in labour market and those in the systems of urban governance, land management development practices and the commercialization of basic services.

Dinesh found that Gujarat state has responded well to economic reforms and industry has grown, especially manufacturing industry. For long term growth, a greater emphasis on the infrastructure sector is needed. Small scale industry can be helped by promoting cluster. The article presents relevant statistical data.

Darshnini observed that while Gujarat has registered a significant improvement in key health statistics, the health situation in the state shows some paradoxes. A comprehensive analysis of the health status over the years, public health expenditure, the growth of health facilities in urban and rural areas and in the private and public sectors indicates that rather than technical inputs, it is the development model adopted that impinges on health status.

Though this is not an exhaustive survey of the literature that has gone into this area, we feel that it does provide analytical framework for enabling us to undertake the present study.

8 RESULTS AND DISCUSSION

By fitting the double natural logarithmic (Log) relationship to the time series data on Sate Per capita Income in Gujarat State (SPCIG) and Public spending in Gujarat(PSPG) for the study years 1990-91 to 2004-05 , we have obtained the following results.

Model:1
LOG (SPCIG) = α + β LOG (PSPG) + μ1
Dependent Variable: Gujarat State Per capita Income
Independent Variable: Public Spending in Gujarat

Here,
Gujarat State Per capita Income = SPCIG

Public Spending in Gujarat = PSPG

α and β are the parameters of the intercept and slopes of the coefficients, while μ represents other variables that could have lent further explanation to explained variables but not included in the model.

Table 1

Dependent Variable: LOG (SPCIG)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.352409	2.526581	0.931064	0.3688
LOG(PSPG)	0.837406	0.293005	2.857991	0.0134
R-squared	0.985869	Mean dependent var		9.557963
Adjusted R-squared	0.918628	S.D. dependent var		0.785223
S.E. of regression	0.638581	Akaike info criterion		2.064429
Sum squared resid	5.301210	Schwarz criterion		2.158835
Log likelihood	-13.48321	F-statistic		8.168110
Durbin-Watson stat	2.293271	Prob(F-statistic)		0.013449

Source: Author's own calculation based on Public Spending and State Per Capita Income data 1991-2005.

LOG(SPCIG) = 2.352409443 + 0.8374062225*LOG(PSPG)

From regression coefficient it is clear that there is positive relationship between State Per capita Income (SPCIG) and Public

Spending in Gujarat (PSPG). The positive effect is low but significant. According to the result, a unit change in Public Spending leads to 0.83 increases in State Per Capita Income in Gujarat. The F- test for the model also indicates it is significant, F = 8.16 at sig F= .0134. This result also indicates that the t- test for the significance of individual independent variable indicates that at the significance level of 0.95(confidence level of 95%), independent variables are statistically significant in the model. D-W statistics is very high and it is 2.29 which indicate complete absence of auto- correlation among residuals. From the above regression result, it is found that coefficient of determination is about 0.98. This implies that about 98% of the total variation in State per Capita Income is explained by Public Spending in Gujarat. The remaining only 2% left unaccounted for by the model is attributed to the error term.

9. CONCLUDING REMARKS

In this study, our Two Variables Model depicts that there is Positive and Significant Relationship between Independent variable and Dependent variable. It means that Public Spending in Gujarat is positively and strongly related to State Per Capita Income. Increase in Public Spending in Gujarat State increases State Per Capita Income in Gujarat Economy. Thus there is a causal relationship between Public Spending and State Per Capita Income in Gujarat Economy. This analysis supports our Hypothesis stated in this paper.

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