



Importance of State Gross Domestic Product in Determination of Government Expenditure: A case Study of Gujarat State of India

KEYWORDS

Importance, State Gross Domestic Product, Determination, Government Expenditure, Two Variables Regression

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ABSTRACT Here in this paper the attempts are made to analyse the importance of State Gross Domestic Product in determination of Government Expenditure in Gujarat state of India for the period of 1992-to 2005. In this paper time series data is used for the analysis the relationship between State Gross Domestic Product in determination of Government Expenditure in Gujarat. For this purpose two variables regression model is used. The results reveal that the State Gross Domestic Product is an important determinant of Government expenditure in Gujarat State throughout our study period from 1992to 2005.

1. INTRODUCTION

In modern times studies and analysis of macroeconomic variable has become very important aspect of scientific studies at national and international levels. In almost all the countries of the world studies of macroeconomic variables is gaining more and more important as this kind of analysis help in solving economic problems. In all the countries of the world in general and developing countries in particular governments want to solve economic problems. Therefore governments want to increase the level of economic development to raise the standard of living and welfare of the people. Therefore it becomes necessary to raise the level of economic development which can be done through increase in Gross Domestic Product at national levels and State Gross Domestic Product at state level, so they can increase their expenditure on development projects and programmes, so they can maximize public utilities and infrastructural facilities. Thus, increase in Gross Domestic Product and State Gross Domestic Product increases to national government and state Government Expenditure. Thus, increase in government depends on increase in Gross Domestic Product and State Gross Domestic Product.

Macroeconomic Development story of Gujarat State is different from other less developed states of India. Gujarat has achieved remarkable growth in Industrial Development, Agricultural Development, Infrastructural Facilities, Roads and Means of Transportation, Education, Trade and Commerce etc. State Gross Domestic Product and State Gross Domestic Product is also higher in Gujarat State as compared to other less developed states of Indian Nations.

This is a study of importance of State Gross Domestic Product in determination of Government Expenditure in Gujarat state of India during 1992 to 2005.

Our findings show that increase in State Gross Domestic Product increases in Government Expenditure in Gujarat state of India during our study period. Thus, State Gross Domestic Product is an important factor governing Government Expenditure in Gujarat state.

The remaining of the paper is organised 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, and reviews literatures. The empirical findings are reported in Section eight, Section nine presents conclusion.

2. THEORITICAL FOUNDATION

Economic development has become very important to

achieve all the economic objectives of any economic systems. All the economically developed and developing nations want to improve the standard of living and welfare of the people of nation. Therefore all the policy and programmes and projects are development oriented, economic development means higher national income and per capita income at national level and higher State Gross Domestic Product and State Gross Domestic Product at state level. This higher national income, per capita income and State Gross Domestic Product and State Gross Domestic Product enables the national and state governments to increase the Government Expenditure on various public utility services. Thus, higher the Gross Domestic Product and State Gross Domestic Product mean higher Government Expenditure for achieving higher economic growth.

Before classical school of economy thoughts mercantilist gave ideology of fiscal principles. Physiocrats argued that to provide facilities to the people government should collect taxes from people.

Classical thinkers were of the opinion that government has no role to play in economic matters. Government is only the agent for the people. Thus, classical approach was based on the principle of non-interference of government. Classical economists strongly supported Laissez Faire policy. Classical Approach states that unless national income increases Government Expenditure cannot increase. For spending more on public utility welfare activities, national incomes must increase. This is how, classical economists advocated that increase in national income and State Gross Domestic Product will only lead to increase in Government Expenditure. According to classical view, causality runs from National Income and State Gross Domestic Product to Government Expenditure.

Even Eminent Economist Wagner in his Law has stated that increase in national income and State Gross Domestic Product increase Government Expenditure.

In this paper, we have tried to find out the importance of State Gross Domestic Product in determination of Government Expenditure in Gujarat state of India.

In our study, we state that increase in State Gross Domestic Product increases Government Expenditure in Gujarat state of India. Thus, State Gross Domestic Product plays an important role in determination of Government Expenditure in Gujarat State of India.

3. OBJECTIVE OF THE STUDY

The main objective of this paper is to find out the importance

of State Gross Domestic Product in determination of Government Expenditure in Gujarat state, during the period of 1992 to 2005.

4. HYPOTHESIS OF THE STUDY

The present paper aims at examining empirical analysis of importance of State Gross Domestic Product in Gujarat in determination of Government Expenditure in Gujarat State During 1992 to 2005 for which we have the following hypothesis:

1. Increase in State Gross Domestic Product in Gujarat has increased Government expenditure in Gujarat State.

5. METHODOLOGY OF ANALYSIS

In this paper, empirical analysis is undertaken with a view to establish time series relationship between State Gross Domestic Product and Government Expenditure in Gujarat State of India for the study period 1992 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 State Gross Domestic Product in Gujarat (SGDPG) is independent variables in this model which is the year-wise total number of State Gross Domestic Product (SGDPG) (in Rs. Crores) over fourteen years in India. On the other hand, the dependent variables are the year-wise number of Government Expenditure in Gujarat State(GEXPG).

In this study, we have estimated a Two Variables Model and fitted double natural logarithmic (log) equations for State Gross Domestic Product in Gujarat(SGDPG) and Government Expenditure in Gujarat State(GEXPG) below with the corresponding statistical values of students t-statistics, 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

Many studies have been carried out in India and abroad which are of greater significance. Among a few significant studies on Government expenditure and economic development, mention may be of following works:

Tushaar Shah and O.P. Singh empirically expounded that Gujarat's 1997 census of below poverty line (BPL) households as well as the village amenity survey of the same year, this research explores the interplay between irrigation development and rural poverty in 177 predominantly rural talukas of Gujarat. The analysis shows, among other things, that irrigation's impact on the BPL ratio in a taluka is relatively small in magnitude but statistically highly significant, and that talukas with high irrigation density (irrigated area / net sown area) have significantly lower than average BPL ratio and conversely..

Teri shows that the current state of the water sector in Gujarat revealed that the distribution of water resources in Gujarat was uneven leading to a significant exploitation of groundwater in deficient areas. In addition, the state has a complex institutional structure with multiple agencies and overlapping

jurisdiction with many SPVs (special purpose vehicles) in the water sector for the execution and operation of specific projects, principally those linked with the Sardar Sarovar Project. The augmentation of water supply and improvements in water quality call for significant investments but it has been recognized that the state cannot finance these activities on its own. Private investment in the water sector will be required to augment the efforts of the state and this fact has been recognized in Gujarat. The need for an enabling framework to introduce private sector participation was felt which would address many complex issues to balance the interests of both consumers and investors in the liberalized environment in Gujarat.

Jammejay Singh and Parmesh Shah observed that the public sector of most developing countries is often the target of numerous criticism – lack of or no infrastructure, absenteeism of service providers like teachers and doctors, poor quality of services, corruption, non transparency, favoritism, discrimination, etc. While several of these criticism are usually attributed to lack of resources and the conflict between the needs of equity and those of efficiency, research has shown in general that the correlation between increased public expenditure and actual outcomes or improvements in service delivery is weak. This gap between spending and development outcomes reflects on more serious deficiencies of 'voice' and 'accountability' for citizens in general, and the poor in particular. This study argues that participatory public expenditure management (PPEM) provides a set of such mechanism.

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 cross-sectional data (14 x 9) matrix State Per capita Income in Gujarat State (SPCIG) categories for the study years 1992 to 2005 and having taken these as independent variables and Government Expenditure in Gujarat (GEXPG) year-wise total number as dependent variable, we have obtained the following results.

Model: LOG (GEXPG) = α + β LOG (SGDPG) + μ
In this model

GEXPG= Government Expenditure in Gujarat
 SGDPG = State Gross Domestic Product in Gujarat

α =Constant Term
 β =Coefficient
 μ = Error Term

TABLE: 1

Dependent Variable:				
LOG(GEXP)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.2705	2.7705	0.819575	0.4336
LOG(SGDPG)	8.6105	0.000222	3.387105	0.0177
R-squared	0.990	Mean dependent var		0.194711
Adjusted R-squared	0.940	S.D. dependent var		0.442445
S.E. of regression	4.7205	Akaike info criterion		-16.8732
Sum squared resid	2.0108	Schwarz criterion		-16.75009
Log likelihood	104.2279	F-statistic		14.8308
Durbin-Watson stat	2.163331	Prob(F-statistic)		0.000000

Source: Author's own Calculation

LOG (GEXPG) = 2.27 + 8.61 LOG (SGDPG)

In the above Two Variables regression result, it is evident that among independent variables, year-wise State Gross Domestic Product in Gujarat (SGDPG) has significant impact on Government Expenditure in Gujarat (GEXPG). The high values of

R² and F-test suggest significant effect of the independent variables SGDPG on dependent Variable GEXPG. The R² value shows that the increase in State Gross Domestic Product in Gujarat increases 99% increase in Government Expenditure in Gujarat. D-W statistics is near 2 and it is 2.16 which indicates absence of auto-correlation among residuals. This analysis reveals that when independent variables State Gross Domestic Product in Gujarat has significant effect in the determination of Year wise Government Expenditure in Gujarat. Thus this Report of our analysis supports our Hypothesis that Increase in State Gross Domestic Product in Gujarat increases Government Expenditure in Gujarat.

9. CONCLUDING REMARKS

Our Two Variables Model depicts that when Independent variable State Gross Domestic Product in Gujarat and Dependent Variable Government Expenditure in Gujarat are Positively and Strongly related. Increase in State Gross Domestic Product in Gujarat increases Government Expenditure in Gujarat. Thus there is causal relationship between State Gross Domestic Product in Gujarat and Government Expenditure in Gujarat State. Thus, State Gross Domestic Product is an important determinant of Government Expenditure in Gujarat State. This analysis supports our Hypothesis stated in the paper.

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