SJIF Impact Factor: 7.001| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 5 | Issue: 10 | October 2020 - Peer Reviewed Journal

TREND ANALYSIS OF EXPENDITURE PATTERN OF GOVERNMENT OF INDIA DURING PRE AND POST ECONOMIC REFORMS

Kumari Youkta[1]

[1] *Research Scholar, Department of Humanities and Social Sciences, Indian Institute of Technology, Patna, Bihar, India.*

Shreya Nupur[2]

[2] *Research Scholar, Department of Humanities and Social Sciences, Indian Institute of Technology Patna, Bihar, India.*

Article DOI: https://doi.org/10.36713/epra4483

1. INTRODUCTION

For the fiscal system of every federal nation public expenditure is an important tool. The growth process is very much dependent on the pattern and extent of public spending, it also helps in reducing economic disparities. Till 1920s study of public expenditure was neglected. It was general belief that public expenditure is waste. This belief got strengthened by classical economists especially by Adam Smith, 1776 who opined that activities of government should be restricted to Police, defense and justice (Zahir, 1972). Recardo also viewed public spending as wasteful. John Stuart Mill had less extreme but similar views as classists. Lutz in 1936 favored public expenditure as it is the direct medium for addition in community wealth. Keynes, a revolutionary economist opined that public expenditure is an important policy tool to stimulate the economy. R. A. Musgrave also favored public expenditure by saying that it has capacity to correct market distortions, provision of public good and regulatory activities etc. The increasing participation of government in economic functioning has highlighted the superiority of public spending over other fiscal instruments. In any economy public expenditure has its wide impact not only on consumption but also on production and distribution. Public expenditure has potential to stimulate and stabilize the economy. It promotes positive externality to society as well as economy (Piana, 2001). Public expenditure is an effective tool not only for developed economies but also for underdeveloped economies across the world. On the one hand it helps developed nations to achieve stabilization by preventing frequent cyclical fluctuations on the other hand it supports underdeveloped nations by promoting economic development and equity in income distribution. India is also not far behind in employing its benefits.

2. ROLE OF GOVERNMENT IN INDIA: A HISTORICAL PERSPECTIVE

In India government's economic role changes with changing economic conditions and are dependent on ruling party's political, social and economic ideologies. If we look back to Indian history after independence, during first three decades state had the sole authority to in socio-economic affairs. During 1950s and 1960s India adopted and propagated democratic socialist pattern of society. The concept of five year plan evolved for achieving economic development. Just after independence market entrepreneurs were weak in India. This is the reason why government took the whole responsibility of investing in key areas. Inward looking policy were adopted on the basis of import substitution. Later on after 1980s ideology took a shift. Scholars and public administrators started criticizing 'statist' model. They argued that for faster development of developing nations it is necessary to relax the control of government on economic activities. India started implementing economic reform measures from mid 1980s and later on in the year 1991 liberalization

SJIF Impact Factor: 7.001| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 5 | Issue: 10 | October 2020 - Peer Reviewed Journal

reached at its full scale. Liberalization, privatization and globalization was the main motto of this reform. Initially these reforms were focusing more upon deli censing of industries and liberalization of trade but later on it got extended to reforms in financial sector and taxation. If we look back to two decades after the reforms we will find remarkable changes in Indian economy. These changes were positive or negative is a matter of enquiry. The structural adjustment which took place during this period affected the economy as a whole remarkably. With this motivation this paper has tried to examine the trend of government spending in India during pre and post reforms so that we can better analyze its desirability and wise decisions can be taken in future.

3. BACKGROUND LITERATURE

Several studies have been done previously dealing with pattern of expenditure by Government of India that are a rich source of input for this paper. A study by Joseph suggest that although an increase in development expenditure was expected but declining trend was found in it. No any substantial change was observed in spending pattern of government of India post 1991. After 2001 expenditure on education witnessed a hike but the actual amount spent was still less than the desired or required (Tasleem Araf C, 2016). Government expenditure in India has doubled between the years 1990-91 to 2003-04 (Anuradha De, 2008). Mooji and Dev, 2004 has found increasing trend in social development expenditure during reform era. Joseph and Prarthna, 2015 found that revenue expenditure was increasing, 1991 onwards and suggests that government should focus upon increasing capital expenditure because spending on capital account will help to increase growth and ensure overall economic development. Most of the works are concerned towards studying the government expenditure but their concern is specific towards education and health sector only. Scholars have shown their interest also on problems which arises due to heavy expenditure or budget deficits. Nexus between government expenditure and economic growth has also been studied by most of the researchers worldwide. There is no doubt in it that economic reform was a major breakthrough in the Indian economy. It had its wide range of impact over several sectors of economy. But in literature trend of all the different types of expenditure like revenue and capital and developmental and non-developmental expenditure during pre and post reform has not been dealt in a comprehensive manner. In this backdrop this study has tried to examine the trend of expenditure pattern of Indian government in a comprehensive way.

4. OBJECTIVE

This study aims to compare the expenditure pattern of government of India during pre and post economic reforms.

5. HYPOTHESIS

There is no difference in expenditure by the government during pre and post reform period.

6. DATA AND METHODOLOGY

6.1 Data

This study is based on secondary data and covers a period from 1970-71 to 2016-17. The data is available in Handbook of statistics, a yearly publication of Reserve Bank of India. The study has been undertaken for the period 1970-2016 so as to analyze the change in expenditure pre and post economic reform (1991) more accurately as 22 observation we have of before the reform and 25 observations of after reform. Variables used in the study are total expenditure, revenue expenditure, capital expenditure, developmental expenditure and non-developmental expenditure.

6.2 Methodology

The econometric model used in the study is
$Ln(Y) = \alpha+\beta t+\mu$

It is a semi log model because only dependent variable appears in logarithmic form. It is also called log-lin model. Here in the model Y denotes the expenditure (revenue, capital, developmental, non-developmental and total) and t denotes time. Ln is the natural logarithm. Here log of dependent variable is taken because it covers exponential trend to linear trends by nullifying the effect of fluctuations. It simultaneously converts the proportional variance to constant variance. β is the relative change in dependent variable to the absolute change in independent variables. On multiplying β by 100 it will give the percentage change or growth rate in Y or government expenditure for an absolute change in t or time. First of all overall data on time is split into two parts: Pre reform period i.e. 1970 to 1991 and Post reform period i.e. 1991 to 2016. Then all the data on expenditure are regressed thrice times, first time over overall time period (1970 to 1991), then over pre reform period (1970 to 1991) and lastly over post reform period (1991 to 2016) respectively. In this way from each data on expenditure three regression equation will be formed as they are regressed over three time periods individually. The slope coefficient from each regression equation gives the average annual growth rate in expenditure during that time period, when multiplied by hundred. To analyze the basic features of total expenditure in overall time period descriptive statistic is used.

SJIF Impact Factor: 7.001| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 5 | Issue: 10 | October 2020 - Peer Reviewed Journal

7. RESULTS AND DISCUSSION

Simple regression analysis has been applied to determine the contribution of explanatory variable time, on dependent variable. Here all the dependent variable i.e. total expenditure, revenue expenditure, capital expenditure, developmental expenditure and non-developmental expenditure are regressed over time interval 1970 to 1991 (pre reform period), 1991 to 2016 (post reform period) and 1970 to 2016 (overall time period). The summarized result of regression analysis is shown in Table 1. This table gives the values of slope and intercept of all the variables (total expenditure, revenue expenditure, capital expenditure, developmental expenditure and non-developmental expenditure). It also gives the t-statistic and p-value. The intercept is the expected mean value of dependent variable (expenditure) when independent variable is zero. The slope coefficient tells about the amount of change in dependent variable that can be expected to result from a unit change in independent variable. In the present study if intercept is multiplied by hundred it will give the average annual growth in expenditures. t-statistic is the ratio of the departure of the estimated value of a parameter from its hypothesized value to its standard error. p-value for each independent variable tests the null hypothesis that the variable has no correlation with the dependent variable.

Table 1 Regression Results for overall time period (1970-2016)

Variables	Constant	Slope	t-statistic	p-value
Total Expenditure	3.892964	0.13456	131.951	6.71E-60
Revenue Expenditure	3.509261	0.139242	121.505	2.72E-58
Capital Expenditure	2.769406	0.121736	76.0252	3.57E-49
Developmental Expenditure	3.475336	0.133824	86.7166	9.97E-52
Non-Developmental Expenditure	2.351243	0.143938	85.4299	1.95E-51

It is clearly shown from the t-statistic and p-value that the slope and intercept coefficient are significant as the resultant p-values are smaller than 0.05. Also the intercept coefficients when multiplied by hundred will produce the required average annual growth rate.

Table no. 2 drawn below explains the nature, trend and dynamics of the dependent variable using descriptive statistics. Table shows that in terms of average expenditure total expenditure is at the top and developmental expenditure at the bottom in terms of mean expenditure. The standard deviation which indicates about the degree of variability or fluctuation in the series is the highest of total expenditure which shows that during the entire time period 1970 to 2016, it is the total expenditure which is continuously varying. Capital expenditure with least value of standard deviation is the least varying and highly stable variable during the entire period.

SJIF Impact Factor: 7.001| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 5 | Issue: 10 | October 2020 - Peer Reviewed Journal

Table 2 Descriptive Statistics

Descriptive Statistics	Total Expenditure	Revenue Expenditure	Capital Expenditure	Development Expenditure	Non-development Expenditure
Mean	4567.58	3628.31	956.29	2915.44	1342.19
Standard Error	1002.49	794.13	208.39	659.43	279.75
Median	1193.35	1088.68	249.82	887.91	378.59
Standard Deviation	6872.72	5444.27	1428.69	4520.87	1917.88
Variance	47234273	29640153	2041154	20438264	3678284
Kurtosis	3.74	3.65	4.17	4.54	2.66
Skewness	2.03	2.02	2.07	2.19	1.79
Range	28216.29	22331.45	5884.85	18880.92	7726.58
Confidence Level	2017.91	1598.5	419.48	1327.37	563.11

Now final table, Table 3 shows the crux of the whole study. It shows the trend of average annual growth of all the variables namely total, revenue, capital, developmental and non-developmental expenditure in the pre reform, post reform and over all time period. From the table we can see that all the expenditure except capital expenditure have a downward shift in the post reform period. Total expenditure registered a fall from 14.37% to 13.17%, revenue expenditure fell from 15.23% to 12.67%, developmental expenditure fell from 15.68%to 12.93% and non-developmental expenditure also fell to 14.10% from 12.46% only capital expenditure registered a rise from 12.08% to 13.65%.

Table 3 Average annual growth rates for overall time period (1970 to 2016)

		Average annual growth rate (in %)		
Variable	Pre Reform (1970 to 1991)	Post Reform (1991 to 2016)	Overall (1970 to 2016)	Direction
Total Expenditure	14.37	13.17	13.45	Downward shift
Revenue Expenditure	15.23	12.67	13.92	Downward Shift
Capital Expenditure	12.08	13.65	12.17	Upward Shift
Development Expenditure	15.68	12.93	13.38	Downward Shift
Non-development Expenditure	14.10	12.46	14.39	Downward Shift

8. CONCLUSION

After performing all the above empirical and theoretical analysis it can now be concluded that really there are no any empirical evidences of rise in expenditure of the state in post reform period. It is valid theoretically also. At the time of reforms position of Indian economy was deplorable. Very high fiscal deficits along with heavy debt burden pressurized the then government to adopt economic reforms. Reforms took place in industrial policies, trade policies, fiscal and taxation policies. Government started implementing disinvestment policies so as to encourage private investment. The reliance on market economy was increasing and side by side role of state was shrinking. Thus in this way the root cause of decreasing government expenses in post reform era is the growing private sector and heavy debt and fiscal burden. Due to huge fiscal burden government started to curb its expenditure by removing or reducing subsidies, allowances etc. This led to the reduction of revenue expenditure. Government also started curtailing its expenses on health and education like social sector requirements. Only capital expenditure was rising because for encouraging private investment a strong infrastructural base was a precondition, thus government had no option than to invest in it.

REFERENCES

1. *Zahir, M. (1972). Public expenditure and income distribution in India. Economic and Political Weekly. Vol.9, Issue no. 4.*
2. *Piana, V. (2001). Public expenditure. India: www. economicwebinstitute. org.*
3. *De, A., & Endow, T. (2008). Public expenditure on education in India: Recent trends and outcomes.*
4. *Mooji, J, and S.M. Dev (2004) "Social Sector Priorities: An analysis of Budgets and Expenditures in India in the 1990s" Development Policy Review" vol. 22, no.1, pp. 97-120.*
5. *Joseph, P. S., & Prarthna, P.(2015). Trend of Development and Non-development Expenditures in the Pre-reform and Reform Periods. St. Joseph's College (Autonomous).*
6. *Tasleem Araf, C. (2016). Trends, Growth and Changing Patterns of Public Expenditure on Education in India. Journal of Global Economics, 4(4).*
7. *The Reserve Bank of India, Handbook of Statistics on Indian Economy, 2016. Available at https://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20Economy*
8. *Government of India, Union Budget. Available at https://www.indiabudget.gov.in/.*