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Introduction

1.1. Introduction

Public expenditure is an important instrument of fiscal policy. The goal of the public spending is the allocation of scarce means and maximization of welfare. With the passage of time, there has been an increasing trend in public expenditure in developing and developed countries. After World War II, the ratio of public expenditure to GDP has significantly increased in India as in the case of other countries in the world. There exist divergent viewpoints and standpoints on the role of government and its engagement in economic activities. The classical economist proposed little or no government intervention in economic activities of a nation or the role of the state was suggested to be confined to maintenance of law and order situation. According to Classical School of thought (Smith 1776, Ricardo, 1821) increase in the government expenditure would negatively influence the role of private capital. Disagreement with the Classical school on state’s initiatives in the economic sphere is that increase in taxation is a disincentive to private capital and deficit financing either through tax or other means would reduce the competition among capitalists in the economy. More or less the same was proposed by the predecessors of classical economists, viz., Physiocrats in France or Mercantilist School in England.

The question of public expenditure has assumed immense importance in the recent past in India particularly after the introduction of economic reforms in 1991. It has been declared as the avowed policy of every
government to curtail deficit financing as it spirals inflation and deflates real earning of the capital of domestic as well as foreign. As deficit financing eventually leads to inflation and erosion of real income, the national government is caught between the situation of reducing inflation on the one side and financing expenditure on the other, through borrowing. The increase in public expenditure is also possible through hikes in direct as well as indirect taxes which would dissuade private capital from the investment.

In the 19th century Adolf Wagner (1835-1917), a German political economist, propounded, “increasing state activities” this is also known as Wagner’s law or Wagner Hypothesis of public expenditure. According to the Wagner Hypothesis, there is a positive relationship between economic growth and public expenditure or in other words, the causality runs from economic growth to government spending. On the contrary, Keynesian School of thought (1936) emphasized the role of government in the economy, especially in the period of economic depression, to supplement effective demand in the crisis or resolve the crisis emerging out of under-consumption or over production. The government has the political, social and economic responsibility of balancing the economy. Although Keynesian view on public expenditure gained wider currency over the standpoints of classical political economists with respect to the role of the state in the economic activities, Keynes has left unanswered the question of why there is periodical slow down in the economy or why does business cycle occur?

The neo-classical economists advanced more or less the same proposition as classical economists on the role of government in the economic sphere. One of the major proponents of the neo-classical school of thoughts, Robert Solow argued that economic growth and public spending were not significantly related to each other in the long-run. According to him, technological change and rate of growth in population determined the
performance of the economy. Romar (1986), Lucas (1988), Barro (1990) and Rebelo (1991) supported the growth model proposed by Solow. Barro (1990) upheld the view that the government expenditure should focus on productive sector, which would stimulate economic growth through expenditure on the productive sector. In short, growth in expenditure in the non-productive sector or on welfare measure would leave adverse consequences on its growth performance of any economy. To a certain, the viewpoint is rooted in Malthusian population theory which stated that increase in wages or income with the laboring poor make them lazy and cause a higher rate of growth in population. However, endogenous growth theory of Solow and other neoclassical economists supported government spending on education, infrastructure, research, and development, which would generate positive externalities and add onto growth stimulants. In the parlance of government in the present era, such standpoints tantamount to the view that capital expenditure is preferred to current expenditure by the state. To a certain extent, it is a positive deviation from the avowed position of classical economists on the role of the state in the economy. In modern times, the vital idea regarding the principals of public expenditure is that the government should spend more to accelerate the economic development of the country. In developing countries, governments do increasingly resort to stimulate economic growth and it has resulted in an enormous increase in public expenditure. The theory of state functions has also undergone a total change from a police state to that of the welfare state which has led to an expansion in state activity. Thus, the modern theory of public expenditure under democratic paradigm makes it clear that no economy can function effectively without accepting the importance of the role of public expenditure and spending on the welfare of its people, particularly for the socially and economically vulnerable sections.
The level of public expenditure influences tax buoyancy and as well as government revenue. If the government has resources in dispossession to spend, the level of government expenditure will be augmented and vice versa. According to Franklin Roosevelt\(^1\), the government would spend a little more than the revenue of the government like any family but the continuous tendency of spending more than the revenue may not be appropriate for the economy (Amoah & Loloh, 2008)\(^2\). In the literature, there are four hypotheses on the causal relation between government expenditure and revenue. According to the first hypothesis, public revenue causes public expenditure (Friedman, 1982). Buchanan and Wagner (1978) forwarded an alternative explanation for the tax and spend hypothesis and stated that the taxpayer is under a fiscal illusion and the cut in the tax rates would bring down the price of goods and services, which would, in turn, drive up the effective demand in the economy. The second hypothesis is related to the association between tax and expenditure. It is known as the spend-tax hypothesis (Peacock and Wiseman, 1961, 1979). Government spending leads to tax revenue of the government. Barro (1974, 1979, and 1986) stated in his tax smoothing hypothesis that the government spending is an exogenous variable, and it increases the tax revenue of the government.

The fiscal synchronization hypothesis (Meltzer and Richard, 1981; Musgrave, 1966) states that tax revenue and government expenditure are dependent on each other and there is bidirectional causality between both. The fiscal neutrality hypothesis, on the contrary, proposes that government revenue and expenditure decision are independent to each other (institutional

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1Franklin Roosevelt was the president of the United States of America between 1933 and 1945.

separation hypothesis) and it’s the long run economic growth, which determines the level of public expenditure and rate of taxes in the economy (Baghestani and McNown, 1994).

In the above context different economic experts give different reasons for enhancement of public expenditure in an economy. According to Hicks (1995), “Rapid expansion of public sector is now universal phenomenon”. Adolf Wagner (1958) has established a functional relationship between industrialization and relative importance of public sector activities. Expansion of public expenditure is in proportion to the growth of the gross national product. This is due to the fact that the government has to perform a number of functions more efficiently which has led to an intensive growth in public activities thereby increasing public expenditure. Williamson (1961) pointed out that

“One of the characteristics of economic development and the course of industrialization is urban movement and with it disappears the informal security of the family in the village. The Urban population must supply with the formal social security, unemployment insurance, and formal community protection to replace the family and village functions” (Williamson 1961: Page No. 47).

Although Williamson does not directly state about the importance of government intervention in the modern world, his assertion provides the pointer to the fact that rapid industrialization and urbanization warrant augmented role of the government manifested in terms of its spending. Wagner’s has forwarded three main reasons for the increase in the government’s spending. First, industrialization and modernization lead to the replacement of private sector with the public sector. Second, an increase in real income would lead to an expansion of income elastic “cultural and welfare” expenditures. Wagner cited education and culture to be two areas in which the
government could be a better provider than the private sector. Thus, the public sector would grow in tune with the basic needs of the people and the expenditure pattern of people widens with the expansion of education and other culture needs of the society. Third, natural monopolies such as railroads have to be taken over by the government because private companies would not deliver efficiently the desired outcome. It is on account of the fact that the private capital would not be in a position to raise required finance for the development of natural monopolies. The importance of public expenditure and reasons for increasing public expenditure stated above reveal that over a period of time, public expenditure in an economy is bound to increase.

1.2. Public Expenditure in India and Rajasthan: A Brief overview

India is one of the fastest growing economies in the world during the last two decades with the seventh rank in the world by nominal GDP ($2.308 trillion, April 2015) and third rank by purchasing power parity ($7.996 trillion) (WEO,2014). The annual growth of Indian economy is 6.9 percent in the fiscal year 2013-14 and 7.2 percent in 2014-15 and the economy is expected to grow by 7.5 percent in 2015-16 (GOI, 2015). India’s per capita income (nominal) was $1570 in 2013 and India ranked 120 out of 164 countries in 2014. The per capita income based on purchasing power parity was US$ 5350 with 106th rank in the world economies in the same year. In rupees term, the per capita income (Rs. 74292) growth was 10.4 percent in 2013-14. However, there exists significant regional disparity in per capita income and economic performance and its level (Datta, Ruddar, and Sundharam, 1997). In terms of per capita Net State Domestic Product (NSDP), Rajasthan ranked 7th (Rs 60844) among Indian states in 2013-14.

3 World Economic Outlook, 2014.


The per capita NSDP of Rajasthan is 12 percent less than the national average in the reference year.

It is a fact that the public expenditure of the government of India has substantially increased in the post-independence period as compared to her previous regime or pre-independence period (Appendix Table 1 and Appendix Figure 1). The government expenditure as a percentage of GDP was 27.2 percent in India in 2013. Relatively, government expenditure in India is on a higher side as compared to its immediate neighboring countries such as China (23.9%), Bangladesh (16%) while India spends less as compared to Russia (35.8%) and South Africa (32.1%) in 2013. Public expenditure in India has been increasing in absolute as well as in terms of per capita as the percentage of GNP. Public expenditure in India rose from 9.1% of GNP in 1950-51 to 26.7 percent in 2008-09 (GoI, 2009). However, the share of the revenue expenditure of the total expenditure of the Government of India has increased from 65.41 percent in 1950-51 to 83.41 percent in 2007-08. On the other side, the share of the capital expenditure to total expenditure has decreased from 34.59 percent during the same period (Verma and Arora 2010). In the 1980s, the development expenditure was 57.46 percent of total expenditure and 8.9 percent of GDP. The observed hike in development expenditure was on account of added emphasis on the development of infrastructures such as electrification, irrigation, and communication in the country. After the introduction of economic reforms in 1991, the development expenditure has been under stress and curtailed whereas the non-development expenditure as the percentage of total expenditure has increased from 6.59 percent in 1980-81, 57.94 in 1999-2000. In the 2008-09, Indian economy was facing an uncertain

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6 Ministry of Finance, Government of India.
macroeconomic environment (Chakaraborty, Bhadra, 2010). In this period central and state governments had increased their expenditures to tackle with the economic crisis of 2008 (Chakaraborty, Bhadra, 2010).

To maintain the fiscal balance, the state governments depend on the fiscal policy of the central government and the distribution of financial resources between the states and central government as per the Government of India act, 1935. The aim of the state government is to strike a balance between government expenditure and revenue, as there are well-defined constraints for the state government to raise resources beyond its purview of tax and non-tax revenue. The performance of state governments in terms of rate of growth in the State Domestic Product assumes importance and implications in that context. In the 2008-09 Indian economy was facing an uncertain macroeconomic environment (Chakaraborty, Bhadra, 2010). In this period central and state governments had increased their expenditures to tackle with the economic crisis of 2008 (Chakaraborty, Bhadra, 2010).

There are wide disparities in the revenue and expenditures across states in India. Some states enjoy a larger share of expenditure from central government while others have the relatively small share of the central fund. The regional difference in the devolution of the fund from the central to the state is primarily dependent on changes in devolution parameters over the years. For instance, 13th Finance Commission of India (FC) had adopted six parameters to devolve funds to local governments in the state in addition to Special Area Grant for certain states in India while the 14th FC has reduced the devolution parameters to population (90%) and geographical area (10%). The change in the devolution parameters has adversely affected Rajasthan, which has a sizable population of SC and STs.

Rajasthan is one of the largest states occupying 10.41 percent of the total geographical area and 5.61 percent of the population in India. Rajasthan is
predominantly an agricultural economy with 62% of the population engaged in agriculture and allied activities. Rajasthan is a water deficient state with only 1.07 percent of total water resource in the country. The Industrial sector contributed 28.54 percent while the contribution of agriculture was 20.27 percent in the NSDP of the state economy of Rajasthan in 2013-14. The share of service sector in NSDP was 51.19 percent in 2013-14. In the fiscal management, the government of Rajasthan is not significantly different from many other states in India. Notwithstanding a mismatch between government revenue and expenditure, for the last three years, the state has managed to bring down its fiscal deficit well below the target of 3.0 of NSDP as stipulated in the Fiscal Responsibility and Budgetary Management Act (FRBM Act) of 2005. The fiscal deficit of the state economy has been brought down to 1.3 percent of the NSDP in 2012-13. However, it has to be admitted that reduction in fiscal deficit well below the target of FRBM Act considerably curtail space for fiscal maneuverability of the state especially in a time of crisis, which occurs rather intermittently particularly after the introduction of market integration in 1991. To a great extent, adherence to the stipulations of FRBM Act undermines the role of the government in the sphere of economic activity and it traces its philosophical routings to Franklin Roosevelt, which in turn has its ideological bonding with classical as well as the neo-classical paradigm or free market economy (Baud,M 2004).

There are certain characteristics features of the fiscal management of the government of Rajasthan for the last half a decade. Important among the characteristics are; (i) relative share of wages and salaries in the total revenue receipt of the state has declined from 35 percent to 26.3 percent between 2008-09 and 2012-13; (ii) as percentage of revenue expenditure, share of wages and salaries accounted for 47.3 percent (with annual variations) in 2008-09 and the share has declined to 36.5 percent in 2012-13. It is primarily on account of the fact that wages and salaries increased at a much slower pace as compared to
revenue receipt of the state. It is partially attributable to the downsizing of the government. (iii) interest payment on past loans has also declined continuously from 18.6 percent to 12.5 percent and interest payment as percentage of revenue expenditure has declined from 18.2 percent to 13.1 percent between 2008-09 and 2012-13; (iv) fiscal liabilities of the government of Rajasthan as percentage of NSDP has also declined consecutively from 36.4 percent to 25.7 percent during the reference period; (v) Although the relative share of own tax revenue in the total receipt of the state government has remained almost stagnant, the share of state government in central taxes has registered a marginal decline from 27 percent to 25 percent between 2008-09 and 2012-13; (vi) In the total capital expenditure, relative share of loans and advances has substantially increased from 5.44 percent to 18.41 percent during the reference period implying that the interest payment is likely to escalate further leaving profound impact on revenue or current expenditure, which would, in a way, cripple the state government from investing in productive assets from revenue receipt in future; (vii) Relative share of capital expenditure has registered only a marginal increase from 15.39 percent to 17.10 percent during the period under reference here (Government of Rajasthan, 2014). It is not an appreciable trend in the context of the adherence of the state government to stick to the stipulations of FRBM Act of 2005.

In the analysis of public expenditure in Rajasthan, and the adherence to rigidly follow the stipulations of FRBM Act of 2005, following characteristics of the state economy has to be taken into account. Rajasthan state has some distinguishing features. The 60 percent area of the state is a desert area (Inhabited by 40 percent of the population) in which the cost to provide basic facilities such as education, drinking water, medical facilities, power supply etc. are relatively on a higher side as compared to non-desert districts or arid zone. The situation of the drought is common for Rajasthan state due to lack of
water resources. A large chunk of the state finance is being spent on providing relief operation in drought situations.

In the light of the changing economic environment in India and Rajasthan particularly after the introduction of economic reforms in India in 1991, the study broadly analyze the trend and pattern of government expenditure and the implications of its changing composition and structure over the years. There has been considerable debate on the issue of the relationship between government expenditure and economic growth. Although a large number of studies have undertaken in the recent past on different aspects of public expenditure, both nationally and internationally, yet not much is available on the state level particularly for Rajasthan state. The present study tries to fill this gap. The present study is an attempt to investigate the direction of causality between public expenditure and state income in Rajasthan, causality between tax revenue and public expenditure and various factors for the growth of public expenditure in Rajasthan state. More specifically, the study looks into the following objectives as given below.

1.3. Objectives of the Study

1. To analyze the structure, trend and pattern of government expenditure and revenue in Rajasthan for the period 1970-71 to 2013-14;

2. To analyze causal relationship between government expenditure and economic growth (NSDP) in the state of Rajasthan during the reference period of the study;

3. To test the validity of different theories of public expenditure and revenue in Rajasthan.
4. To compare the economic growth and performance of government expenditure and revenue in the Pre and Post Economic-Reform period in Rajasthan.

5. To identify major determinants of public expenditure of Rajasthan.

6. To suggest a public expenditure policy for the state of Rajasthan.

1.4. Scope and Significance of the Study

Public expenditure influences economic development and growth of an economy. Government spending is rather crucial in deciding the welfare of a region, particularly for the economically and socially vulnerable sections in the society. Moreover, public expenditure or government spending is a major catalyst force of leveling up economic inequality in a state as government expenditure is concentrated mostly on social goods like infrastructure development and welfare of the vulnerable sections of the society. Moreover, fiscal instruments, particularly tax policies have also become an important tool with the state for redistribution of income generated by the existing system of development in the country. There is, therefore, a direct relation between government expenditure and economic growth and vice versa. In this context, the present study will be confined to the state of Rajasthan for the period of 1970-71 to 2012-13. The choice of the period is influenced mostly by the availability of secondary data on different aspects of public expenditure in the state of Rajasthan and the broad objective of the study is limited to testing the existing and accepted theories on the association between economic growth and public expenditure. However, the study prefers to deviate from a deductive approach as the empirical analysis explores inductive explanations for the statistically valid relationship in the context of Rajasthan economy.
1.5. Plan of the Study

The study is presented in eight chapters. The first chapter introduces the topic and the problem is stated. The chapter also deals with an overview of the public expenditure and economic growth in Rajasthan in the broader context of the Indian economy. In the introduction chapter, objectives, scope and significance of the study have also been elaborated. In Chapter 2, a detailed and critical review of existing literature on different strands of thought in the area of public expenditure, taxation and their association with economic growth have been scientifically investigated. The gap in the literature is spotted to place the study in the vast pool of accumulated wisdom on the area of the research in hand followed by a theoretical framework for the analysis. In Chapter 3, methodology, data sources of the study, tools used for empirical analysis and method of research are explained. Chapter 4 gives a detailed account of a disaggregated analysis of trend, structure and pattern of government revenue and expenditure in Rajasthan (Objective-1). Empirical testing of different versions of theories of public expenditure and its interpretations with respect to economic growth and causality in government revenue and expenditure in Rajasthan during the study period (1970-71 to 2013-14) is presented in chapter 5 (Objective- 2 and 3 and Hypothesis-1, 2 and 3). The relationship between government expenditure and economic growth in the pre and post-economic reform phases are empirically tested and concluded in Chapter 6 (Objective-4 and Hypothesis -4). Major determinants of public expenditure in Rajasthan are discussed and empirically examined in Chapter 7 (Objective 5 and Hypothesis -5) and Chapter 8 concludes the analysis with the important findings and policy implication on public expenditure for the state of Rajasthan (Objective- 6) along with the future research scope and Limitations of the study.

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