

CHAPTER 1

INTRODUCTION

1.1. Background

Economic growth is referred as the steady course of action through which the productive and fruitful capacity of an economy is improved in due course of time to bring about increasing levels of national output and income (Todaro and Smith, 9th Ed 2005). The higher production level of a country helps to improve social welfare. However the value of education as one of the significant factors in economic growth has been accepted from a long period of time. It fulfills the requirement of both qualitative and quantitative labours in the process of development of a country. It helps to transfer the production process of a country by developing and following modern technology in the production process. Education plays an important role in the development of human capital. The enhancement in the status of education becomes as a medium of enhancement in the earnings of individual. Individuals' income increases because education helps to improve their skills and then their productivity. These improvements leads to decrease the unemployment risks on one hand and on the other hand it increases the employment opportunities and wage increments. Thus an individual brings himself out from the vicious circle of poverty and a country rolls on the path of prosperity.

Generally, education is a dynamic process. It changes with the changing of socio-political and economic conditions. The basic purpose of education is to secure such condition for every one under which individuality is most completely developed (Pathak, 2007). It is a

lifelong process which develops the natural capabilities of individual in a pleasant manner. It is a harmonious and progressive development of all the powers of human being like physical, intellectual and moral (Pestalozzi). It is a set of equipment for socio-economic mobility and a key instrument for building an equitable and just society. It helps to judge the values of the useful customs, traditions of the society. It also helps to judge the values of the removal of restrictions on caste basis, equality of women, doing away with social evils and unnecessary social traditions, participation in the governance and establishing democratic institutions. In this way it helps to strengthen the society and nation. In other words education is such a medium which removes the darkness of ignorance and leads towards the light of knowledge (Namita, 2012). A well educated population, equipped with the relevant knowledge, attitudes and skills which is essential for economic and social development in the twenty-first century. It plays a significant and remedial role to balance the socio-economic framework of the Country (MHRD, GOI, 2015). Identifying the importance of education in national development, it is essential to focus on the expansion of education, on significantly improving the quality of education provided and on ensuring that educational opportunities are available to all segments of the society.

To ensure the benefits of education for the society and nation, it is necessary to make education affordable for each one. Private cost is one of the major obstacles for education attainment. The resolution of private cost for education is only possible by suitable public funding for education. Thus public expenditure on education becomes important for educational led growth.

1.2 Education and Economic Growth

Education is a consumer good as well as capital good. It is so because education gives utility to individuals and it is used as an inputs for other goods and services. In terms of capital good education is used to develop the human resources essential for economic development and social transformation. Education is linked with the concept of human capital which states that production has a great need of skilled labour because skilled labour is an important factor for production process (D.A.Olaniyan and T.Okemakinde, 2008). A skilled labour is used to be in such a position to increase his/ her income in compare to those who are unskilled labours in economy. Mincer (1974) revealed that the individual earning is a function of years of education and other factors like age and experiences. His study found that an extra year of schooling has increased the earnings of an individual by about 7 per cent. However earnings appear to be an increasing linear and decreasing quadratic function of years of work. When the allowances are made for this the returns to the years of schooling is increased up to 10.1 per cent.

The returns to education depend on various factors like country, types of education (primary, secondary and tertiary). In an international survey done by Pschropoulos (1994) it is found that return to primary education is ranging from 42 per cent per annum in Botswana to only 3.3 per cent per annum in former Yugoslavia and 2 per cent per annum in Yemen. The largest return on secondary education was 47.6 per cent per annum in Zimbabwe and 2.3 per cent per annum in former Yugoslavia. In tertiary education the range was narrower it was between -4.3 per cent per annum in Zimbabwe and 24 per cent

in Yemen. However it is found that income of individual decreases with income of country concern, it may be caused due to abundance of educated labour.

1.2.1 Education and Economic Growth: Global Perspective

It is acknowledged by various scholars that education expenditure makes the shape of prosperity in an economy. However the empirical studies have provided the different results regarding the association between education expenditure and economic growth in developed and developing countries. In 1990, Lucas estimated the importance of human capital in economic growth. He accepted that human capital is a driving force in an economy to attract other factors of production. Although the importance of education expenditure on economic growth has been accepted by number of researchers in the world but it is also accepted that the relation between the both of the variables differs from region to region. In the case of developed and developing nations the studies have given different results. In the case of developed nations almost all of the studies have given similar results. They have shown that there is positive relationship between education expenditure and economic growth. Krueger and Lindahl (2000) found that in developed countries like United States, expenditure on education has played a significant role to raise the earnings.

Developing countries are struggling to compete the developed nations and they feel that there is a great need of improvement in production for that purpose of development there is a greater need for technician, professionals and administrative personals to gear up the production process. Several researchers have accepted the importance of education expenditure to enrich human capital which leads to rise earnings of individuals as well as a country. In developing nations researchers have found that education expenditure has

significance role for economic development. Relationship between education expenditure and economic growth varies according to particular country. Some study supports the positive relationship while some study supports for the negative relationship. In the case of countries like Pakistan, Uganda and Turkey researchers have found in their studies that education plays an important role for economic development. They have found positive relationship between variables (Aqil, 2014, Reza and Valeecha, 2012, Mercan, 2013, Musila, 2004).

But in the case of China and India, it was found that there is opposite and uni-directional relationship between the variables. (Kaur, 2014).

1.2.2 Education and Economic Growth in India

It is widely acknowledged that investment in education sector plays a crucial role in economic growth and social transformation. The increasing faith in education as an agent of change has encouraged for investment in both developed and developing nations. Researchers have given diverse views regarding education expenditure and economic growth in Indian economy. Some researchers found positive relationship between education expenditure and economic growth while some other has denied it. More over some study says that there is bidirectional relationship between the variables. Pradhan (2009) and Gangal & Gupta (2013) empirically studied and found that in India education expenditure is positively related to economic growth. There is existence of unidirectional relationship between the variables and direction goes from former to later. While Tamang (2011) analysed the data set of 1980 to 2008 and found that education expenditure per labour is less effective to raise economic growth in compare to physical capital per labour. Investment in education has been accepted as a key factor of production and rise

in income. But for economic growth some other factors are also necessary. Ghosh (2011) studied and found that in spite of education expenditure per labour some other factors such as institutional structures, openness in policies and labour market are also necessary for economic growth.

In the Indian perspective the data presented in the various reports of government claims the increasing trends of GDP from the period of liberalization. Almost the similar increasing trends are also found in the data of expenditures on education. In the initial period of 1990-91 the GDP was recorded ₹1347889 crore which came at ₹ 2348481 crore in the year 2000-01 with rise of 74.23 percent. On the other hand expenditure on education reveals that it was ₹19615.85 crore in year 1990-91 and increases to ₹ 82486.43 in year 2000-01. It was the increasement of 320.59 per cent (Appendix 1). This rise in education expenditure and GDP during these years tell the long run association between the both.

The education expenditure became ₹84939.49 crore in year 2012-13 from ₹79865.71 crore in 2001-02. On the other hand the GDP came to ₹5482111 crore in 2012-13 from ₹79865.71 crore in year 2001-02 (Appendix 1). These data reveals that there is sharp increase in education expenditure.

1.3 Statement of the Research Problem

Several studies related to education expenditure and economic growth has presented contradictory results. Most of the empirical studies have supported the endogenous growth model which underlines that public policy is instrumental to improve the economic growth of a country. In early stages of the study various scholars like Solow

1956, Romer 1986, Lucas 1988, have talked about economic growth and they have accepted in their studies that technological change is an essential factor for economic growth. However they were in favour of human capital as an agent of economic growth. Generally most of the studies (Judson, 1998, Basir, Cooray, 2009, 2012, Husain, 2012) have accepted education as a significant factor of economic growth. There are a few studies which have analysed the impact of sectoral expenditure on economic growth in a country. Bose (2007) found that education expenditure and investment in education are significantly correlated with economic growth rather than other factors like defence, health, agriculture, transportation and communication. Attainment of education has different stages such as elementary education, secondary education and university education. There are a few studies (Melina, 2013) which have analysed the impact of different stages of education attainment on economic growth. But there is hardly availability of studies which have analysed the impact of expenditure at different stages of education and their impact on economic growth. Some study like Idrees (2013) has found that impact of education expenditure is more in developing nation in compare to developed nation. Several studies has depicted the association of Economic growth with education expenditure in India. However there are contradiction among the researchers regarding the direction of causality between the regressors and regressand. These nexus of education expenditure and economic growth prompted to analyse the causal relationship between the GDP and education expenditure. The existence of sectoral components of education expenditure also inspired me to examine the causal association among the variables.

1.4 Objective of the Study

The education expenditure and economic growth has a vast dimension. It has various aspects on which research is possible. In this study concise objectives have been identified that will enable to examine the relationship of these variables.

- To study the recent trends and pattern of education expenditure and GDP growth in India.
- To investigate the causal relationship between education expenditure and economic growth in India.

1.5 Significance of the Study

There is useful forecasting provided by growth models that support at the time of policy decision. At the time of econometric analysis misspecification in econometric model leads to bias co-efficient estimates which becomes the reason of misleading policy recommendations. The adoption of policy derived from inaccurate econometric model presents inefficient government involvement in education sector. The results of this study will help to form a suitable policy for the enhancement of sufficient supply of education in economy. It will help to make such a mechanism that will helpful for policy formation for the sake of quality education.

The results of this study will serve as a guide for policy makers in ministries of finance, Ministry of Human Resource Development (MHRD). It will be the guide for those policies which will eradicate the hurdle in the path of supply of every tier of education. For the planning purpose this study will help to attract attention to deprived sector of

education to finance and for their quality education. Further this study will serve as a useful reference for future researchers in this field.

1.6 Definitions of Terms

In this study several terms have been used. These terms need to be defined. The definitions of terms are given as follow:

1.6.1 Education

According to Oxford Advanced Learners Dictionary Education is a process of teaching, training and learning especially in school or colleges, to improve knowledge and to develop skills. In English the term Education has been derived from two Latin words Educare (Educere) and Educatum. Educare means to train or to shape. Again it means to bring up, or to lead out or to draw out, motive from inward to out ward. The term Educatum denotes the act of teaching. It throws the light on principles and practices of teaching. This term mainly indicates the development of the latent faculties of the child. It is the teacher not a child who can take appropriate method to develop those powers. But it does not mean mere schooling or instructions imposed by the elders to younger. It is similar to the development of the characters or personality by means of the social life of educational institutions.

The term education has been defined in different ways by the scholars of the different literatures. In Hindi the word shiksha came from the Sanskrit word Shash which means to control or to discipline, to order, to rule, or to direct etc. In traditional sense the meaning of education is to discipline or to control the individual behavior.

The field of education is very vast and it has various aspects. By seeing one aspect one has defined but other has defined by seeing another aspects. Since the time of Plato to the modern times of John Dewey and Gandhi various educationists have defined it in the various ways. So, the specific definition of education is very difficult.

1.6.2 Elementary Education

Different nations have adopted different classification of education. In Indian classification Elementary education consists primary school education and upper primary school education. This education starts from zero standards to eight standards. In terms of age of students elementary education is considered up to age 13-14. However primary school education gives students a sound basic education in reading, writing and mathematics along with basic understandings of social sciences (Aggarwal and Thakur, 2003).

1.6.3 Secondary Education

It comprises four years of school education in which two years for lower secondary and two years for senior secondary. In terms of age of students in secondary education there is variation among states. In most of the state lower secondary starts at the age of fourteen and it ends at the age of seventeen. In secondary education students have to complete standard nine to standard twelfth. At senior secondary level a student has a choice for particular subjects/ vocations keeping his interest and requirements of boards. (Aggarwal and Thakur, 2003).

1.6.4 University Education

University and Higher education is also known as tertiary education in United Kingdom. It follows the completion of secondary education or its equivalent. It consists higher education and the more advanced parts of further education.

1.6.5 Education Expenditure

It is the expenditure on education by central government. There are various measures adopted for education expenditure in various studies such measures are education expenditure per worker (Mussila, 2004), public expenditure on education relative to the total public expenditure (Solaki, 2013), Education expenditure as percentage of Gross National Income (GNI) (Kaur et al, 2014), Ratio of Education expenditure to total public expenditure (Nunes, 2003), education expenditure as percentage of Gross Domestic Product (GDP) (Cooray, 2009).

In this study education expenditure has been taken at different level of education like elementary education, secondary education and higher education. For all these levels, education expenditure has been used in absolute term which is percentage of Gross Domestic Product (GDP).

1.6.6 Gross Domestic Product (GDP)

It refers to the market value of all final goods and services produced within an economy in a given period of time. It is of two types such as nominal GDP and Real GDP. Nominal GDP refers the value of goods and services measured at current prices while

Real GDP deals with the value of goods and services measured using a constant set of prices (Mankiw, 2009).

1.7 Organisation of the Study

This study is divided into six chapters. Following this first introductory chapter second is devoted to a review of literatures. This chapter consists theoretical as well as empirical literatures related to education expenditure and economic growth. Research methodology and collection of data is discussed in chapter three. In this chapter research design of the study and models have been included. Chapter four consists trends of education expenditure in India. Chapter five contains causality analysis of education expenditure and economic growth in India. Lastly, the chapter six is devoted for major findings, recommendations, limitations sand conclusion.

