



Education Development and Economic Growth in India

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Abstract: *This brief survey examines the returns to education in India , and then examines the role of education on both economic growth and economic development with particular reference to India. Throughout, the objective is to draw out the implications of the empirical results for education policy. The results suggest that female education is of particular importance in India. They also suggest that perhaps because of the externalities it generates, primary education is more important than might be deduced from its relatively low private rate of return.. The result of the study shows that expenditure on education is positively influencing the growth of the economy. But Expenditure on education as a percentage of aggregate expenditure is negatively influencing the economic growth in case of total states as a whole and Non special category states. However it is not showing significance for northeastern states.*

Key words: *education, economic growth, expenditure on education, north east state.*

Introduction:

The analysis of education as an economic commodity has a long history. The seminal work of Becker (1962) and Schultz(1962) presented a formal model of education as an investment good that augmented the stock of human capital. Individuals made educational choices in the same way as any other investment decision all of which have the common characteristic that an investment cost paid now produces a flow of benefits through time whose present discounted value is to be compared with the present cost. Following from this, there was an outpouring of econometric studies attempting to measure the rate of return to education – the so called Mincerian approach – whilst controlling for a plethora of other variables that might reasonably be expected to influence earnings. Extensions of this basic Human Capital model to study training outcomes, educational subsidies and fee charges have been recently exploited. Within development and growth economics, the importance of education as an economic variable also has a distinguished history beginning with Lewis(1962). Questions regarding appropriate mix

of skills, what type of education to be emphasised, the relationship between education and the capacity of the economy to absorb educated workers in productive employment have all been studied albeit outside the confines of a formal model. Recently, the resurgence of interest in endogenous growth – the so called New Growth Theory (Barro(1991), Barro and Sala-i-Martin (1995),Lucas (1998) has given a huge impetus to the formal analysis of the potential role of education in economic growth. However it must be emphasised that economic growth and economic development are not the same thing. Economic growth is one component albeit a very important one in the process of economic development. This important distinction is best illustrated by the creation (and widespread use) of the Human Development Index by UNDP. This index has acquired the status of the industry standard when discussing non GDP contributions to economic development. In India, perhaps more than in many developing countries, the non GDP dimension is of huge importance. The sheer scale and diversity means that the development process has had perforce to deal with issues of inequality and exclusion on a multidimensional scale. Most developing countries have had to emphasise reduction of poverty, gender discrimination ,infant mortality, literacy, child labour, income inequality etc as part of their development agenda. In India there are additional factors which impinge on and intersect the development process- caste and “untouchability”, religion, language, to name the most important. I shall structure this brief survey to follow the three main strands outlined above. First I shall examine the returns to education in India , and then examine the role of education on both economic growth and economic development with particular reference to India. Throughout, my objective is draw out the implications of the empirical results for education policy.

Globalization has not only increased completion in world economics but also with in and between the education systems. Policies and strategies that drive educational reforms have been adjusted to the new realities by creating structures in education systems that allow assessing comparing and rank ordering national and regional education performances. India is a low income developing country. There is no doubt that nearly one fourth of its population lives in conditions of misery. Poverty is not only acute but is also a chronic malady in India.

Rates of Return to Education in India:

The recent study by Dutta (2006) using the Indian National survey data found that for adult males the pattern of rates of education is not dissimilar to that found elsewhere. The returns

were significantly different for casual workers and regular workers. The latter had the usual inverted U shaped curve with respect to education levels whilst for casual workers the returns were flat. There was also some evidence that for regular workers graduates were pulling away from primary educated in the period of the 1990s. The author suggests (without much evidence) that this might be because of trade liberalisation. Worthwhile though such studies are, it must be borne in mind that the entire Human Capital approach is based on competitive access to credit markets in order to finance education. If education is rationed so that those from low income families are excluded from the education process, then the estimates of rate of return can at best be interpreted as conditional. In an important paper Tilak(2002) uses NCAER data on Human Development in rural India to demonstrate that household expenditure at least on primary education is not restricted to the upper socio economic classes. There does not appear to be strong evidence of financial constraints rationing access to education. At least at the primary level, this lends support to the rates of return to primary education being a good first approximation. In another recent study, Duraisamy and Duraisamy(2005) using NSSO survey found wide variations in rates of return across the various states. Nonetheless the inverted U pattern was found with returns to primary education being low (2 to 10%) compared to those who have secondary education (12 to 24%). Not surprisingly the returns to primary education were greatest in the less developed states where poverty is more manifest. In a parallel study Duraisamy(2002) found that that the return to women exceeded that for men. However, Kingdon and Unni(2001) show that this finding that women have higher rates of return to education has to be set against the fact that women tend to have lower levels of education due to discriminatory intra-family behaviour. They show that the positive effect from higher rates of return is effectively cancelled out by women's lower years of schooling, leaving other forces to play an explanatory role in accounting for lower wages for women. An important aspect of the role of education in development is the distinct possibility of "over-education". The studies cited above suggest that rates of return beyond secondary education are not very high. Why then is the post secondary educated sector exploding? Casual observation suggests very high levels of graduate unemployment and underemployment. This view is supported by Sharma et.al(2002) who note " the (relative) shrinking of the job market especially for educated workers" in recent years. This suggests a considerable amount of "disguised unemployment" amongst graduates which manifests itself as graduates doing jobs for which they are overqualified. Once again this could bias the rates of return to education as

has been shown in the UK context by Chatterji et al (2003). From a policy perspective, these rate of return studies do provide some useful information. The results highlight the need to consider education policy options that are contingent on current levels of development. One size fits all is not helpful. They also suggest that before policy is considered, the interaction between education and the labour market needs to be properly accounted for.

Economic Growth and Education:

The seminal paper by Lucas (1988, op.cit.) was central to understanding not only the relationship between education and growth but also why there might be a strong case for policy intervention to promote educational take up. Within the context of a “new growth” model, Lucas suggested that the productivity of any worker is higher when working in an environment peopled by other high productivity workers through a kind of learning by watching mechanism. It follows then that the growth path a region takes depends in part on the level of accumulated human capital at the start of the growth process. The Lucas model can also be used to justify educational subsidy because of the implicit positive externality arising from education. Cross country empirical studies most notably Barro (1991, op.cit) found that once other factors were controlled for, human capital did indeed have a positive influence on growth. Barro’s analysis was focussed on the positive impact on growth of fairly basic education variables – namely primary and secondary schooling. Using a similar methodology, Chatterji (1998) extended this to include tertiary education and found a similar positive result. Using Indian data from 1966 to 1996, Self and Grabowski(2004) used time series techniques to study the causal impact of primary, secondary, and tertiary education on Indian growth performance. The results confirmed the importance of primary education with weaker evidence for secondary education and no evidence that tertiary education has a beneficial impact on growth. The apparent irrelevance of tertiary education is of course entirely consistent with the graduate disguised unemployment hypothesis outlined above. But perhaps the most interesting finding of Self and Grabowski is the importance of female education (at all levels) in the growth process. This supports the results of Duraisamy (2002) that rates of return to education were higher for women. It should be noted that the period of the study ends before the trade liberalisation reforms started. In other words, the data come from a closed economy. It has been suggested by Jain(2004) relying on the work of Bhalla at the World Bank that education has significant gains only in an open economy which is able to fully leverage additional knowledge. It is tentatively

suggested that in the open era, that if India can raise the average level of schooling by two years, this will lead to a 0.15-0.2 percentage point permanent increase in GDP growth. In another pre-liberalisation study, Ansari and Singh(1997) use annual time series from 1951 to 1987 to study the relationship between public spending on education and growth. They find no long run relationship between the two, consistent with “the closed economy fails to leverage new knowledge” hypothesis. However, they do find a direct causal link from public spending on education to private capital formation, and hence indirectly onto growth. Similarly, in a study of the Indian states from 1970-94, Nagaraj et.al(2000) do find strong evidence of the role of primary education in generating growth and in educational disparities across the states in sustaining inter state inequality.

Economic Development and Education In the Indian context, economic growth cannot be seen as synonymous with economic development. For all but the most ardent believers in “trickledown”, economic growth will be seen at best as a necessary condition for economic development. It is certainly not sufficient. Once one considers the much broader perspectives of economic development, it becomes apparent that the role of education and education policy becomes (potentially at least) even greater. In India the set of issues which might reasonably be encompassed within the umbrella of economic development might include inequality and exclusion of all types (whether based on income, gender, caste, religion or region), health, fertility and infant mortality and child labour. In the broadest terms, the empirical research by economists suggests that in India, a very important factor impinging on these issues is women’s education. For example, Dreze and Murthi (2001), show that a major factor determining low fertility is high female education whilst general indicators of modernisation like urbanisation, poverty reduction, and male literacy have no such impact. The picture with respect to caste issues is less promising. Despite considerable government investment into the education of the “backward castes”, there is little evidence of economic benefit to these castes, partly because of the inability of the education to deliver superior jobs. This leads naturally to a “discouraged worker” effect and withdrawal of funds for educational purposes by such castes. In an important study, Jeffrey et al (2004) conclude that “Without a substantial redistribution in material assets within society, development initiatives focused on formal education are likely to be only partially successful in raising social standing and economic position of subordinate groups”.

Education – classification:

A need quality Education is today's need as it is the development of intellectual skills and knowledge which will equip learners to fulfill the needs of professionals, decision makers and trainers. The term education is a part of learning which in one sense or another, under the control of men, with the degree of control varying according to circumstances. Therefore the education can be divided into various kinds.

Formal Education:

It is that which is consciously and deliberately planned for the modification of behaviors, with a particular pre determined objectives in view.

Informal Education:

It is not pre-planned. It is quite incidental. This education starts from the very birth of child and continues till death. In short, it is that modification of behavior which comes about necessarily and spontaneously, without any conscious effort for it.

Milieu Education:

This kind of learning that takes place almost automatically, to walk on side walks; to eat certain food and to avoid others to live in houses. Milieu education is also known as social contagion. Education is not as single aim activity. Different aims represent different ways to looking at the same thing. Education aim is to be belongs to vocational, culture and happiness, moral and spiritual. In the past country, we progressed from a stage where the application of science to manufacturing techniques or to agricultural practices become the basis for production. Indian economic competitiveness is the key attribute of economic development and growth. In the knowledge based economics in the last two decades expectations of education, especially the qualities desired in educated and trained people have dramatically changed.

Indian Economy:

India is an under developed though a developing economy. Bulk of population lives in conditions of misery. Poverty is not only acute but also chronic. At the same time, there exist unutilized natural, resources. The co-existence of the vicious circle of poverty with the various circle of affluence perpetuates misery and foils all attempts at removal of poverty. It is in this context that an understanding of the major issues of development should be made.

Education system at Door step

The idea of education which expects an effective and far researching influence on the impressionable minds of youth should not be alien to the national genius and culture. A glance into the past reveals that never in history has any generation of people seen such radical change in the system of education, as vast, which has affected the life of our ages tremendously. The progress of any country lies on the literacy and education of its population as it gives the required discrete power to judge and rationalize the events on natural surroundings as well as in the social conditions. A good judgment towards these aspects prevails in the mind of the truly educated one. The purpose of education can not be just money making but truly man making. In the light of the above statement, the investigator would like to present the analysis on the four of the effectiveness and growth of the development of Indian Economic System.

Role and importance of Education:

Generally, at the start of a very young age, children learn to develop and use their mental, moral and physical powers, which they acquire through various types of education. Education is commonly referred to as the process of learning and obtaining knowledge at school, in a form of formal education. However the process of Education does not only start in a child first attends school. Education begins at home one does not only acquire knowledge from a teacher, one can learn and receive knowledge from a parent, family member and even as acquaintance. In almost all societies at any school and receiving an education is extremely vital and necessary if are wants to achieve success. However, unfortunately we have places in the world where not every one has an opportunity to receive this formula type of Education. Learning subjects in school is not enough one can learn history, maths, science in school, and the “book smart” in addition, one can learn how to live life by knowing what to say when, acting a certain way in certain situations and be “street-smart”. The above two types of knowledge are extremely essential to the successful in life. But no matter what, education is the key that allows people to more up in the world, seek better jobs, and ultimately succeed fully in life. Education is very important and to develop the Indian economy systems is very objectively.

Role of Education in the Economic growth:

The growth of the economy and development of a country is depending upon the education system of that particular country. A perfect and successful batch of youth of a country is come from education sector. Many foreign / abroad countries including India, China, Australia,

Newzeeland, Singapore and many other developing moves started to welcome more international students. As they bring different ideas, culture as well as foreign incomes in the form of fees structure, living expenses and other daily expenses. Where as those developed countries like UK, USA Canada and other developed European countries already open doors for international students and these countries are always emphasis on improving their education structure, developing more colleges and universities on country side areas and always in a way to update their course content on regular. India has also launched many types of different degree courses offered by various universities and colleges of India. But more as times goes on, Indian Education Development has very well improved and now started many programmes and degree courses at International of standard along with the implementation of grading system in middle school that brings relief to middle school students and make them motivated to work hard to complete with co-operate world. The story of education in India is a paradox. Twenty percent of Indian get a fairly decent education, and in a nation of 1.2 billion, this is huge number and helps to explain why India has become the back office of the world. Government schools have failed in India, and this is why one-third of Indians children attend private schools. The Government has implicitly recognized its failure and requires that a fourth of the seats in all private schools be reserved for the poor, whose fees are subsidized by the Government.

Trends in Enrolment:

The total enrolment in the education system (excluding distance education) has increased from 0.17 million in 1950-51 to 10.48 million in 2017-18. During the period 1950-51 and 2004-5, while total enrolment at higher education level has increased at an average annual growth rate of 8.04 percent, the growth rate in the total number of teachers has been 5.78 percent. Nearly 87 percent of students in the higher education system are enrolled in the affiliated colleges. In fact, more than 90 percent of graduate and 65 percent of post graduate students are enrolled in affiliated colleges. It is also revealing that only 0.65 percent of students in higher education institutions are engaged in research. It is a common practice that the priority accorded to education is gauged with the help on indicators like public allocation as a proportion of GNP and budget. It may be noted that India has committed to allocate 6 percent of GNP to education long ago. Issues of quality enhancement should become the priority to reap the benefits of internationalization of higher education. A pragmatic approach to enhance the equity and

access should be given due attention. The quality level of the public and private institutions should be published and brought to the notice of general public. Since the Indian system is very large, the University Grants Commission cannot monitor all the private institutions. The UGC can frame clear cut policy and ask the different states to institute a separate agency for the purpose as per the guidelines of the UGC.

Conclusion:

The consensus of the empirical literature appears to be that rates of return are indeed (inverted) U shaped being largest for secondary education. However, all rates of return to education are higher in those areas where development is low. One apparently contradictory finding is that rates of return to primary education are quite low, but nonetheless in growth regressions, it is the primary education variable that has the largest positive impact. This is suggestive of the possibility that primary education does have the Lucas type externality. The measured private rates of return are lower than the social rate of return. If this conjecture is correct – and it is testable using inter-state data – this has profound implications for public policy. There appears to be no similar effect for women where the higher private rates of return appear to already show up in higher growth rates from educating women. The risks of further expansion of higher education are also documented. Similarly, the policy of investing in educating “backward castes” without compensatory changes in labour market policy have been shown to be potentially counterproductive. Despite the fact that from a narrow income perspective for women, there appears to be no wedge between private and social economic returns for women, the developmental returns from enhancing female education appear to be large. Education reforms currently planned or implemental throughout the world need to include deeper and more comprehensive analysis of what and how schools and leaders should do in order to contribute to the development of Indian economic system of the countries. The emergence of the network society and knowledge based economics appear to be a powerful justification for education reforms in developed countries. Living in and working for a world of innovations requires fundamentally different attitudes, knowledge and skills from the citizens. Technological adaptation and innovation have been the main drivers of economic growth in developed countries since the world war 2nd and are proving to be important factors also in many developing countries. Successful economic complete on the basis of high values, not only low cost. High value is best guaranteed by well trained and educated personnel and flexible lifelong

learning opportunities for all citizens. The most frequently presented general idea for increasing Indian economic development is to equip people with the skills and attitudes success in an increasingly knowledge based economy.

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