The Importance of Education in Economic Growth

~Ph.D. Selami Ahmet Salgür (South-East Europe - Lumina University, Bucharest)
E:mail: ahmet.salgur@lumina.org

Abstract: The main purpose of this paper is to examine the relationship between education and the economic growth of a country. Education is one of the most important factors for the economic and social developments of a society; and it is also the main component of the construction of human capital. It is very difficult for a country to accomplish a successful economic progress if it does not invest sufficiently and judiciously in education. Therefore, investment in education is seen as the vital part of a country's economic development. It is clear that educational investments are expensive and long-term projects and must be more important than other possible development projects in order to ensure the welfare and prosperity of societies. Unfortunately, this idea falls especially focusing on most under-developed countries. For this reason, the importance of education in a country's economic development and growth must be stated and asserted overtly and unambiguously.

Key words: education, economic growth, developing country, educational investment.

INTRODUCTION

"If you plan for a year, plant a seed,
If for ten years, plant a tree,
If for a hundred years, teach the people."
- Kuang Tse 551-479 B.C.

Education preserves and transforms the important components of societies such as culture, tradition, or customs which are thus perpetuated and transmitted to the next generations. Education also designs the motivations of the actions of human beings. For this reason, the role of education in society is essential and inherent and this is why society and education are considered as intertwined entities.

Moreover, education contributes to the improvement of one's personality causing thereby the individual to be more connected to the society which has its own laws, rules, regulations and customs. In time the individual becomes a more active citizen who knows his/her rights and responsibilities and also he/she can be aware of the policies of the government. Education introduces the individual into the legal, moral and political area of public life. It supports the respect of the law, justness, public order, and democracy and also encourages the thriving of society.

The purpose of education resides not only in providing the normal curricula and school subjects to students, but also in preparing them to live effectively and responsibly as adults of the future local, national and international society. Moreover, schools, regardless of their form or kind, are the only place where the leaders and intellectuals of the future can be educated and they are also the place where the high technological levels

are reached, as well as the improvement required by economic growth is developed.

Theories About The Relationship Between Education And Economic Growth

In today's world, the importance of education in economic growth is obvious and indisputable. If a country wants to have a sustainable economic growth, there should be an extensive investment in education or human capital. In the past, this opinion was not so self-evident due to the fact that the authorities and scholars had difficulties in explaining the relationship between education and economic growth. The main reason for this difficulty is that the relationship between education and economic growth is a conceptual one. This relation can change depending on each country and its educational strategies. Today, no one questions any more the straightforward importance played by education or human capital in the economic growth of any country, in our modern societies.

However, the educational systems of many countries were formed according to the post-World War II conditions which were not applicable in terms of many aspects to the economic, political and technological changes of modern world. It means that in many countries the educational system could not be adapted to today's conditions, needs and changes. This relationship between education and economic growth shows undeniably that these new conditions can affect the achievement of the accomplishment and accumulation of human capital.

The improvement of the educational process has been an important part of

economic growth programs for decades, as a result of the observational data recorded for many years (Denison, 1985; Mowery and Rosenberg, 1989). According to the economic theories developed after World War II, all capital and labour were one and the same thing, which means that any changes in the labour process as a result of education, technology and other reasons were ignored (Solow, 1956). According to this theory, population of the society should be kept in a lowest level and the savings amounts should be maximum level. As it is observed, education was not mentioned in this theory.

There is no need for this theory to analyse the effect of education on a country's economic growth, because the role of education in its economic development was excluded in this 'homogeneous labour' theory. The effect of education was not considered in the economic theories until 1980s. In 1983, Findlay and Kierzkowski, and in 1986, Romer introduced the effects of human capital in terms of 'endogeneous' skills in the economic development. However, it was neither very clearly specified how it did it, nor to what extent education might affect the economic development.

In the following years, the importance of education in economic growth was formulated and elaborated in different models and theories. According to all these models and theories, the effect of the human capital on society's economic growth can be classified into three groups:

• Education is considered as a separate component of the production process: This model was developed by Romer (1986) and Lucas (1988). They introduced the idea that the human capital can be considered as a production

- input. However, there was no mention of the relative investments in primary, secondary, or higher education.
- Human capital learns when they do: Originators of this model such as Young (1991) and Stokey (1988) indicated that 'learning by doing' obtains very good results in production. This approach can be more useful when a minimal foundation of education is established.
- There should be mutual cooperation of human capital, economic conditions and technology: This model was introduced by Bartel and Lichtenberg (1987), Davis and Haltiwanger (1991) and Mincer (1991). According to this model, skilled human capital is believed to have a "comparative advantage" for inventing and using new technologies.

At the beginning of 2000s, empirical evidence showed that there is a weak relationship between education and economic growth in the developed countries (Demeulemeester & Diebolt, 2009). Moreover, Vandenbussche, Aghion and Meghir (2006) have indicated that higher education in developing countries will play a more important role in the economic growth of those countries than lower levels of education, because innovation is the main factor of development for those countries. In other words, it means that imitating or counterfeiting someone else's technology is not a solution to achieve economic growth.

Why Is Education Requisite To Economic Growth?

Since the beginning of the twentieth century onward, education, schooling, science, technology, knowledge and training have become important elements as regards the productivity of individuals and states. The human capital of a state has been considered as an important element for the economic growth and development of that country. Education is known as the pivotal factor for improving the quality of the human capital. For this reason, education plays a vital role in the social and economic development of a country. No nation can succeed in achieving a sustainable economic growth without providing a better education to its human capital (Ozturk, 2001). Such an educational system promotes an on-going economic growth, an increase in the total production, ensures an ever larger per capita income, and improves the quality of family life.

The relationship between education and economic growth was based on the idea that the main advantage of more schooling is that a better educated human capital means and entails an increased level of labour productivity. The reason for this opinion is that individuals possessing a higher level of education are more literate and numerate, and furthermore these people will be better trained and more competent in their future jobs. Moreover, better educated workers can learn more quickly and will adapt themselves more rapidly to complicated jobs and tasks. Several countries' authorities have discussed this issue and have concluded that insufficient education among the human capital in the production process is the main problem which jeopardises the economic growth of any country.

It is clear that a limited number of educated people may affect the economic growth negatively. However, it is not crystal clear what kind of education should be given in

schools in order to promote the economic growth – general schooling, vocational education, or on the job training. Another problem to be faced regards the decision to be made as to which level of education plays a more important role on the economic growth – elementary education, or secondary education, or higher education.

One of the main indicators that education plays an important role on the economic growth is that developed countries with high economic growth have good human capital with higher standards of schooling strategies. This fact became a model for new developing countries. These countries will possess better conditions tending to approach the levels of developed countries if they have enough educated human capitals with required capacities to improve their own technologies or to assimilate and modify the existing technologies of developed countries.

The 2011 UNESCO Education for All (EFA) Global Monitoring Report indicates that many low-income countries have made good investments for their educational systems since 1999 (EFA, 2011). The economic growth of a country depends mainly on three factors:

- Human capital,
- Physical capital, and
- Financial capital.

The physical capital refers to all the natural resources that a country possesses. The financial capital refers to the power of investment that is required to transform the physical capital into valuable goods. Finally, the total human resources needed to supervise this overall process are called human capital.

In this approach of new developing countries, there are two methods for raising the productivity with better educated human capital:

• Human capital gains new skills and

- accomplishments which encourages the working capacity to increase the productivity.
- Human capital will have enough capacity to improve new approaches by using the technology to increase the productivity of other labours.

In order to put into practice the first method, the human capital needs more education. It means that more education develops the capacity and quality of human capital in terms of increasing the productivity and adapting the new technological changes. As regards the second method, human capital is the centre of the economic development, because while the productivity of the human capital increases, it creates new ways to improve the productivities of other workers.

Better Education And Job Opportunities

Individuals tend to continue their higher education because they think that they can find better jobs and earn more as compared to other individuals with average schooling. Moreover, this tendency to acquire more education can also be a reason of social movement. As a result of social movement of individuals who want to continue their higher education, some countries or regions are interested in increasing the population of this kind of people in their society, because this increase in the population can affect positively the productivity, and better the quality of jobs in the economy, and finally, it improves the economic growth of the region.

When employers have two candidates for a position in their companies, they will most probably choose the candidate with the highest qualification in terms of education and other skills. The main reason for choosing more qualified candidates is that a better educated individual does not need money or time or training investment on behalf of the employer. In other words, the company does not need to show to the employee the details of the job, or the different ways of doing the same tasks in the working place. On the other hand, the employers will have to explain and teach to a less educated employee every detail of the job. Most of the employers are not willing to put up with this situation.

Moreover, it is obvious that individuals with more education have higher incomes as compared to less educated individuals. This shows the importance played by better education on individuals' incomes. In fact, the main reason why a better educated individual earns more is that higher qualification means more productivity, hence a larger production. In a healthy economic system, it is only natural that employees who really produce more than others should earn more. This was one of the main reasons why the socialist systems in Eastern Europe could not continue their economic development. Individuals were being rewarded according to their political positions not to their economical productivities. It means that higher education offers the opportunity to get better jobs. This can be considered as a microeconomic approach for the importance of education in economic development.

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