

Education - an investment in human capital

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Abstract

Formal education, personal abilities and the health state play an important role in this paper. Those are all essential constituent elements of the human capital.

In the present paper we intend to present briefly the fundamental concepts of the human capital, with an emphasis on education and abilities. We also mark out the importance of the human capital development in the purpose of maintaining the development and the motivation of the human resources, which are the main premises organizations need to capitalize. The higher education has a determinant role in the attainment of this desideratum.

Keywords: human capital, education, teaching, learning, educational capital, investment.

Introduction

It is essential to take into consideration the contentions of Martha Christina Suciu, the author of “The investment in education”, who shows that the main driving force which can either inhibit or impel the formation activity, is the investment in human capital. Ion Jinga, in his paperwork “Education as an investment in the human being”, highlights the fact that the most efficient investment, socially as well as individually, remains the one made in order to form people. The book of G. Becker, “The human capital”, is a reminder of the message of the creators (“the parents”) of the economic science, message that openly claims the most precious resource at the disposal of the human being in

his millenary fight to better his own well-being, is the human being itself.

Education and professional training are the most important investments in human capital. The aim of every public policy, no matter if it's regarding the transformation of the education, of the sanitary system or of the fiscal one, is to better the life of people. Hence, the human capital develops progressively in the formal field of school, in the family, in the organization and by the means of the individual efforts of studying and reflecting.

The human capital therefore reflects the investment in education and the development of certain competencies and skills, necessary to carry through a certain economic activity. The value of this investment in education depends, on one hand, on the expenses made on education, and on the other hand, on the anticipated future benefits generated by the knowledge acquired through education. Given the concept that the majority of knowledge, competencies and qualifications are gained in school, through the instructive – educative process, through the education and inferentially through the higher education, it has been acknowledged its determinant role in the aggregation and development of the human capital, and as informed, in the economic development of a country

Material and methods

Even though it has met its affirmation and conceptual structure only after the seventh decade of the twentieth century, the term of human capital was utilized long before the term of economy. As Kiker (1968) remarks, two methods were used to estimate the monetary value of the human being: the procedure of the production cost and the one of the net incomes of the “making” of the human being in its development, excluding its costs of “maintenance” – sir William Petty and Ernst Engel being amongst the promoters.

The second method consists in the evaluation of the present value of the past and future incomes of the individuals, J. Shield Nicholson and Alfred de Fosill being the most popular economists who used this method. Without offering a modality on estimating the value of the human capital, Adam Smith (“The Wealth of Nations”), has defined as generally being the elements of the capital, the “useful” abilities and knowledge of the human being, referred to as a machine having costs as well as the capability to produce, in return of revenues.

The end of the fifties and the whole seventh decade have brought back the human capital under the “spotlight” of the academic world, especially under the incentive of the paper works of Theodore Schultz, Jacob Mincer and Gary Becker.

Initially, the modern theory of the human capital has developed around the group of the University of Chicago, which was intellectually coordinated by Theodore Schultz, president of the American Economic Association. Schultz and his collaborators have treated the educational and health expenses as being investments with the aim of economic growth. The superior levels of education offer people a wider modality regarding the change of profession with the augmentation of revenues. For example, it is much easier for a person with a superior level of education, to adapt to the changes present on the labor market, by learning new skills or by applying older knowledge in new situations.

Efficiency, economic performance and competitiveness impose with priority investments in human capital with the purpose of creating professional competencies, which are specific to the field of activity and to the capability of adapting to the dynamic of the labor market's demands.

1. The anticipative junction of the higher education to the labor market is a necessary condition also to the competitiveness of a country. From here derives the necessity of developing an operational system of qualifications in the higher education which can ensure a real correspondence between the preparation of the students and the job occupied, and which can create an accurate image in the social and economic field.

2. The permanent education represents a principle of projection and organization of the education in the perspective of its deployment in different forms, throughout life, determined for the purpose of growth of the economic performance and of the competitiveness of a nation. Regarding permanent education, the main indicators of evaluation point are:

- the degree of participation at the activity of permanent learning (“lifelong learning” of the population aged between 25 and 64 years);

- the degree of participation at activities of permanent learning, including the formal education, the non-formal and the informal ones. Relevant information regarding the rate of participation of adults to the formal, non-formal and informal education are offered by the Pilot

Inquiry concerning the Education of Adults (2010 – AEDA) made by the Romanian National Institute of Statistics.

3. Ensuring the quality of the human capital from the higher education, from the perspective of the formation and the certification of professional competencies, regards two categories of human resources:

a) The graduates – by ensuring the competencies, the skills and the abilities which can allow an easy entering on the labor market, in accordance with its demands,

b) The academic body – by its formation in the spirit of development and modernization of the initial and continuous formation.

The activity in universities, its goal, must be correlated with the stringencies of the society, with the other levels of organization of the education and with the economic realities.

Specialists think that an educational system which does not develop the pupils'/students' capability of capitalizing the knowledge in different concrete situations, the creativity and the innovative spirit cannot be considered as being good and efficient education systems.

Through educational capital certified by diplomas, the problem of measuring at an individual level is not very tetchy, even though the different methods of usage can be discussed: measuring by years of school, by degrees of instruction. In exchange, the non-formal education produces stocks of educational capital which are very difficult to estimate.

The simple measurement of the scholastic participation is “less satisfactory than the direct testing of abilities, but it can be difficult to test all the relevant abilities” (OECD, p.15). A possible measure is the usage of an indirect measure, as the formal educational capital stock of the parents (expressed for example through the total number or the mean value of school years that parents graduated). An alternative method is the one suggested by International Adult Literacy Survey (IALS – described in OECD, 1998, p.22-28), in which adults are evaluated on three scales of general culture: prose literacy – knowledge and abilities necessary to understand and use the information from newspapers, fiction tests and explicative texts; document literacy – knowledge and abilities necessary to find and use the information contained by official forms; quantitative literacy – knowledge and abilities necessary to apply mathematical operations in lettered materials.

Using practical research methods: comprehensive quests regarding the demand for labor force and the evolution of occupations on the Romanian labor force market in the 2010-2012 perspective; available demographic statistics, methods used in the prognostic analysis of the labor market in the most important EU countries, studies made by the National Institute of Statistics with the pilot inquiry named "The growth of the interest for the higher education", the sample represented by the adult population (aged between 25 and 64 years), analyzing the degree of participation at any learning activities, the quantitative and the qualitative results obtained after the adoption of the methods, lead to the idea that the education must be seen as a process which needs to show its efficiency and effectiveness in time, a process that invests in human capital in a planned manner, for it to show its productivity in time.

Literature review

Jacob Mincer, Gary Becker and those who followed, have focused more on studying the relations between the human capital and the revenues from labor, and to be more specific, on studying the variations of the revenues, by the degree of education of the individuals. In 1974 Jacob Mincer examined the relationship between an added year of school and the anticipative growth of revenues throughout life. Mincer considered that the only cost of an additional year of school is the anticipated revenue, hereby ignoring the direct costs, as are the study-related fees. This fact is determined by the used data, so that the results of this research must be regarded as being an estimation of the superior limit of investments in education (Mincer, 1974, p.89-91). Recently, in the specialty literature (Krueger and Lindahl, 2000, p.36-85), it has come to an important conclusion which corresponds to the results obtained by Mincer: in USA, each additional scholastic year raises the lifetime revenues by approximately 10 %. These results help us understand the effects of the education upon the future anticipated revenues of the individual, which also expand to the level of economy as a whole. According to one enunciation (Heckman and Klenow, 1998, p.63) of their model, they have discovered that "education really has a more important effect at a macro level than at a micro level". Professor Gary S. Becker (laureate of the Nobel Prize for economy) highlighted the economic effects of the intellectual investments and identified the

professional formation of the human factor among the activities which influence their “future pecuniary revenue of the individuals”.

The complexity of the interrelationships between the importance of the higher education and the labor market can be singularized from the perspective of the statistic systems of classification used by the following sources: Romanian National Institute of Statistics; the inquiry regarding the Education of Adults – AEDA 2008; EUROSTAT – data base available online for the macroeconomic indicators; OECD – statistic data regarding the indicators of the labor market from the OECD countries; MECTS – the report of the state of the educational system 2010; The Integrated Strategy of Developing the Human Resources from the perspective of learning throughout life, 2009-2010.

Results and discussion

In the present, in Romania, at a strategic level, the main operational instrument for ensuring the quality in the human resources field is represented by the Human Resources Development Operational Sector Program.

From a few characteristics regarding the actual state of the educational system – according to the National Institute of Statistics, we can focus on the following.

The evolution of the number of students in the 2005-2010 periods has had a tendency of growth, having periodically recorded periods with slow augmentations of the number of students as well as periods with more accentuated augmentations, the last years representing certain stabilization. The interest for the higher education has risen to the point where in the last university years more than a half of the population of Romania, aged correspondently, was comprised in this level of education.

Table nr.1. Effectives of students

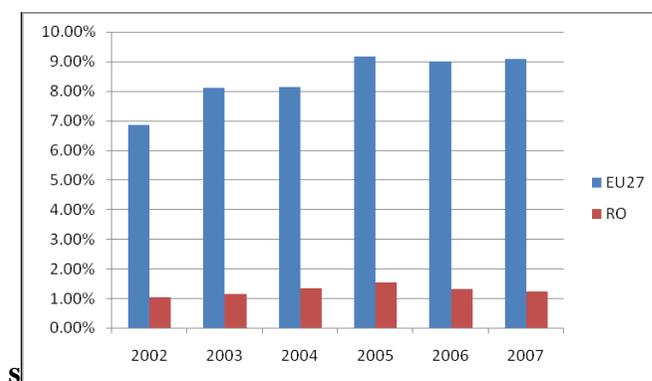
Higher education		2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010
	Total	716464	785506	907353	891098	850704

Source: National Institute of Statistics, <https://statistici.insse.ro/shop/>

Regarding the degree of participation at the activities of permanent learning of the population aged between 25 and 64 years, at

the level of the European countries, we conclude by saying that in the Nordic countries– to which we add Switzerland and Holland, there are the highest rates of participation at activities of permanent learning amongst the population aged between 25 and 64 years, 26 % and 36 %. The extremely reduced values of the indicator under 3 % are recorded in Bulgaria, Romania, Greece and Hungary.

Figure nr. 1. The degree of participation at activities of permanent learning of the population aged between 25 and 64 years, Romania vs. UE27

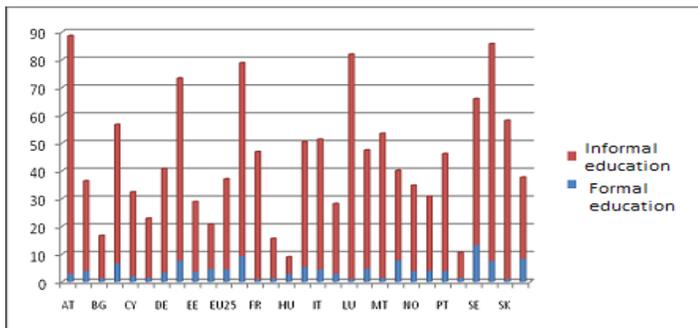


Source: Eurostat,

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

According to an Eurostat survey made on a sample represented by the adult population (aged between 25 and 64 years), analyzing the degree of participation at any activity of learning, highest rate of participation in activities of formal education, of over 5 %, are recorded in countries as Sweden, Finland, Switzerland, Holland, Ireland, Great Britain and Slovenia.

Figure nr. 2. The structure of the participation at any activity of learning



Source: Eurostat,

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

In the case of the activity of informal education – over 60 % is recorded in Austria, Finland and Denmark. Our country records reduced levels of the rate of participation of the adult population at the educational activities, in the case of the formal education (1 %) as well as in the case of the informal education (9 %)

Table nr. 2. The participation degree of the population at activities concerning with adults education

Type of education	Population who have participated at education (thousands of persons)	Rate of participation (%)
Formal education	431	3,6
Non-formal education	574	4,8
Informal education	2240	18,8

Source: The National Institute of Statistics, the Pilot Inquiry regarding the Adult Education, 2008 – AEDA

The study regarding adults education, made by the National Institute of Statistics shows that 2706 thousands of persons (22, 8 %) of the population aged between 25 and 64 years (11893 thousands of persons) have participated at least one educational activity during the period of twelve months.

In the last years in Romania, the human capital was affected by the austerity measures, and the effects are hard to quantify. There have been affected fields of national importance – one of them being the education, and the human capital is hard to regenerate implying long cycles and very high costs. But maybe the most eloquent example is Japan, a country that is missing inherent natural resources, but understood that the future is based on education, and on investments in human resources, and has ended up being one of the most developed countries of the world.

It is important to mention the fact that it has formed its educational system even before creating a successful economic system, and has allocated in some periods more than a tierce of its budget for investments in human capital and consolidation of the education.

In Romania, the educational system must be oriented to satisfy the real demands present on the labor market. Taking into consideration the human resources that Romania has and the fact that those resources are underused, the private and public allocations oriented in human investments must become a priority for the economic policies.

Conclusion

To be able to develop and aspire to a sustainable growth you need a well trained and developed human capital.

Among the elements that characterize an educational system in the case of Romania, we can mention transparency, simplicity and difficulty to administer the necessary funds to the investments in education. The tendency of young people to continue their studies contributes to the tout ensemble development of the society – the evaluations are based in general on the high rates of recovery of the investment in education.

In order to maximize the effects of the education on the development of the human capital and on the economic development, certain rules must be followed: the quantity and the quality of the education measured in the number of years of studying; the percentage of the GDP allocated to education; the rate of scholastic participation,

the results, the scholar performances must to be high and the educational offer must correspond to the current demands and to the perspective of the labor market; the existence of a social and economic field, politically stable, and of an accelerated economic growth rhythm; the differences between revenues at an individual level need to correspond to the level of scholastic and professional preparation of the individual. The concept of human capital thence reflects the investment in education and the development of some competencies and skills necessary to accomplish a certain economic activity. Today in Romania the achievement of the objective “Investments in the human capital” becomes urgent; it is necessary to get through certain steps not only conceptual, but also regarding the habit of mind.

The formation of the human capital through investing educational processes remains a global responsibility for all individuals and governments.

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