Impact of Education on Social and Economic Inequalities in Romania

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Abstract

In all societies, even into the economically developed societies, the differences related to education generate inequalities, since the possibility to find a well-paid job, to start a business or to perform an independent activity, as well as the income and the pension of the individuals are depending on the educational attainment to a large extent.

The educational attainment is directly linked with other social phenomenon, like social class, residential status, race or gender. Recent studies show that income, residence and ethnicity are the key factors that influence educational level in our country.

The paper shows that the large investments in modern infrastructure of communication made in the last years are an important factor for sustainable development, but it still exist inequalities among regions of Romania, between rural and urban spaces, etc. The risk is that a large portion of Romanians will become or remain a "computer underclass" inside European Union.

Key words: Education, Government, Income, Income Distribution, Inequality
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1. Introduction

According to both classic and contemporary economic and sociological theories, education has an essential role in any society; the development of educational systems and the increase in the importance of education for the level of the overall and individual economic prosperity were the outcome of the economic and social transformations that began in the 19th century. While in traditional societies work-related skills were acquired in the family, being transferred from one generation to another, this is no longer possible in industrial societies, because these societies rely on an increasing division of work, while the role of acquiring knowledge and work-related skills is taken over by various educational institutions. The increasingly complex and specialized professions require the acquisition of more and more abstract knowledge, in fields that are becoming more and more diverse; in modern societies, people are required to have basic knowledge of reading, writing and mathematical calculation, but also a general knowledge of the physical, economic and social environment wherein they are acting. Especially in the last decades, new competences, such as the familiarization with the new technologies (from computers to modern means of communication, smartphones, etc.), but also those relating to some specific issues (environment, food safety, etc.) have become increasingly more important.

The particularly fast technological changes prompt an unparalleled quick shift in the theoretical information and practical skills required for a particular profession; thus, the knowledge obtained in the initial phase of education is no longer sufficient to an individual. Therefore, education means lifelong acquisition of additional knowledge and competences, including training on the job. These recent phenomena are changing the classic perspective relating to the evolution of an individual: thus, in the past, the first stages of life were dedicated to education, followed by work in a position that would change quite insignificantly until the individual's retirement from the active life. This has become impossible nowadays, when jobs appear and disappear quickly, and the adaptation through education to these quick changes should be fast and permanent. During his or her life, an individual has more work experiences that require lifelong flexibility and training.

2. Economic and social consequences of education

Literacy was the first step of the educational systems in the modern states, and the levels of education have become increasingly more diverse with the increase in the complexity of professions. Durkheim believed that, through education, children acquire, apart from the skills required for an increasingly specialized work activity, the required knowledge on how society works. Another important view on the role of education, i.e. Talcott Parsons' functionalist approach, emphasized the role of education relating to individual success. Thus, according to Parsons, a child's status in a family is *ascribed,* while in a school, his or her status is *achieved;* while the former is a fact that could hardly be changed, since it is acquired by birth, in modern education systems children are assessed based on their own performances obtained in exams; thus, school is an meritocratic institution *par excellence,* which allows social mobility and promoted increasing equality in developed societies.

This positive view on school and education as modalities to promote the individuals on the objective basis of their own merits, without interferences of social class, gender, ethnic group, etc., is strongly questioned by studies on the social reality in many societies; these studies tend to confirm just the opposite: in very many cases, the ascribed status has a very significant role in relation to the individual's achieved status, which leads to the perpetuation of economic and social inequalities. This aspect is also true for the developed societies of the world, and even more accurate for those in the underdeveloped states. The question that keeps popping up in the sociologists' and economists' debates relates to whether the possibilities of moving up the social ladder have become more and more frequent or more and more limited and rigid.

The evidence that those with high levels of education have higher odds of finding themselves at the upper levels of the social and economic hierarchy has been brought in a recent analysis of global inequalities; the author of the study (Freeland, 2012, pp. 54-57) shows that a large number of those who make the 1% of the richest people in the world have high levels of education, being graduates of prestigious universities. Furthermore, since each of them is aware of the importance of education for their ascension, they tend to perpetuate this trend to their children, which is seen in the level of the competition for access to the best kindergartens, schools or universities.

The consensus on the fundamental role of education is one of the dominant characteristics of the current economic and sociological surveys. By analyzing how the United States can stay ahead of the economic competition in the 21st century, too, Friedman (Friedman, 2012, pp. 51-52) shows that 20th century American success relied on five pillars, the first of them being the public education offered to as many people as possible. The other pillars are: the investments in infrastructure (schools, roads, airports, fiber optic, wideband internet, etc.), the acceptance of the immigrants, especially of those who can contribute to the country's economic development, the government assistance for the support of fundamental research and development, as well as of private economic activity.

According to Stiglitz (Stiglitz, 2008, pp. 55-56), the strategies relating to education and to employment should be analyzed from a twofold perspective, the one of the impact on the development of the related state, but also of the manner in which the individuals are influenced. Thus, the analysis of the number of years of education is only a quantitative indicator (like the gross domestic product in the economic analyses), which does not say anything about the quality of education. Moreover, investments in the increase of the population's level of education should be made in parallel with the increase of the possibilities of employment and of some satisfactory levels of income; otherwise the results are a trick played on the population who invested resources and effort in the increase of the level of education, or the "brain drain" to the developed states that are able to meet such expectations. The latter phenomenon is detrimental for a developing country that invested significant resources in the education of workforce, but failed to come to the point where it could benefit from it.

Experience shows us that most of the states cannot find solutions to these issues; there are, however, some examples of success: South Korea is one of the states that managed, during several decades, to go from the level of one of the least developed states of the world to the level of a large economic world power of the moment. The explanation of the Korean miracle is, according to some authors (Chang, 2012, p. 23), a mix of market incentives and state intervention, contrary to

the free trade promoted by the theorists of globalization. Nevertheless, economic success was also achievable owing to the investments in education, which placed the Korean universities, for example, among the most developed ones in the world. The evolution of South Korea shows us that gaps can be recovered, and it is a good example for our country that is also seeking to overcome economic and social underdevelopment and to join the developed states of the world.

3. Education and its impact on inequalities in Romania

The degree of literacy is one first indicator for the level of economic development of an industrial society; from this point of view, our country has started with significantly behind in relation to the economic development and the educational level of the population, as compared with the states in the West of the continent; thus, at the establishment of the Romanian state, most of the population was illiterate.

In inter-war Romania, owing to the governments' effort to decrease illiteracy, the percentage of the educated people had reached, in 1930, 57% of the adult population. This significant, albeit insufficient, leap was the result of the fact that, in 1921-1932, the financial effort for the development of the educational system amounted to 12.5% of the budget; although this level may seem high as compared with the current funding of education in our country, for comparison we find that a developed state like the Netherlands would invest, in the same period, approximately 25% of the budget (for an accurate image, we also need to consider the difference between the size of the two budgets, generated by the different levels of economic development). The comparison of the data in our country with the data of other European states shows the grim picture of the differences that persisted between Romania and other Central European states, for example; thus, according to the existing data (Encyclopedia of Romania, 1938, p. 147), the number of the educated people in Czechoslovakia was more than 92.6% of the total population, in Poland 67.3%, in Hungary 84.8%, in Bulgaria 60.3%.

The situation was visibly improved in the communist period, when the governments understood that economic development should be doubled by the development of the human resource. Thus, in the period that spanned in communism until the 1990s, illiteracy was almost eradicated, and the educational levels increased in parallel with Romania's industrial growth. Although Romania did cover, to a large extent, the existing gap, the communist government was not able to foresee the economic mutations in the developed states of the world, which meant that, in the eighth decade, a new gap would open in comparison with the developed states that were then entering the state of the society based on new technologies. Furthermore, differences between the rural and the urban areas continued to exist, just like those among the historical regions of Romania.

In a recent study of the inequalities in our country, the author (Precupețu, 2013, pp. 253-254) shows that inequalities in the field of education are prompted by three major factors: income, residence and ethnic membership. Income has a significant impact on the level of education, even if education is free in our country; the influence of income is seen on expenses that are required when one goes to school (clothing, transport, meals, writing materials, etc.), a significant number of families not having the necessary related resources (since our country has one of the highest rates of population living in extreme poverty, especially in the rural environment, where income sources are considerably diminished). Moreover, the quality of the education institutions is very different, especially when we are considering the gaps between the urban and the rural areas, between the large urban environment and the poor urban localities, or even within the large cities. Differences become even larger when we are also considering that wealthy families are opting for the children's private tutoring, which leads to the increase of educational inequalities. As shown by the data of the study, the levels of education in the rural areas are considerably lower (only 4% of the population that lives in the rural has a university degree, while in the urban environment the share of this population goes up to 25.4%). The economic underdevelopment of the rural environment prompts the individuals who complete higher educational levels to migrate to the urban environment. As to ethnic membership, the most impacted group is the group of the Romani: thus, in 2011, 20% of the Roma children with ages ranging from 6 to 16 years were not enrolled in school. More than 25% of the Romani population with older than 16 years is illiterate, and the percentage is considerably higher for those who live in the rural environment. Inequalities also act

on other minorities, such as the group of HIV-positive children or of which with special educational needs.

Moreover, the situation tends to self-perpetuate: the risk of extreme poverty is higher in those with elementary school studies (ISCED 0-2), i.e. 33.2%, while in those with levels of middle school education (ISCED 3-4) it decreases to 12.5%, and in those with high levels of education (ISCED 5-6) it is only 1.1%. The layoffs during the crisis have also had an impact especially on the less skilled individuals and those with lower levels of education (Precupețu, 2013, pp. 265-266).

We can see the same thing in relation to income. Thus, in 2008, the families whose provider had higher education had an average income 2.8 times higher than those where the family provider had only elementary studies or no studies at all; the percentage was increasing in comparison with the previous years and one of the explanations is the need of an increasingly qualified workforce following the economic development. In 2008, income in the urban environment was 52% higher than in the rural environment, and the reasons of this situation were given by the jobs in the rural environment, mainly related to agriculture, which involve income considerably lower than those in the industrial or service sector; in the rural environment, we find a significant share of families of seniors (retired from work) with small retirement pensions (also because of their activity in agriculture), of single-member families or of families with three or more children and where more generations live together. Another difference is the one among the regions of our country; the largest revenues are in the Bucharest-Ilfov Region, while the poorest regions are the North-East Region, the South-Muntenia Region and the South West Oltenia Region (Molnar, 2010, p. 67-69).

The data on education in 2009, depending on residence (Precupețu, 2013, p. 22) was the following: 16.4% of the population with ages between 15 to 64 years had graduated a form of tertiary education (urban 25.4%, rural 4%); 4.2% a post-secondary form (urban 6%, 1.6% rural); 33.9% a higher secondary form (urban 39.6%, rural 26%); vocational education 24.3% (urban 21.2%, rural 28.6%); lower secondary education 18% (urban 6.7%, rural 33.5%) and elementary education 3.3% (urban 1.3%, rural 6%). The aforementioned data shows the educational inequalities between the rural areas and the urban ones: the share of graduates of a tertiary or post-secondary form of education is 4-5 times higher in the urban environment than in the rural one, while at the levels of lower education, the situation is reversed. This shows that the high level of education is typical to the urban environment, while the rural environment is dominated by low levels of education. The only indicator at which the rural is ahead of the urban environment is the one relating to those who graduated a form of vocational education.

The situation is seen in a completely different light when we compare ourselves with the developed states (OECD, 2015, p. 39): there, the share of graduates of higher education is in the range of 20-30% of the total population (the United States and the United Kingdom-22%, South Korea-31%, Japan-28%). Moreover, there is also a qualitative difference from them, especially in the use by the Romanian population of modern technologies and means of communication.

4. “The world is flat”: the place of Romania

The fusion of globalization with the IT revolution can change everything, from how business is conducted to the places of work, the required skills, etc. Thus, by the use of new technologies at a wider and wider scale, the world has become “flat”; the last decade was the one that saw an explosion in the use of mobile phones and internet services at world level, a phenomenon that is going to expand and, thus, create new inequalities among the states and the individuals of the world (Friedman, 2012, pp. 75-78).

According to the *Consumer Barometer* established by Google, in 2015, 46% of the Romanians have a smartphone, a share almost four times higher than the year 2012, when only 12% of the Romanians had such a phone; although the increase is spectacular, this share continues to stay behind other European states in the region: Poland (59%), Slovakia (65%), Czech Republic (55%), Hungary (50%) or Bulgaria (48%). Although the share of Romanian who have a smartphone is lower than in other countries of the region, they compensate by the intensity of its daily use; thus, according to the indicated study, Romanians are using their mobile phone approx. 80 minutes/day (as compared with the Czechs and the Polish people who are using the phone only 55 minutes/day).

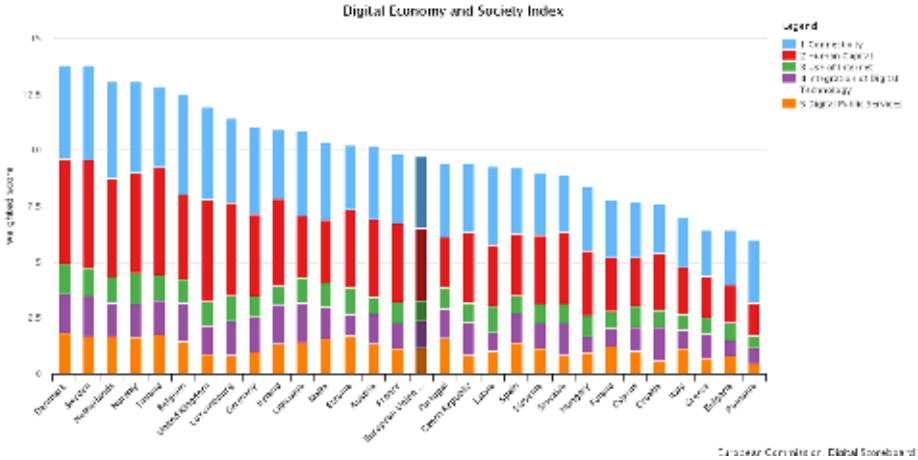
The data of the same study shows that more than 65% of the Romanian population is using the

internet, the share of the daily use being 47% in 2015, while in Bulgaria the percentage of those who use the internet is 69%, and daily use goes up to 56%, in Hungary 73%, respectively 62%, in Poland 74%, respectively 55%, in the Czech Republic 80%, respectively 54%, in Slovakia 84%, respectively 60%. This data shows that, although Romania is ranked among the top positions at world level as to wideband communications infrastructure, the number of users places us at the last position in EU.

A study conducted by *Ernst and Young Romania*, on a sample of 1040 respondents with ages between 18 and 55 years, with their residence mainly in the urban environment, in 31 counties of Romania, has shown that most of the Romanians have started to use mainly smartphones to the detriment of tablets or computers. The study shows that the greatest use of the smartphone, more than 200 times in 24 hours, is seen in the 25 to 35 years age category, followed by those aged between 35 and 45 years. The study also shows that there are visible differences between the rural and the urban areas; in the former environment, the use of the internet is considerably lower.

According to the European Commission, Romania is included in the group of the countries that are in a phase of recovery from the digital lags, with states like Latvia, Croatia or Cyprus. Our country is found above the EU average in relation to access to high-speed internet, with the national networks able to provide 30Mbps speed, for 72% of the households, the EU average being 71%. The Commission's report shows that Romania has registered the greatest progress in the field of connectivity, ranking the 23rd among the member states. At present, 59% of the subscriptions to fixed internet are subscription with fast internet connections, as compared to 54% in 2013, which places Romania on the second place, from this point of view, according to the document. As seen in *Figure no. 1,* our country continues to be deficient in the field of human capital, in the integration of new technologies and in their use in public services. Romania ranks the 28th and has a weighted score of 0.35 in terms of development and use of digital services, while the European weighted score is 0.52:

Figure no. 1: Digital Economy and Society Index



Source: (European Commission, 2015, *Digital Economy & Society*)

The implementation of the RO-NET project involves the introduction of state-of-the-art networks for the entire territory, which will lead to the increase of the degree of coverage with wideband networks.

The DESI warns that Romanian enterprises will have difficulties in competing on the global digital market, unless they use more the electronic commerce and cloud computing applications. Only 7.4% of the SMEs are selling online in Romania, and only 1.9% of these are selling online in other member states, a small share as compared with the other member states.

5. Conclusions

Apart from the opportunities provided by the new technologies, they can trigger new educational disparities which are later translated in social and economic inequalities. Giddens (Giddens, 2010, p. 689) shows that technological changes have shifted the emphasis from the "culture of the book"

(which involves the use of books, magazines, newspapers, and other printed means for education), typical to industrial societies, to the use of technology in education (computers, the use of Internet, of learning software, etc.). The use of new technologies is leading to new forms of inequality, such as the appearance of a "subclass of the computer", both among the states found at various levels of economic and technological development, and among social categories in the same country.

The lack of information can add to the shortage of food or other resources. The increasing need of information and the additional skills of computer use can create differences among the employees, between those who are using and those who are not using or are only partially using the computer (without any relation to basic professional skills), between the technologically skilled and the other ones. Thus, the importance of lifelong learning is increasing, as is the risk of disconnection of some areas, countries or categories of individuals. Technologies can contribute to the dissemination of information and its democratization, but the limitations caused by the lack of the necessary infrastructure lead to the fact that some countries or individuals have additional facilities that are translated in social and economic benefits.

The low shares in the level of education in our country, doubled by the low levels of knowledge and users of new technologies of communication may lead to the expansion of the gap between us and the developed states, including the former communist states in the region, with obvious effects on the rates of economic growth and, subsequently, on the population's purchase power. Recent investments in the modernization of infrastructure should be double by massive investments toward the development of human capital, as well as the implementation of coherent public policies for the stimulation of the use of new technologies in public services, as well as in the business environment.

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