

THE RELATIONSHIP BETWEEN THE COST OF EDUCATION AND THE HUMAN CAPITAL. THE ALIGNMENT OF ROMANIA TO THE EUROPEAN STANDARDS

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Abstract

Once with the development of the human capital theory, the education received an economic value, which is a quality variable of human resources and the main determinant of economic growth. The famed economists have shown that the remarkable economic effects of the investments in education influence the chances of acquiring a job and earnings, demonstrating how the theory justifies such an investment. Human capital approach allows also estimating the costs of education in schools and higher education, as well as the profits that comes out of it. Thus, the human capital theory is primarily focused on the demand for education. Moreover, the objective function of the state, in terms of education, contains itself two contradictory arguments: the state, theoretically, is a representative and guarantor of the collective good and its organizer; the state will seek to maximize individual education on the one hand and on the other hand will search for the optimization of the relationship between professional training and formal education. Also, in the context of recent years, the budgetary constraints are raising the problem of optimal allocation of the resources, as well as the funding of the performance of the educational services. The particularities, in terms of flexibility and cumulative distribution of the investment levels in the human factors, are translated into a practical action in the sense that global competition, from which Romania cannot decouple. In the long run, there are winning and resisting only those with academic flexible formation and the intelligent persons. Considering the above arguments, the purpose of this paper is to analyze the main characteristics of funding mechanisms for education systems, the volume of spending on education and ways of managing the resources allocated to the education. The cost allocation for education in Romania is investigated in terms of government policies, but also in terms of human capital theory. Also, to answer to the question how Romania had aligned to the modern trends in terms of allocation of the resources more and more important for human capital formation, this paper attempts to estimate the economic effort claimed by the financing of the education system.

Keywords: investment, human capital, cost, economic growth, performance

Introduction

The economy and the efficiency of education is an area that integrates public economy and the economy of human resources. Over time and especially today, the issue of budgetary constraints underlines the problem of optimal allocation of the resources and the funding on performance of the educational services. Following the above considerations, the content of this paper will focus on analyzing the main characteristics of funding mechanisms for education systems, the volume of spending on education and the ways of managing the resources allocated to the education. The cost

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allocation for education in Romania is investigated in this paper both in terms of government policies and in terms of human capital theory.

Also, to answer the question of how to connect Romania to the modern trend of the allocation of resources more important for human capital formation, we attempted to estimate the economic effort claimed with regards to financing the education.

As for the literature notes, several currents are highlighted and referred to in this paper. The first research papers have focused on the *cost measurement methodology, the study of determinants of the unit costs, on their laws of evolution*¹, and *the measurement of educational costs supported by the family*². 80s decade has seen a deepening of this line of thinking - further comparative studies³ and more specific studies mainly on the cost of systems using new technological means (Eicher, Hawkrige, MacAnany, Orivel, 1986). Recently, the scientific speech of financing has been the object of the numerous papers. Thus, education systems are currently funded, sometimes even totally by the public power. On the other hand, economic theory does recommend full public funding only in the cases of pure collective goods. Therefore, in front of growing constraint of the budget, the problem arises not only for the optimal allocation of resources, but also how best to finance educational services. This issue concerns the specialized literature, as well as governments of the developed and emerging countries.

1. The role of human resources education and training in Economic theory

The education and the training of human resources stands more than six decades in the interdisciplinary focus of governmental structures, national and international non-governmental organizations.

The research and the economics – in their permanent renewal, development and structure included as a separate specialty, in the late 50's, a new branch and economic discipline called education. Although the influence that education can have on human productivity was pointed out and still stressed by classical economists, particularly Adam Smith, in their works are not found consistent and detailed analysis to substantiate their statements. If we exclude the work and management studies (financial - accounting) of the educational institutions that have developed and have considerable experience in Western countries, the new economic approach to education includes two major research topics:

– Application of the theory of education analyzed and evaluated by the theory of the human capital;

– The correlation between education and training of the labor force and economic growth.

In time, the crisis phenomena accompanied by increasing budgetary constraints have produced an additional application for studies and research regarding optimal allocation of resources for education and lookup for more efficient ways of financing it. Also, growth and persistence of unemployment have generated a certain priority of employment for continuous education and training issues, recycling and retraining the workforce, directly and indirectly influencing demand, content, duration and pragmatism of the formal education.

Therefore, education core economy - the human capital theory - has been a subject to criticism and contradictions, as well as extensions of the scope and content approaches.

¹ Eicher, J.C. și Orivel F., 1979, *L'allocation des ressources à l'enseignement dans le monde*, Paris, UNESCO

² Mingat, A. și Perrot, J., 1980, *Familles: coûts d'éducation et pratiques socioculturelles*, Dijon, Cahier De l'IREDU, N.32

³ Eicher, J.C., 1986, *L'évolution des systèmes d'enseignement dans le monde de 1960 à nos jours: aspects économiques et financiers*, Paris, UNESCO

2. Human capital theory and the effectiveness of education

The concept of the human capital is attributed to Theodore Schultz. Theoretical developments around this concept date from the 60s and is related to the author contributions quoted to which we can add the contribution of Gary Becker and Jacob Mincer.

However, the core of thinking about human capital is much older: Jean Bodin states so that “there is no greater wealth than men”, Adam Smith, in Chapter 10 of Book I, “Wealth of Nations” show that “the man who was educated by a significant expense and time is necessary to provide work/activity that would reimburse the cost of his training, with an ordinary income at least equal to that of a capital equal value.” It can be easily seen that assimilation of the education with an investment and human capital prepared is obvious, but this idea has been analytically resumed neither by Smith nor by his closer successors.

Among other tangential references, but significant economic importance of education, we can mention Benjamin Franklin – “an investment in knowledge brings the best profit”⁴ or John Stuart Mill that argued that the return of development is fast only when the population is allowed to use the same knowledge and skills they had before⁵.

At the beginning of the twentieth century, Irving Fischer has developed a theory that considers any stock as capital resources leading to the birth of future income, considering training people, along with the construction of cars as investments.

Thus, the spectacular increase in the needs of specialists of different professions, generated by technical and technological developments determined also the restructuring of general knowledge essential for most jobs; vocational training was becoming more and more perceived and considered as an investment.

Currently, education systems are funded primarily - sometimes almost totally - by the public power, from the public funds, but the economic theory does recommend full public funding only in the case of pure public goods. Since the potential demand for education is higher than the number of places or facilities offered, it cannot practice the principle of non-exclusion and therefore do not represent a “pure public good”.

The budget constraints raise the problem not only of an optimal allocation of resources but also of the performing funding of the educational services. As in the developed countries the principle of free primary and secondary education in public institutions is still intangible, the economic research has been focused on the financing of higher education. Related to these issues, under the pressure coming from social demand, higher education budget has a rapidly growing trend and quasi public funding - full of this form of education is income redistribution from poor to rich because at this level of access the social inequalities are particularly evident.

In their approach to finding the best financing mechanisms, the researchers often produced descriptive studies, comparing methods used by different countries, the European solutions compared to the U.S. or Japan solutions. The results show that optimal funding was initially addressed by analysis of the redistributive effects in the higher education; concomitantly there are studied

⁴ Becker, G., *Capitalul uman. O analiză teoretică și empirică, cu referire specială la educație*, Editura All, București, 1997, p. 173

⁵ Mill, J.S., *Principles of Political Economy with some of their application to social philosophy*, London, Prker, p. 57, citat de G. Becker în op. cit.

efficiency problems and those of equity, asking to increase tuition fees and scholarships reform, it is proposed more often by funding student by the loans.

Also, as I mentioned above, in the developing countries, the size of the financial crisis and internal and external public debt increased the demand for research on education funding. This research has been conducted mainly under the financial impetus of the World Bank⁶. The results of the researches take in consideration the introduction of the enrollment fees, reforming scholarships, creating credit market for education, development of the private education, etc. Therefore, in education, not only the cost is important but also the methods and the resources of the funding.

The optimal funding issue was first addressed through an analysis of the redistributive effects of higher education⁷. This research was directly achieved by simultaneously taking into account efficiency and equity issues and highlight the need to increase tuition fees, where they are almost nominal (symbolic) and to reform the support systems granted to the students.

With all the explosive nature of the debate on taxes, most European countries seem to take into account the recommendations or being about to implement them.

The most debated is the support systems granted to the students. The controversy over "Bons education" (Education vouchers) was not always entirely clear, but it has helped, finally, to highlight various possible solutions, the advantages and disadvantages (in Blaug, 1987)⁸. While until recently, these findings influenced policies on higher education was almost zero, the recent evolution of influential groups in the principle of student financing through loans and extent of reforms put into action in some countries, like in United Kingdom, shows that these ideas are building their own way.

In the developing countries, the extent of the financial crisis is so great that the demand for research on education financing has become, for some years, very high. The World Bank has played an exciting role. Much of reflections is emanating either from its members (Psacharopoulos and Woodhall, 1988) or from experts working for this institution. They prepared major reports (BanqueMondiale, 1986 and 1988).

Conclusions concerns the favorable effects on the efficiency and equity of the institutionalization establishment of the selective enrollment fees, on a reform of the support systems going to a selective reduction and allocation of scholarships to students in higher education, to create a market for education loans, loan financing for this purpose and, finally, to the relaxation of restrictions on private and local schools.

Regarding the financing of educational institutions by themselves due to the education production, economists have shown that logically they can expect little from these activities (Eicher, 1984).

3. The cost of the education in European Union

The funding structure and policies applied in education vary from state to state and sometimes even within the same state from one region to another. In the education system of any state is of particular importance its funding mechanisms, and compatibility with public financing legislation.

⁶ Le financement de l'éducation dans les pays en développement, Washington, 1986, L'éducation en Afrique Sub-Saharienne, Washington, 1988

⁷ Blaug, M., 1987, The Economics of Education and the Education of Economist, New York, New York University Press

⁸ Idem

All sources of funding of education can be grouped into two broad categories, namely: public sources and private sources. Public sources come from central, regional and local authorities, while private sources come from students, households and non-governmental organizations. The relative importance of each type of funding source, whether public or private, varies significantly from state to state, ranging from “total funding of education in countries such as Denmark, Finland and Sweden, while in many Member States taxes for the study are borne by the students”⁹. Therefore, it should be noted that the European Union in recent years, there is a constant concern to find effective ways of financing education. “For example, the Netherlands, is promoting a performance-based lending, where loans can also take the form of reimbursable grants if the student successfully complete its studies. This keeps the public funding source, while contributing to increased efficiency in education”¹⁰. To highlight the interest that European Union Member States show to education, I will use as support statistical data developed by Eurostat¹¹ upon the total expenditures for education in 2008. The statistic mentioned reveal that in European Union (EU -27) the public expenditure on education in 2008 measured up to 5.1 % of GDP. The highest public spending on education relative to GDP was observed in Denmark (7.8 % of GDP), while Cyprus (7.4 %), Sweden (6.7 %), Belgium (6.5 %), Finland (6.1 %) and Malta (6.0 %) also recorded relatively high proportions. The situation at the level of all the EU members’ states is not so good if we take into consideration that in 2008 the share of public expenditure on education was less than 5% of GDP, in more than half of European countries (Figures 1). It should be noted that the EU-15 total expenditure percentage is below 5%, and the situation is slightly better in the EU - 27 where the percentage of total spending severely stands at 5.07 %. Also, compared with 2003, in 2008 the percentage of total expenditure in the EU-15 is lower by 0.06 points; Hungary and Slovenia recorded the largest decreases, both down 0.8 percentage points. It should be noted that changes in GDP (growth or contraction) can mask significant increases or decreases made in terms of education spending.

⁹ Consiliul Concurenței, Ghid privind finanțarea sistemului de învățământ din România, comparativ cu unele state membre ale U. E., din perspective legislației ajutorului de stat (The Competition Council, Guidelines about the financing of education in Romania, a comparison with some EU member states in terms of state aid legislation.)

¹⁰ Idem

¹¹ Educational expenditure statistics ,Eurostat ([http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Expenditure_on_educational_institutions,_2003_and_2008_\(1\).png&filetimestamp=20111117102022](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Expenditure_on_educational_institutions,_2003_and_2008_(1).png&filetimestamp=20111117102022)), accessed March 2011

Tabel 1: Total public expenditure on education as a percentage of GDP (2003 and 2008)

	Public expenditure (% of GDP)		Private expenditure (% of GDP)		Expenditure on public & private educational institutions per pupil/student (PPS for full-time equivalents)	
	2003	2008	2003	2008	2003	2008
EU-27	5.14	5.07	0.64	0.75	5 414	6 459
Euro area (EA-15)	5.03	4.97	.	.	.	.
Belgium	6.03	6.46	0.35	0.37	6 343	7 866
Bulgaria	4.23	4.61	0.67	0.58	1 692	2 840
Czech Republic	4.51	4.08	0.37	0.57	3 354	4 520
Denmark	8.33	7.75	0.32	0.55	7 133	8 701
Germany	4.70	4.55	0.92	0.70	6 005	6 953
Estonia	5.29	5.67	.	0.30	.	4 226
Ireland (2)	4.38	5.62	0.31	0.34	5 279	7 172
Greece	3.56	.	0.20	.	3 778	.
Spain	4.28	4.62	0.54	0.66	5 042	6 941
France	5.90	5.58	0.56	0.60	6 038	7 031
Italy	4.74	4.58	0.40	0.41	6 118	6 609
Cyprus	7.29	7.41	1.35	1.35	5 968	6 461
Latvia	5.32	5.71	0.83	0.60	2 258	4 332
Lithuania	5.16	4.91	0.46	0.52	2 183	3 622
Luxembourg (3)	3.77	3.15	.	.	.	.
Hungary (4)	5.89	5.10	0.56	0.54	.	3 995
Malta (5)	4.70	6.01	1.40	0.31	4 272	6 220
Netherlands	5.42	5.46	0.94	0.92	6 881	8 069
Austria	5.57	5.46	0.31	0.50	7 604	8 836
Poland	5.35	5.09	0.66	0.74	2 524	3 781
Portugal	5.57	4.89	0.09	0.49	4 287	4 979
Romania (6)	3.45	4.25	.	0.50	.	.
Slovenia	5.82	5.22	0.83	0.63	5 021	6 529
Slovakia	4.30	3.59	0.45	0.70	2 325	3 523
Finland	6.44	6.13	0.13	0.15	5 858	6 988
Sweden	7.30	6.74	0.19	0.17	6 825	8 067
United Kingdom	5.24	5.36	0.95	1.72	6 097	7 942
Iceland	7.71	7.57	0.70	0.71	6 727	8 290
Liechtenstein (2)	2.46	2.11	.	.	5 851	7 788
Norway	7.54	6.51	0.10	0.09	8 275	10 084
Switzerland	6.00	5.37	0.62	0.56	.	.
Croatia	3.96	4.33	.	0.36	.	4 147
FYR of Macedonia	3.39	.	.	.	.	.
Turkey (7)	2.96	2.86	0.04	.	.	.
Japan	3.70	3.44	1.25	1.66	6 682	7 530
United States	5.81	5.40	2.05	2.10	9 924	11 759

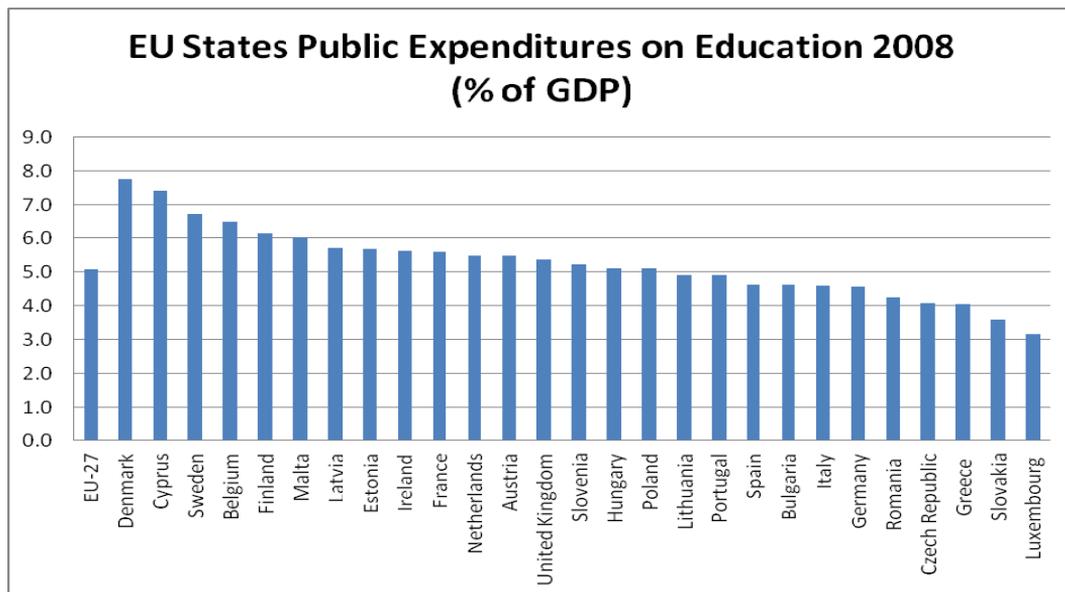
Source: Eurostat¹²

In essence, education accounts for a significant proportion of public expenditure in all of the EU Member States – the most important budget item being expenditure on staff. The cost of teaching increases significantly as a child moves through the education system, with expenditure per pupil/student considerably higher in universities than in primary schools. Although tertiary education costs more per head, the highest proportion of total education spending is devoted to secondary education systems, as these teach a larger share of the total number of pupils/students. However, in

¹²Educational expenditure statistics ,Eurostat ([http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Expenditure_on_educational_institutions,_2003_and_2008_\(1\).png&filetimestamp=20111117102022](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Expenditure_on_educational_institutions,_2003_and_2008_(1).png&filetimestamp=20111117102022), accessed March 2012

absolute terms, there is almost no change between 2008 and 2009 and several countries even had a decrease in education spending.

Figure 1: EU-27 Public expenditure on education, 2008 (% of GDP)

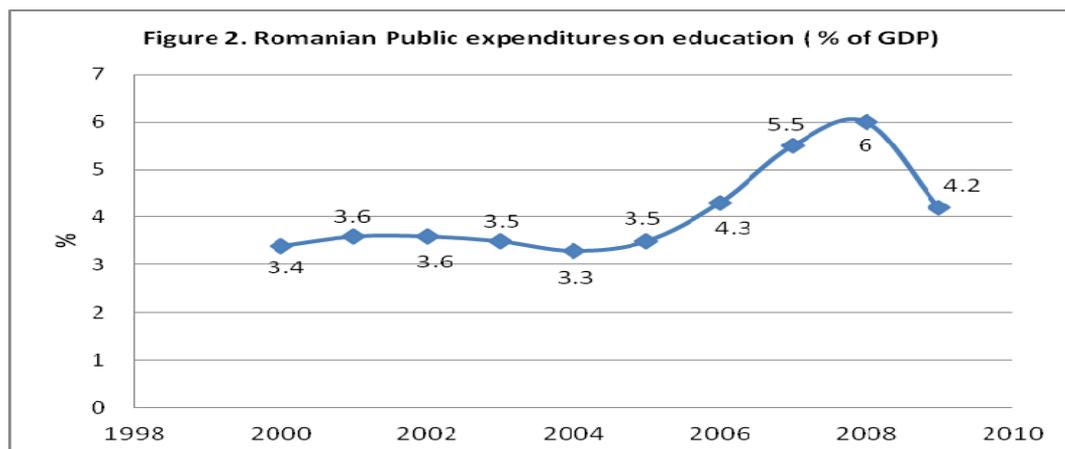


Source: Eurostat¹³

In 2009, government spending on education as percentage of GDP was the highest in Denmark (8.0 %), Sweden (7.3 %), Cyprus (7.1 %), and Estonia (7.0 %). The lowest percentages were found in Romania (4.2 %), Slovakia (4.3 %), Germany and Bulgaria (both 4.4 %), and Greece (4.5 %).

Compared with the other member states, the percentage of GDP allocated to education in Romania ranks our country at the one of the last position of the EU Member States, close to the Czech Republic and Slovakia. In 2009, has decreased its growth rate registered in 2007 and 2008 (see Figure 2) due to anti-crisis measures imposed by the Romanian Government. The significant decrease in GDP in 2009 led to a decrease in funds allocated to education, reaching a value of 4.2%.

¹³ Educational expenditure statistics, Eurostat, [http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Public_expenditure_on_education,_2008_\(1\)_\(%25_of_GDP\).png&filetimestamp=20111117102037](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Public_expenditure_on_education,_2008_(1)_(%25_of_GDP).png&filetimestamp=20111117102037), accessed March 2012



Source: Ministry of Education, Research, Youth and Sports

The lower percentage of GDP in education has led to measures, primarily to reduce technology and material investments and, secondly, reduce salaries of teachers and administrative staff. Thus, in Romania, the average salary that a teacher can receive is 21,468 lei (5,063 Euros) per year, while a high school teacher is 23,353 lei (5,508 Euros) per year. Only Bulgarian teachers are paid less than the Romanian, with 4271 Euros per year. In contrast, the highest salary paid per year to teachers in the European Union are in Luxembourg (88 315 Euros), Denmark (61,804 Euros) and Austria (57,663 Euros). Moreover, in some countries, including Romania, the basic gross wages for teachers in the early years of their career are lower than the national GDP per capita, except Germany, Spain and Portugal.

Even so, in all European countries, staff costs represent the largest part of the costs of education, they are found, on average, around 71% of annual costs in the European Union.

Central governments and/or local ones take most decisions on the total amount allocated to public schools in compulsory education cycle, depending on the category of resources involved. Only in four countries, are found the key regional donors and recipients of education budgets. These countries are Belgium, Germany, and Spain and to a lesser extent, the Czech Republic, here more than 70% of funds allocated to education (45.5% in the Czech Republic) are collected and spent at regional level. In three of these countries, regional institutions (Communities of Belgium, the Spanish Autonomous Communities and provinces of Germany) are the highest level of authority in education. In Austria, the situation is slightly more complex - almost 75% of resources are collected by central government contribution, which can spend only 53% of available funds. In Estonia, Slovakia and Finland, the central authorities provide a big part of resources, but uses less than 40%. Countries where there is a greater decentralization are Latvia, Lithuania, Poland, Romania, United Kingdom and Iceland. In these countries, local authorities are providing and consuming most of the financial resources allocated to education. This is due to the organizational structure of education in these countries and because the regional authorities are not involved, except Poland.

In majority of the countries, total public expenditure with the teaching staff are determined centrally, at the government level, while decision-making procedures involving non-teaching staff costs, operational resources and current assets are divided between local and central authorities or are implemented only locally.

The general tendency is to decentralize the decision to determine the total amount which will be allocated to the resources not directly related to the teaching activities.

To support the development of human capital, in all European countries family allowances are granted for studies. They are offered when children born and paid by the end of compulsory education. The amounts awarded will vary depending on the number and age of children. For example, in Bulgaria, Czech Republic, Italy, Portugal, Slovakia and Iceland, the amounts are proportional to family income. It should be noted that in some cases, families that exceed a certain level of income do not receive financial support in the Czech Republic, Spain, Malta, Poland, Slovenia and Slovakia. Also, scholarships for children who are enrolled in compulsory education exist only in a few countries. In four countries (Belgium, France, Luxembourg and the Netherlands), scholarships are available only from lower secondary education and family options are always evaluated. In Romania allowance is granted to children from birth until the age of 18 years, provided under the condition that the student is enrolled in an educational institution. The amount allocated does not vary by family income or other criteria. It should be remembered that the person shaving an economic and social disadvantaged can receive additional support from the state as a social scholarship is given throughout the school year. It also supports the involvement of children in Romanian state education system, respectively, human capital formation by free / discounts offered for transport, health, reductions in price ticket for artistic and cultural institutions.

In various countries are implemented and other specific measures to assist parents with children in additional compulsory education. Some of these approaches involve reducing the price of transport, free meals at school, specifically to support the purchase of teaching materials, free distribution of textbooks, etc.

4. The cost of education in Romania

Education funding in Romania is a long debated topic in the last 20 years. Many analysts in educational policy, theoretical field, press and representatives of education institutions management in Romania presented and analyzed different aspects both positive and negative about the funding of education in our country. A recent study conducted by Eurostat reveals that Romania is the state that allocates the least amount per student across the European Union¹⁴. According to the research cited above, The total annual unit cost of a pupil/student which is on average PPS EUR 5 748 in the EU-27 varies widely between countries. One group of countries (Bulgaria, Estonia, Latvia, Lithuania, Malta, Poland, Romania and Slovakia) is characterized by unit costs per pupil/student which are relatively modest compared to the other member states average and do not go beyond PPS EUR 4 000 (ranging from Romania with 1 467 to Poland with 3 278).

There is a second group of countries in which the unit costs vary from PPS EUR 7 000 to 8 000, namely Belgium, Spain, Cyprus, the Netherlands, Sweden and Liechtenstein and to a lesser extent Ireland, France and Italy (slightly below). In a third group the unit costs are more than PPS EUR 8 000, as in Denmark, Iceland, Norway or Luxembourg, which is way ahead with more than PPS EUR 14 000 per pupil/student.

Lack of funds necessary for financing the European Union average and close to the high costs faced by families to support a pupil / student in school has a direct impact on school attendance by children and culminating in early school leaving. It also shows that between access to education and involvement of children in work there is a double link: on the one hand children are forced to work to contribute to family income (including to cover part of tuition fees) and on the other hand, the involvement of children in school can affect time work, which leads to absenteeism and even drop of

¹⁴ Key Data on Education in Europe 2009, Eurostat http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/105EN.pdf

education. Data from the Ministry of Education, Research, Youth and Sports reports show that the dropout rate has tripled in the period 2000-2007.

Also in the current context of economic and financial crisis, it is expected that the situation will be worse in the future. Thus, according to recent research undertaken by the Institute for Quality of Life points out that during the crisis, Romania's children will suffer even more, they are "hit indirectly by lowering income families, coupled with decreasing financial support for social system, but also for education and health". The report highlights that the relative poverty rate increased even during the period of economic growth 2000-2008 particularly for vulnerable populations, including single-parent family find with dependent children (relative poverty rate increased from 25.6% in 2000 from 27.1% in 2006), and especially the family of two adults with two dependent children (in which case the increase is about 5 percentage points from 12.8% to 17.6%).

At present, in Romania the education funding is based on standard cost per pupil / preschool. In accordance with decision no. 1395¹⁵, the standard cost per student is determined for each level of education, branch, field, specialization / field, the number of students, language teaching, education and other specific indicators of urban / rural. Therefore, the standard cost per student / preschool is an indicator of substantiation necessary funds to cover basic costs of financing. Standard cost level that of each category of expense base funding is determined by physical indicators of human and material resources consumption established by laws and government decisions or regulations issued by ministries and central institutions in the field. The standard size cost and actual cost per student / preschool is determined by at least two reasons:

- Standard cost relates to a school with a standard number of pupils, a number of classes and students/class, a regulated space necessary for a student etc. while teaching a particular unit may have a number of students other than standard, different volume of space per student, a certain degree of education, etc. equipped with means.
- Actual costs of staff in a school/ student may be higher or lower than standard depending on the degree of qualification of teachers, average length of education, and number of students per teacher position etc.

These differences between actual costs and standard costs are not related to the objective quality of management or policy management. These differences can be eliminated through a medium and long term policy regarding the school network, concentration and modernization of educational facilities, etc. On average, in the year 2011, the standard cost per pupil / school / day is highlighted in the table below:

Tabel 2: Some standard cost per pupil / school / day

Nr. Crt.	Level / chain / profile	Type of education	Average number of students per class		Standards of cost per pupil, on average and level RON		Standards of cost per pupil, on average and the levels ¹⁶	
			Urban	Rural	Urban	Rural	Urban	Rural
1	Kindergarten with normal program	with frequency	20	18	1.478	1.617	1.478	1.617
2	Primary education	with	22	18	1.701	2.027	2.041	2.432

¹⁵ HOTĂRÂRE NR. 1395 privind finanțarea unităților de învățământ preuniversitar de stat, finanțate din bugetele locale, pe baza standardelor de cost pe elev/preșcolar pentru anul 2011, publicată în M.Of. nr. 896 din 31 decembrie 2010

¹⁶ Education in minority languages

		frequency						
3	Secondary education	with frequency	25	20	2.230	2.727	2.549	3.117
4	College	with frequency	28**	28	2.119	2.119	2.401	2.401

Source: author

If we look overall, in reality, the cost of education per student is higher. In the study conducted by Save the Children Organization, in 2010, regarding the cost of education of children at the family level¹⁷ has revealed a number of expenses that the family makes for a student during a school year. The average cost spent by parents for a child's schooling is 1490 RON, and per family is about 2,000 RON. It should be noted that the above amount is calculated taking into account the average costs for parents in the sample budgets, representing a trend as it emphasizes not an absolute value. Also, looking at the results we see that the total cost may reach values of over 4,500 RON per year, per student. The survey questionnaire was conducted based on a sample of approximately 600 parents and 300 teachers, thus the data has a more rough guide character; generally, the expenditures differ regionally, at the school level, considering also school popularity rank and the parent's salary level who allocate more or less financial resources for children human capital development.

Regarding higher education, university funding is based on actual work performed. Funds and thus the responsibility to develop their own strategies for the cost optimization is the freedom of university management. Of the total base funding of 70% shall be distributed based on the number of students unitary equivalent and 30% are considered as quality indicators.

In fact, at higher education institutions in 2011 the average amount paid for a student was about 2,750 RON, slightly lower than in 2010 when the state paid about 2840 RON / student equivalent. In 2010 approximately 470,000 students have disposed of 1,903,513,398 RON - as far as core funding has been granted from the budget for higher education. In 2009, the amount allocated from the budget for students was 1,990,932,992 RON, and in 2011 the Ministry of Education Research, Youth and Sports has provided an allowance for equivalent unit student an average of 2,750 RON. The reason for reductions of funding is the financial crisis affecting our country. This cost varies depending on the criteria above. At a minimum calculation relative to the cost factors used to determine the areas of education funding, it appears that a "a medicine student will benefit from support from the state amounting to 6.187 RON (1467 Euros), a chemist - 5225 RON (1244 Euros), a student of a faculty of the human and socio-economic profile - 2,750 RON (654 Euros). The biggest amount of money - 20,625 RON (4910 Euros) - will receive the students who want to make a career in cinematographic art"¹⁸. In addition to costs incurred by the state, the student and / or family have the direct private annual total costs¹⁹ of between 2000-6000 thousands of Euros, depending on the locality in which the educational institution has its activities, on faculty requirements related to books, on software and on family financial availability. To cover some of the hidden costs that have to support student or family, the Romanian authorities offers performance scholarships for students with exceptional results, scholarships for students with good results, but

¹⁷ Cercetare cu privire la costurile „ascunse” din educație ”Învățământul gratuit costă”, realizată de Organizația Salvați Copiii, București, 2010 (Research about the “hidden” costs of education - Free education costs, conducted by Save the Children, Bucharest, 2010). The survey questionnaire was conducted based on a sample of approximately 600 parents and 300 teachers.

¹⁸ Cât investește statul român într-un student, articol publicat în Săptămâna financiară, 4 Martie 2011 (How much Romanian state invests in a student. Article published in Financial Week, March 4, 2011)

¹⁹ Becker, G., Capitalul uman. O analiză teoretică și empirică cu referire specială la educație, p. 180

also social aid scholarships for students from families with very small financial funds. Also, some private companies assist the performing students through foundations offering scholarships.

Therefore, the biggest problem remains at the primary and secondary levels of education where the Romanian state must find better solutions to encourage school attendance and lower school dropout in poor families or with single parents. In terms of human capital it is noted that rural schools in counties with a low level of socioeconomic development are characterized by poor learning conditions, low quality education, socially disadvantaged segment of pupils which get low educational performance: lower participation in the yearly evaluations with very poor results, which often either exclude them from the competition, or do not allow them the enrollment and attendance in a desired school to continue their studies.

Conclusions

Currently, education systems are funded primarily - sometimes almost totally by the public power, public funds, even if the economic theory does not recommend full public funding. Community practice revealed that at the European Union level funding modalities of the educational system varies significantly from state to state, ranging from full funding to the combination of private funds with public ones. Low potential of the Romanian education funding from private sources and needs and stringent requirements which Romania has to face, require increased attention to the educational process from decision makers, both in the quality and in ensuring an appropriate degree of financing. The need to find adapted solutions for the Romanian education system is urgent because the low level of public expenditure on education (about 4% of GDP) leads to the proliferation of serious effects on educational performance and human capital accumulation. Among them are:

- Decreased level of teacher's training because of the lack of motivation due to lower wages;
- Migration of highly qualified teaching staff to better paying areas of the country or abroad;
- Loss of logistics that cannot sustain an efficient teaching process;
- Decreased quality of students performance and accumulation of skills necessary after graduation;
- Increased school dropout, especially in rural areas where it is found a constant need for qualified teachers, especially in Moldova.

All these effects cause the loss of human capital among both teachers and pupils. Underdevelopment of human capital can lead to a partial exclusion of human resources able to work, but unprepared in terms of knowledge and skills required on the labor market. This "exclusion" of human resources creates serious social and economic effects like increasing unemployment rate and number of social assistance or hiring on low qualifications jobs for small salaries. These effects will be extended by the author in other works.

In conclusion, the differences of the educational system between Romania and European Union developed countries can be eliminated through a medium and long term policy regarding the school network, concentration and modernization of educational facilities. Therefore, it is recommended that Romania has to create an efficient financial system, along with the development of educational policies designed to enhance the quality and prestige of education that should be regarded as a national priority and activity of a general interest that the future depends largely on the degree of development of the country.

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