



Funding the Educational System and the Quality of the Public Educational Services in Romania - A Literature Review

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ABSTRACT

Both among the specialists and the general public, the topic of funding education causes new controversies and bring about new promises every year. Nevertheless, no "miraculous" formula has actually been found so that it should be satisfactory to all parties involved, given the high stake – the future of Romania. The aim of this paper is to highlight the importance of funding education and to show the relationship between funding the system and the quality of the education. An analysis of how education is financed at the level of the European Union, on the one side, and an analysis of how our own system is financed, on the other side, lead to the conclusion that high quality education does not necessarily and solely lead to reaching the (targeted) percentage of the gross domestic product, as a funding-related desideratum; in terms of funding the system, the quality of the education is a consequence of a suitable distribution of the financial resources, in line with the needs identified. The state has to identify an appropriate way to invest in education so that the investment should be productive and generate added value in society, through the persons trained.

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1. Introduction

The budget earmarked to education causes strong debates on an yearly basis, both among the politicians and the representatives of the various institutions involved in the sector of education as well as the general public. Such debates show therefore that the education represents one of the greatest concerns nationwide and also one of the biggest challenges to which the government has to face (Constantin D et al, 2022).

The leaders of the parliamentary parties, the representatives of some institutions in the sector of education as well as the representatives of some organisations concerned signed in March 2008 the National Pact for Education. One of the objectives included in this document is allocating education minimum 6% of the gross domestic product provided that objectives considered for funding are clearcut and assumed (FDSC, 2008). This objective is transposed three years later in the text of a law: "In order to fund the national education, minimum 6% of the gross internal product of the respective year is allocated from the state budget and the budgets of the local public authorities..." (National Education Law, 2011); however, since the Law on Education was promulgated in 2011, the education has not benefited to date from a funding level as stipulated in the law (Government Emergency Ordinance no 114, 2014) (Government Emergency Ordinance no 130, 2021).

Beyond figures, what is yet the stake of funding the educational system? Both in economic and social terms, education represents, on a medium and especially long term, a productive investment (Manolescu, 2009). Any society sees growth through education; at individual level, the effects of education are direct and impact someone's personal wellbeing, health and implicitly their lifetime. (Center for the Study of Education, 2018).

A high level of studies represents the premise towards gaining a status on the labour market which should generate high income for people and therefore a better standard of living (Deloitte, 2021). This is merely one of the reasons why high quality education should penetrate all social categories with the intent to support the beneficiaries of such services towards evolving and growing in their vocational fields so that they

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ultimately create added value in the general process of the development of the society (M.R. Gabor et al, 2021).

All aspects considered, the expenditure of a state with the education of a person acquires government investment value whereas the efficiency of such investments are to be found in the amounts paid by each individual in taxes or other contributions, on the one side, and in the level of dependency in terms of state financial aid programs, on the other side (Deloitte, 2021).

2. Materials and methods

To prepare this paper, databases such as Google Scholar and ResearchGate were accessed. A good starting point was also represented by the literature selected for this purpose. Scientific information was also identified in several media publications and some official websites of public institutions acting in the field of education and used for documentation. The statistical data was collected from the official European Commission websites. The information selected was represented in graphs and interpreted. The actual results were checked by drawing comparisons with articles published in the literature.

3. Overview on funding education at the level of the European Union

At the level of the European Union, according to data published by Eurostat (Eurostat, 2022), education takes the fifth place in a classification on the general public expenditure in 2020, with 671 billion EUR, representing 5.0% of GDP, as shown in figure 1.

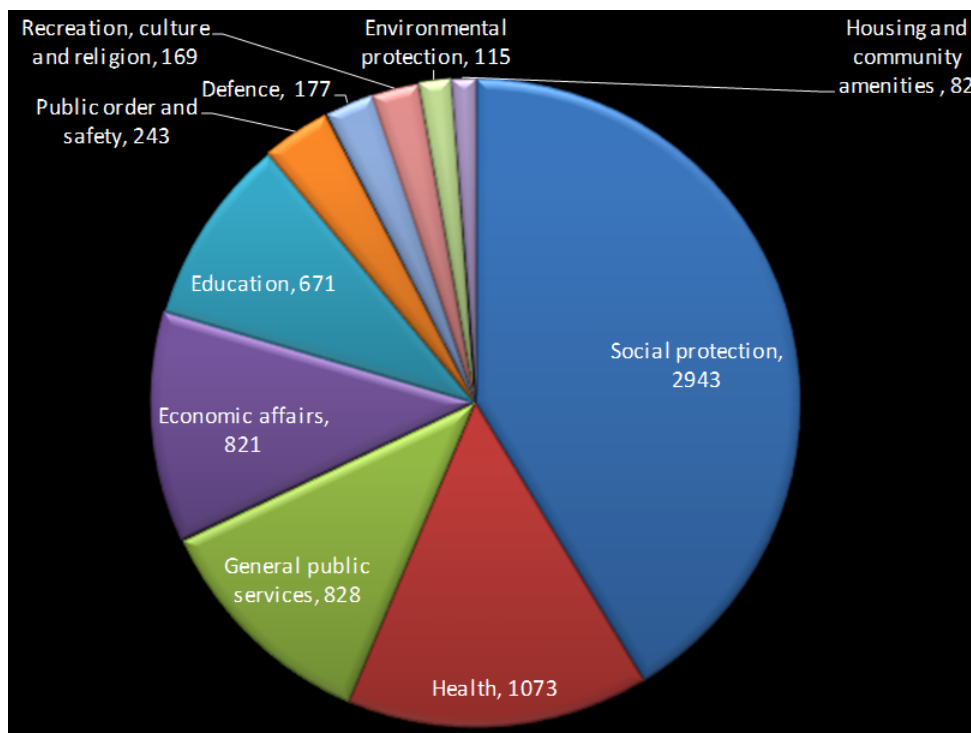


Fig.1. General government expenditure in EU in 2020(billion euro)

Source: Author based on Eurostat data (Eurostat, 2022)

Sweden has the highest percentage of GDP earmarked to education (7.2% of GDP), Estonia and Belgium, both with a percentage of 6.6 of GDP earmarked to education, followed by Denmark (6.4% of GDP); additionally, Island allocated 7.7% of GDP to education; (Eurostat, 2022). At the bottom of the list, we find Greece (4.5% of GDP), Italy (4.3% of GDP), Bulgaria (4% of GDP); Romania is on the second lowest place with 3.7% of GDP, whereas Ireland comes last with 3.1% of GDP (Eurostat, 2022).

With reference to the weight of the general education-related expenditure against the total public expenditure in 2020, at the level of EU, they were 9.4%. Estonia (14.3%), Latvia (13.8%) and Sweden (13.6%) are countries where education expenditure was high compared to the total public expenditure incurred with education; as third countries, Island (15.3%) and Switzerland (15.2%) also reported significant expenditure (Eurostat, 2022). The lowest education expenditure against the total public expenditure was reported by Austria and France (8.9 % each), Romania and Spain (8.8%), Italy (7.5%) and Greece (7.4%) against the total public expenditure (Eurostat, 2022).

Figure 2 shows the data mentioned above with the observation that for Belgium, Denmark and Ireland Eurostat does not provide any data on the weight of the education expenditure of the total public expenditure for 2020.

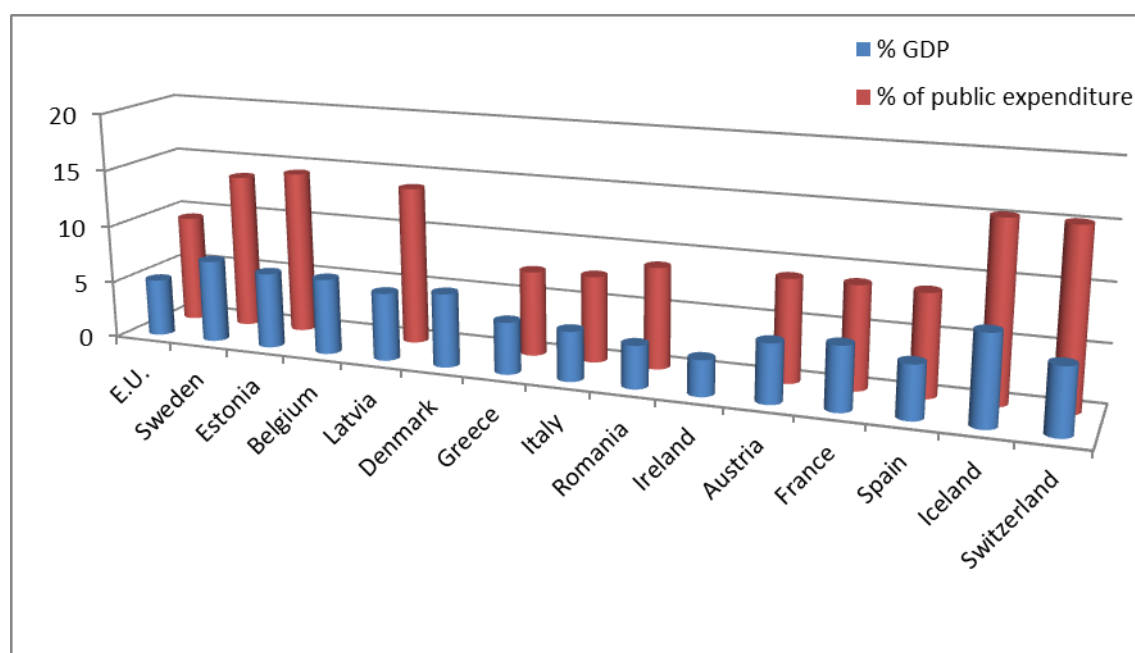


Fig.2. Graphical representation of the weight of education expenditure in GDP and the total public expenditure in EU countries, in reference to countries of the European Union - 2020

**for Belgium, Denmark and Ireland, Eurostat does not provide any data on the weight of the education expenditure of the total public expenditure for 2020*

Source: Author based on Eurostat data (Eurostat, 2022)

The economic growth ratios were strongly affected by the imbalances generated by the COVID-19 pandemic, and the consequences will be at least visible on a medium term. In this context and taking into account that the state budgets are the main funding sources for education, the education is expected to be underfunded in the future. Therefore, the European Parliament proposed the member states that they each prioritise their investments in education and advise them to take into consideration that higher budgets for education do not necessarily mean reaching the targets set, while good investments trigger positive results (European Parliament, 2021). To put it differently, “more” does not mean “better”. Establishing and reaching a certain percentage of the gross domestic product or the total public expenditure for education does not guarantee a better funded and therefore a more efficient system. These figures do not represent indications on the distribution of the public financial resources at different levels of the educational system or by categories of beneficiaries of educational services. Nevertheless, most debates on funding education among the representatives of the general public relate to these indicators and fail to approach in minute detail the actual issue: how these financial resources are distributed within the system (Lang, 2005).

In Romania, the education budget does not rely only on the budget of the Ministry of Education. There are also the budgets allocated from other sources (other ministries, local public administration) (Culture Magazine, 2022) (figure 3).

With regards to funding pre-university educational establishments, they are funded from public funds or, as provided by the law, from other sources, and consist in basic funding, complementary funding and additional funding (National Education Law, 2011b).

Basic funding is covered by the state budget using amounts broken down from the value added tax, through local budgets, and cover salary-related expenditure (salaries, other monetary rights, including relating contributions), expenditure intended for lifelong training programs and staff assessment, expenditure with internal periodical assessment of pupils, material expenditure and service-related expenditure as well as current maintenance expenditure. (National Education Law, 2011c); all these expenditures have to underlie the standard cost per direct beneficiary (kindergarden pupils/pre-schoolers/pupils). However, in practice, the standard cost is not determined according to the funding needs, but in line with a general financial allocation (Hâj, 2017).

Basic funding of an educational establishment is set based on the standard cost per preschooler / pupil (established differently for each educational level, field of study, major).

Complementary funding (National Education Law, 2011d) is ensured by the budgets of the territorial administrative units where the pre-university unit is based as well as from amounts broken down by value added tax, which cover the expenditure with: investments and rebuilds / building consolidation, subsidies of cafeterias and boarding schools, national assessment of pupils, scholarships intended for pupils, transportation of pupils, commuting expenditure incurred for teachers, periodical medical check-ups of employees, competitions and extracurricular activities within the educational system, work safety and health

of both staff and preschoolers / pupils, management of emergency situations as well as expenditure made with European projects in the field of education and professional growth.

Additional funding represents a fixed global amount from the budget of the Ministry of Education intended for awarding pre-university educational establishments with remarkable results in the field of inclusion or school performance; this fixed global amount from the state budget is completed by an additional contribution under the form of grants allocated by local / sector councils and county councils / General Council of Bucharest Municipality (National Education Law, 2011e).

According to the law (National Education Law, 2011f), the pre-university educational establishments may obtain their own income from specific activities, income from donations, sponsorship and other legal sources.

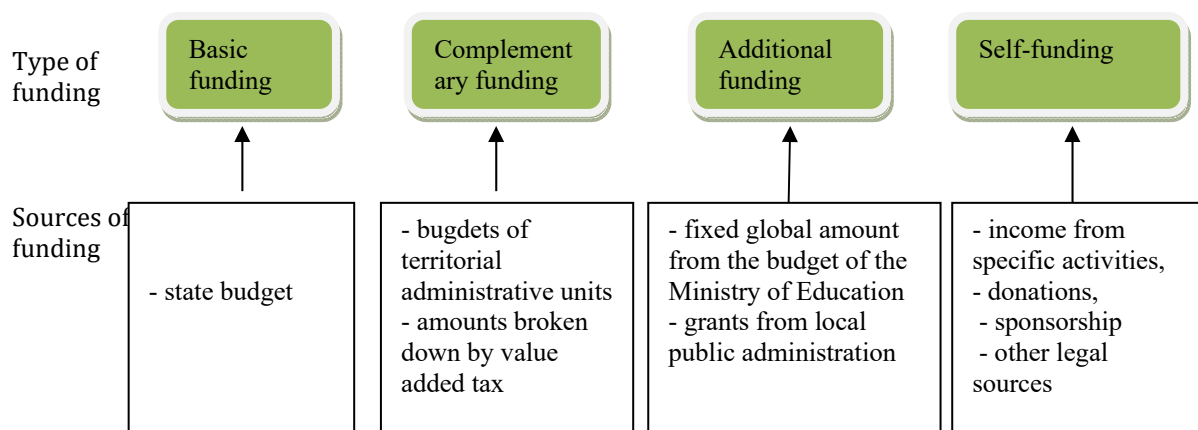


Fig.3. Types and sources of funding intended for state pre-university educational establishments

Source: Author based on Ministry of Education (National Education Law, 2011)

As already shown above and indicated in figure 3, funding educational establishments is not covered from the budget of the Ministry of Education alone. By decentralization, a large amount of the funds needed to equip and render the educational establishments functional, to cover both pupils' and teachers' transportation costs, to support extracurricular activities, come from budgets of local authorities; the farther fetched the decentralization process, the more funds directed to schools and allocated through local authorities.

4. Quality of the education as a consequence of suitable funding of the educational system

"Suitable funding" means funding which meets the needs of the educational system. Firstly, such needs have to be identified on scientific basis within a complex analysis which triggers the idea of standard cost per actual pupil. In the school year 2020-2021, 95% of the standard cost per preschooler / pupil was used to cover the salaries of the teaching staff (National Council of Pupils, 2021) which means that only 5% were used to meet other needs of preschoolers / pupils ("good and services", professional training, periodical assessment of pupils).

Another aspect which, in our opinion, should gain attention and adjustment refers to the formula used to establish the standard cost per kindergarden pupil/preschooler/pupil; the current formula does not take account of other factors relevant so as to needs such as social and economic context of the pupil / preschooler or the family environment of the pupil.

A suitable funding may not be provided in the absence of accurate analyses on the needs in general, and in particular those needs which, unless met, may lead to school dropout, early school leaving and adoption of a consequential standard cost.

Similar to any public service, education is also "called" to satisfy the general interest of beneficiaries. The quality of the service is a consequence of (direct and indirect) beneficiaries' satisfaction, on the one side, and beneficiaries' results in the field of education, on the other side. These results are best reflected in the pupils' scores obtained in international standardized tests (The Program for International Student Assessment PISA).

PISA (The Program for International Student Assessment) is a comparative study conducted at international level and initiated by the Organisation for Economic Cooperation and Development (OECD); the aim of this study is to measure how advanced the competences of pupils below 15 are, in three main areas: reading, mathematics and sciences (National Education Policy Center, 2021). This program is scheduled to continue until 2024; Romania participated to PISA assessments as early as 2000. Six participation cycles have been completed so far (PISA 2006, PISA 2009, PISA 2012, PISA 2015, PISA2018 and PISA 2021).

In their last participation in 2000, Romania came 34th of 42 states involved, whereas in 2006, it was 47th of 57 states; in 2009, Romania was 49th of 65 competitors and in 2012 it went slightly lower, i.e. position 45 of

65 states; 2015 brought Romania position 48 of 72 states participating in the assessment program. The perspective is not gratifying, especially if we consider that the pupils assessed between 2000 and 2018 have accessed or will soon, theoretically, access a competitive labour market worldwide due to globalization.

5. Some considerations on higher education system

In the context of current underfunding and given some political, social and economic constraints, over the last decade there have been debates on quantification of the effectiveness of the higher education system based on two types of assessments [Cicea, Cl., 2007]: classical view (according to which assessment emphasizes effects obtained irrespective of the efforts made) and systemic view (according to which assessment is based on the relation between actual effects and resources used).

According to literature, the effects of the activities carried out in education fall into cognitive or affective, quantifiable or unquantifiable, economic or social.

In his treaty "Investment in Learning", (cited by Cicea, Cl p.95-96), H. R. Bowen offers another approach on assessing the effects in education and presents five different methods of quantification:

- the first method of quantification is to consider all and any expense incurred in relation to education as a measure of its effectiveness;
- another method to evaluate the effects is to consider the potential growths in the human capital as a result of higher education;
- the third method is to study the economic growth recorded in the United States, for a specific timeframe, and the extent to which the education played its role in such growth;
- the fourth method refers to evaluating the investment return rates applicable to the higher education system;
- the fifth method of quantification is to inquire on the subjects' opinion so as to their own university experience.

In addition to training highly qualified specialists, the university creates strong bonds with the business environment and everything around and relating to it. The lack of financial means (over the past 20 years, in most industrialized countries, the level of public expenditure intended for education has decreased from 7% of their GDP to 5.5%) has led to external sponsorship. The government delegates shortage management to lower levels, local groups, and therefore develops the concept of "financial autonomy" of the latter. The underfunding brings about development of entrepreneurial universities and stimulates partnerships among higher education establishments and companies. The liberalization of the educational market occurs at an accelerated pace also due to the introduction of new information and communication technologies in schools and universities. The universities become involved in the preparation of longlife training programs, retraining of the unemployed, revitalization of the economic potential of the collective.

6. Conclusions

In our opinion, there is a direct causal link between funding the Romanian education system and the quality of the education; we consider that the main issue is not underfunding the system, but the incapacity of such funding to meet the actual needs of the beneficiaries of educational services. The proof in this respect are the highly poor results that Romania has scored in the PISA assessment tests; these results are a good indication of where Romania stands as a society and an economy worldwide.

Consequently, there is a major interest of the Romanian educational system in the new Romanian education law of which promulgation is scheduled for January – February 2023.

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