

UNBALANCES ON THE EDUCATION AND INNOVATION MARKET – ENHANCEMENT FACTOR OF THE CRISIS IN ROMANIA. A LIBERAL APPROACH

Lecturer Ph.D. **Aurelian Virgil BĂLUȚĂ**
Faculty of Financial and Accounting Management, Bucharest
Spiru Haret University
E-mail: aurelian.baluta@yahoo.com
Liviu JICMAN
Liberal Studies Institute

Abstract

The paper starts from the identification of imbalances on the education and innovation market in Romania. The implications of each of these imbalances on the amplification of the crisis are explained. Solutions are presented and estimates are made of resources to be allocated to restore that balance. The imbalance and economic growth issues and even demands of the knowledge economy aim to be addressed from a liberal point of view.

The paper includes the following chapters: introduction, the position of education and innovation resources in the fight for development against the crisis, the shortage of places in kindergartens – serious problem in pre-school education, the lack of funding for research, projects possible for a real deficit. The position of education and innovation resources in the fight for development is presented in accordance with international accounting standards, the economic science and the present radical liberal current. The last chapter lists specific projects and “My city, city of innovation” and “Internet/TV platform for pre-university education” projects are being detailed. Statistical data which is available at public authorities is used and the information from blog debates is being valued.

Keywords: *education market, innovation market, imbalance, crisis, re-launch, investment*

JEL Classification: I₃₉

Introduction

This paper aims to identify some gaps in the education and innovation market. There is used statistical information provided by public institutions. Solutions are presented as a long list of projects and a more detailed description of the two of them. This paper falls into the category of economic policies in general, of policies destined for education systems and innovation in particular. The data sources are statistical in nature. There were used public debates to which the authors participated, including the opinions of participants who did not have at a time the majority support and have given up to the launched ideas.

The development phase that mankind is going through now was defined by many professionals, with a quasi-consensus in this regard, as the knowledge society. But knowledge is based on information and most information we use is obtained through education. The transition to new stages of development is also conditioned by information obtained through innovative processes, primarily through scientific research. There are frequent points of view according to which “the technical-scientific revolution taking place in the world for decades, radically alters the conditions of production and opens unlimited possibilities for increasing the material wealth of the world, broadens knowledge and peoples spiritual life” (Sonea, G., 2009).

Generally speaking when the balance problem is tackled, it refers to the state budget, the labour market, the financial market, the money market. Sometimes the information market is included as the main feature of the knowledge society (Angelescu, C., 2009). Moreover, only tools that act on the financial, money, work markets, or on government spending are seen as solutions to exit the crisis. In other words the economy is seen in the short and very short term and mainly from the perspective of previous stages of evolution. We do not support the views under which focusing efforts in finding talent in contemporary society is a step taken outside the capitalist system, money passing on second place. On the contrary, the capitalist system must improve and allocate resources, especially to those specific activities of the new stage of society development, namely knowledge economy. Education and innovation should receive more resources to stimulate the present and future development and to limit the risks of new crises. Stability on the education and innovation market must be carefully tracked in the future, the prospects of development depending on them.

The position of education and innovation resources in the fight for development and combating the crisis

A problem for solving the crisis is finding ways to increase competitive advantage. To the extent that a firm, a national or regional economy identifies solutions to enhance their competitiveness on the market then it has chances not only to quickly emerge from recession but also to transform the crisis into an opportunity. Educational and innovative resources are the most flexible for an organization and among those who have the highest efficiency. The investment in education was frequently appreciated as the most effective investment. Using the competitive advantages specific to cluster collaboration (Gavrila, I., 2006) is not possible if there is no compatibility in preparing human resources and in organizational culture.

In defining the economic growth it is envisaged their stability and implementation in a reasonable time horizon. In a relevant and accessible approach, the economic growth policy represents actions and measures undertaken by the state for the growth of GDP *for a longer period of time* (Angelescu C., 2004). Under this definition, economic growth cannot be considered as a mathematical increasing of GDP while reducing absolute or relative resources allocated to areas that provide

economic and social support in the future, such as education and innovation. One of the major errors tackling education and research in Romania is including them in the category of current expenditure. Under international accounting standards taken in the national standards (MFP Order 3055/2009), resources that are acquired for obtaining future economic benefits are assets. The accounting doctrine further elaborated stating that “future economic benefits *embodied in assets* have the potential to contribute directly or indirectly to the entity’s cash flow” (Boajă and Lungu, 2006). It is exactly the case of education and innovation: resource consumption today for economic benefits to the public budget in the future. Benefits will be translated into cash flows generated by the activities of persons subject to education or innovative activities prepared in advance. In these circumstances, any allocation for education and innovation shall be accounted for as investments for the public budget, with a direct impact to the economic recovery in the future.

By drawing attention to the problems of education and innovation financing we do not see the presence of the state as perpetuated. Like the doctrine of radical liberalism states, only one prophecy should be possible in this field: the survive only of the units that can satisfy their customers, i.e. the youth and their families in the case of education establishments, the beneficiaries of innovation solutions in the case of research-development-innovation organizations (Friedman, M., 1998). Meanwhile, the educational and innovative services can be analyzed in terms of the economic theory of radical liberalism in the form of testing conditions for the existence of economic goods. Like any other products, services or works, even education services must meet all the following four key conditions: the existence of human need, the work to have properties which enable the subject to be put into a causal relationship with the satisfaction of a particular need, to have knowledge of this causal connection, to have a sufficient control over the property for directing it to satisfy the need (Menger, C., 2010). Customizing this to services of education and innovation we come to the requirement that they must meet the real needs of the present stage of development, namely the stage of knowledge society.

Education and innovation are important resources for development. Education is a critical filter to assess the equality of opportunity between genders, socio-professional categories, regions, races, etc. Discrepancies in access to education can lead on a medium or long-term to major differences in remuneration. Instead, the equality to education alone, without an economic and social environment based on competition, does not ensure equality of opportunities. For example in Romania, the student status of women in the labour market is 2% to 1.7% of men (Andronie, M., 2011). However, a significant gap is registered in favour of men in terms of income (Andronie, M., 2011).

The deficit of places in kindergartens – a major problem of the pre-school education

From the very first stage of education, the pre-school, there are problems that occur in allocating resources. The acute shortage of places in kindergartens,

especially in urban areas, is an imbalance with major impact. In the absence of validated data at a national level we will make an analysis at capital level.

According to estimates of the Bucharest City Hall, in September last year, the deficit of places in kindergartens reached, only in the capital, 25,000, the biggest problem being in Sector 3, where demand exceeded supply with 7-8000 places. This means that the required number of places in kindergartens was close, at that time, to double the offer provided by the public system, respectively 32,000 places for 2011. Unfortunately, this problem, although well known, is even more difficult to resolve given that it is denied by authorities in the field: ISMB (Bucharest School Inspectorate) representatives said, on the same occasion, that the existing number is “almost sufficient”.

The deficit of places in kindergartens in the public system in Bucharest is chronic, which is observed every year. Here are some figures from previous years:

For the year 2010-2011, ISMB centralized 37,000 applications as opposed to 31,500 places available. The resulted deficit is only the official one, adding to this the not submitted applications, because the parents are notified that there are no more places and so on.

The shortage of places in kindergartens in Bucharest is presented in Table 1.

Table 1

The situation of available places and the deficit of places in kindergartens in Bucharest

Sector	Available places in kindergartens	The deficit of places in kindergartens	The ratio between the deficit and the available places
1	2	3	4
1	4,752	1,124	23.65
2	6,700	950	14.18
3	4,700	2,950	62.77
4	4,200	1,859	44.26
5	3,360	1,765	52.53
6	5,600	1,800	32.14
Total Bucharest	29,312	10,448	35.64

The size of the deficit of places in kindergartens can be highlighted from multiple perspectives. Firstly, the large number of people that cannot be enrolled in pre-school education system shown in Table 1. Secondly, even the number of places available is oversized, which is also confirmed by the statements of ISMB representatives. Four or five years ago there were 10,000 applications without a place in kindergarten, and now the number of places decreased. Pre-school education units are required to enrol more children in a group, although the optimal number is 20. The distribution of kindergartens in Bucharest is not equal, so that puts pressure on some kindergartens in number of requests. As many applications

as possible must be honoured. For this reason, pre-school education units are forced to exceed the number by about six to eight children per group.

The lack of places in kindergartens has multiple negative effects. One of these is that, for each child that parents do not get a place in kindergarten, a family member is unavailable for the labour market, who has to stay home for child supervision.

Secondly, we find that it is also about social inequity: the financing of pre-school education system is made from public funding, from the budget. Therefore, the beneficiaries should all be, in an equal way, taxpayer citizens. Unfortunately, that's not the case. A part, those who manage to enrol their child in kindergarten, benefit indirectly from the financial allowance by participating in the system, with its advantages and disadvantages, the rest do not benefit at all. In this second broad category we include both parents who decide to enrol their children at a kindergarten in a private system and who support the full cost without benefiting from any allowance or subsidy from the state, and those who, failing to enrol their child in a kindergarten, stay at home for his care.

An idea launched for some time for public debate, on which no consensus was reached, is that of vouchers of education to finance kindergartens, which would ensure equal opportunities between the public and private system, would encourage the completion of the deficit of places with investments in private kindergartens and would guarantee equal rights for all children. Thus, each parent would receive a voucher of education for their child and will direct it to the kindergarten it wants. In this way financing is made in a competitive system, depending on the quality of services. The voucher has exclusive use. Its value will be equivalent to state money allocated to kindergartens.

The deficit of funding for research

There is no possible significant progress in any field, let alone research, the main branch supporting innovation, if funding issues are not resolved.

The connection between knowledge and the economic process is well defined by the economic thinking in general and by the liberal one in particular. It is properly appreciated the reality according to which "capital, labour and knowledge are limited means that man can use to fight the world's greed in which he exists" (Up, C., 2011).

From the data presented by the General Directorate for Regional Policy of the European Commission it results that Romania spends 0.5% of GDP on research and development, representing the lowest percentage recorded by a European Union country. The EU average is 2% of GDP, while the highest value recorded is 3.9%. This is while the GDP per capita for Romania is 45% of the EU average. Romania's plan is to achieve a rate of 2% of GDP spending on research and development by 2020.

Romania is also ranked on the last place regarding the number of employees in areas related to science and technology (12.6% of the total number of employees, than the European average of 18.8% and the highest value recorded of

33.1%) and the number of employees in high tech sectors (1.8% than the European average of 3.7%).

The fact that Romania is not investing enough in research, a priority field for other states, is not new. For example, in recent years, Romania has effectively spent for research and innovation only 0.49% of GDP. The government proposed in 2020 to achieve a level of research investment of 2% of GDP, of which 1% contribution of the private sector. In recent years, Romania has invested in research only one quarter of the European average, and the private sector contribution was about 0.15% of GDP. Thus, Romania's export of high technology is at a quarter of the EU.

After 2008, in the context of economic crisis and, especially, of budget deficit problems, investments in research have had more to lose. Limited investment in education is due to reasons related to the bureaucracy of public finances. It is easy to prove that, for Romania, as a country that aims to reduce the gap with the EU average through an economic growth, the chance of investing in research and technology is one of the main strategic options.

Possible projects for a real deficit

In the spirit of liberal doctrine, we state that it can act through stimulation or allocation of resources that have to return to the public budget. As argument we show in Table 2 a list of potential projects with limited resources and major effects.

Table 2

The list of possible projects with a low amount of resources and an important impact in the field of education and innovation

No.	Project name	Deficit on which it acts	Brief explanation of project content
1	Widen cooperation between schools and high schools in Bucharest or high schools in EU countries	Deficit in recognizing the value of training young people in Romania	Organized meetings take place, physical or virtual, between students from different EU member states
2	Wireless in public places where most people study or spend their free time	Deficit of information or inter-connecting activities	Specific investments with a role in education and information
3	Attracting quality students and teachers from schools in the submission and implementation of research projects	Innovation deficit	Increasing the number of people who can participate in innovative processes in society by attracting the recognized elite from Romanian high schools
4	Organization of competitions and creative centres for youth	Deficit in understanding and promoting values	Through contests and creation centres, talented young people in

No.	Project name	Deficit on which it acts	Brief explanation of project content
			the same field are faced
5	My city – city of innovation	Deficit for the implementation of large-scale innovation, cost-effectively	Further detailed below
6	Internet platform or local TV station for pre-university training	Deficit of general training under exigency standard	Further detailed below

Further, we detail two of the projects listed in Table 2.

The project „My city – city of innovation” – example of initiative to reduce the deficit of innovation

Project description. In the Prefectures and County Councils an “Advice for inventors” section is formed, consisting of two business consultants. They will provide free advice to all those who hold patents of inventor and want to apply them to commercial conditions or to industrial scale in that county or in Bucharest.

Project costs: Salaries and social contributions related to two specialists in business consulting. An estimated 10,000 lei per month.

Project benefits: A large number of patents will be commercially exploited. It creates jobs in sectors based on innovation, generally well paid. It increases fees charged to local budgets.

Flexibility. If performances reach saturation or proves ineffective it can be stopped at any time. Restructuring costs are equivalent to the period of notice for the two consultants.

Access to resources. In the following period a number of consultants specializing in structural funds will have far fewer orders due to the closing of this source of funding.

Relative comparative advantages of communities for such a project. There are a number of patents that were not implemented due to the gap between the idea and business resources. Most research institutes are able to make the micro-level production of a number of patents in their field.

The project “Internet Platform or local TV station for pre-university education” – a contribution to improve school training in terms of knowledge society

Project description. An on-line training platform is organized for students in the high schools and middle schools of the area of each county or in Bucharest. In case of large interest, a local television station can be organized dedicated to training. It presents advice for the exam subjects, foreign languages and other subjects of the curriculum where deficiencies are manifested in preparation. Such

media channels can be used for preparation of excellence – academic Olympics. There may be included career guidance sessions for students in last year classes. It can improve the results of international tests.

Project costs. The project can be self-sustaining from advertising. Initial investment is needed depending on the scale required.

Form of achievement. A joint stock company in which the county council, the City Hall of the county or the City Hall of Bucharest and each of the six sectors are shareholders with different shares (voting rights).

The project benefits. Improving school performance with a small amount of resources consumed and specific experience in the knowledge economy.

Conditions of project launch. Participating in frequency auction.

Pilot launch opportunities. Partnership with one of existing sites or television.

Specific advantages of the project. There is experience in this field in the private university system.

Conclusions

There is a shortage of places in kindergartens with social impact (inequity in access to budget resources for education) and economic impact (the reduction of potential employment). A fair funding of the education system, including pre-school, regardless of which system is chosen, should be made according to the number of children, potential recipients, and not the number of existing places. By their nature, education and innovation meet international accounting requirements necessary to be removed from the category of current expenditure. In the spirit of the liberal doctrine and the specific of knowledge society, a number of concrete projects can be performed, such as “My city – city of innovation” or “Internet platform / local TV pre-academic training” which may be conducted with limited resources but with important leverage for the economy and the public budget.

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