

Romanian higher education: present and perspectives

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ROMANIAN HIGHER EDUCATION: PRESENT AND PERSPECTIVES

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Journal, Revista Romana de Statistica, The Romanian Journal of European Studies.

Abstract

The paper aims to present the current state of Romanian higher education, based on statistical data on number and trends of student population and staff. The latest progresses in Bologna process are analyzed, with a special attention to international student's mobility. Based on demographic projection, the paper also reflects the perspectives of Romania higher education at 2025 horizon.

Statistics reveal an unseen development of Romanian higher education, in terms of number of students and an increasing international cooperation, but the perspective are more pessimistic. Demographic trends will have a crucial impact on higher education. Romanian universities apply fairly passive policies which reflect rather adjustment to current demographic situation than anticipation of changes to come. Obviously, combining the two approaches would be an optimum solution.

Key words: higher education, international student mobility, quality assurance, demographic projection

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INTRODUCTION

The reform of Romanian higher education, awaited by Romanian young people, represents at this moment the construction of a higher education system as compatible as possible with the European educational space. In addition, Romanian higher education institutions need to respond to the demands of the knowledge-based society and European Higher Education Area.

This paper is organized in three major parts. In the first one, I present the current state of Romanian higher education system using the available statistics concerning number of students and academic staff. I focus in the second part on one particular aspect of higher education, the international dimension. I approach this aspect considering the harmonization of Romanian higher education system with the European one, according to Bologna process, and also I take into account the international student mobility.

Part three is devoted to a prospective view of number of students, having in mind the demographic changes that affect Romanian population. In the end of this chapter I identify the consequences of demographic trends on higher education.

The paper ends with conclusions and a few recommendations, based on the identified challenges.

1. RECENT TRENDS IN HIGHER EDUCATION

The Constitution of Romania, adopted in 1991, is the foundation of the entire legislation in the field of education. The specific legislation, regulating higher education in Romania is represented by three organic laws: the Law on Education (Law 84/1995), with its further modifications and supplements, the Statute of teaching staff (Law 28/1997), with its further modifications and supplements, as well as the Law of accreditation of higher education institutions and recognition of diplomas (Law 88/1993), with its further modifications and supplements.

The actual structure and administration of the Romanian education system are still influenced by their historical past, when a special attention was conferred to industrial and agricultural sectors. In the last two decades, the Romanian education and training system has been reorganized. Changes have been introduced to reflect the transformation of the labour market and changing technological and production processes. The education system includes:

pre-school education, basic compulsory education (primary education; gymnasium education), secondary education (high school education; vocational and apprenticeship education), post high school and foreman education, tertiary education (for short term; for long term) and post-university education. In addition, several other forms of education exist to create a system of lifelong learning including distance education, private education, education for minorities and special education. Compulsory education includes 8 grades (until 14 years old).

The enrolment rate for tertiary education presented an ascending trend in Romania during the period 2000-2004. During this period of time, the enrolment rate grew from 32.9% (academic year 2000-2001) up to 51.2% (academic year 2005-2006); this evolution shows the sustention of a spectacular ascending trend for tertiary education.

Starting its development at the beginning of the '90s, private education serves 23% (2003-2004) of total number of students. High private education has mostly been orientated to less uneconomical areas and much successful at students and at the labor market. Private higher education institutions generally have a humanistic structure, with specializations mainly in the economic, legal, philological and theological fields.

On the other hand, the public system of tertiary education is very important, as it engages almost 77% of total number of students enrolled in tertiary education. Changes that have occurred globally in the education system have been strongly influenced by the increasing number of public and private higher education institutions.

The indicator concerning the number of the teaching staff involved in higher education has grown rapidly, mostly during 1995-2000, by 34%. Almost three quarters (71,9%) of the educational staff is female, the tertiary level is the only one where men are more numerous than women.

The ratio between the number of students and the number of professors is extremely important because it is a starting point for efficient policies in education and it also influences the quality of the educational process. The link between these two elements is strongly tied to the salaries of the academic staff; this may explain the fact that some countries spend more per student than others even when the student teacher ratio is the same.

The students/teachers ratio can vary up to threefold depending on the country. In some countries (Slovakia, Finland, Sweden and Iceland) there are, on average, 10 students per teacher; this figure rises to more than 25 in Greece and Slovenia. In general, expenditure per student is lower in countries in which the number of students per teacher is amongst the highest and viceversa. Other European countries (Bulgaria, Lithuania and Slovakia) clearly differ from this tendency with low student/teacher ratios (less than 15 students per teacher), yet with some of the lowest levels of teaching expenditure in Europe in 2004. On the other hand, in the United

Kingdom, in which teaching expenditure was amongst the highest in Europe, the student/teacher ratio was higher at 18:1. In Romania the ratio is 21:1 and the personnel expenses are not that big.

2. MAIN PROGRESSES TOWARDS THE BOLOGNA PROCESS

2.1. Quality assurance in Romanian higher education

The Bologna Process is based on a few underlying assumptions¹: both Europe and the world are entering a new era of knowledge-based and market driven economies competing against each other; Europe as a region has to struggle with its two main competitors in higher education and research and development: the USA and Japan; the knowledge society depends for its growth on the production, transmission, dissemination, and use of new knowledge.

The underlying goal behind current transformations of educational systems and research and development is more or less to meet the target set out by the European Council in Lisbon (in 2000). The target is that Europe by 2010 must become 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion' (also the creation of the European Higher Education Area must be completed by 2010).

This is the highly competitive environment in which Romanian education system has to be reorganized and reformed.

Romania has made major steps towards the European Higher Education Area by reorganizing the entire spectrum of university programs. A new higher education structure of the study cycles has been adopted following the discussions that occurred within the National Rectors' Council in November 2003 which have shown a general consensus regarding the adoption of this Bologna objective. Accordingly, the new legislation of June 2004 stipulates the organization of university studies by three cycles, Bachelor, Masters' and Doctoral studies.

The higher education structural reform aims to increase the mobility of the students, improve their chances on the labour market, reduce the number of university specializations and increase the participation in masters' and doctoral programmes.

Since Bergen, Romanian higher education has progressed mostly in the fields of:

¹ MAREK KWIEK, The Emergent European Educational Policies under Scrutiny: the Bologna Process from a Central European perspective, *European Educational Research Journal, Volume 3, Number 4, 2004*

- *The three-cycle system* by continuing the gradual implementation of study programmes within the first two cycles and establishing a new legal framework for structured doctoral programmes.
- The National Qualifications Framework in Higher Education by developing the competency grids for qualifications for 22 domains of study while paying special attention to the harmonization of the higher education qualifications with the corresponding VET qualifications (for 20 study programs from ten different domains of study in higher education).
- Quality assurance by establishing a new methodology for external evaluation of quality assurance in accordance with the European standards and guidelines for quality assurance.
- Cooperation and partnerships among higher education institutions across the EHEA by implementing a new legal framework concerning the organization of integrated university study programs by two or more universities, which leads to a joint degree for all three cycles of university studies (bachelor, master, doctorate). [Miron, 2007]

Quality assurance is the key issue for Bologna and progress in this area will largely determine the success or otherwise of the Bologna Process.

According to the government emergency ordinance regarding quality assurance in education, no. 75/2005, approved by the law no. 87/2006, the main operational concepts regarding quality in education are:

- *Educational quality* (quality of education) is the set of characteristics of a training programme and of its provider, through which expectations of beneficiaries and also the standards of quality are satisfied.
- Assessment of educational quality refers to the multicriterial examination of the degree in which an organization and its programme fulfils the referenced standards.
- The assurance of educational quality is achieved through a set of development actions, which refer to the capacity of the educational institution to elaborate, plan and implement study programmes and to generate the trust of beneficiaries in the capacity of the educational institution to satisfy their requirements.
- *Control of educational quality* in educational institutions involves operational activities and techniques, systematically applied from an authority designed to verify the fulfillment of pre-established standards.
- *Improving educational quality* involves assessment, analysis and continuing corrective actions from the educational institution providing the educational programme,

based on selecting and adopting the best procedures and, also, the choice and application of the most relevant reference standards.

The methodology of quality assurance in education stipulates that quality assurance is mainly focused on learning results. The results of learning are expressed in terms of knowledge, competences, values and attitudes, which can be obtained by following and finalizing a level of education or a study programme.

External assessment of education was established by ARACIS. It refers to the assessment of institutional capacity and of the educational effectiveness of the providing educational institution. The assessment applies to quality management at institutional level, quality of the provided programmes, concordance between internal assessment and the real situations, comparative trans-institutional assessment of the same study programme offered by different educational institutions.

2.2. International student mobility in Romania

Mobility goes in many cases together with migration and for each of them there is not a widely spread and accepted definition.

Mobility is the child of academic freedom and of the irreplaceable exchange of ideas in research, as well as in teaching and study. The literature on mobility classifies the phenomenon into different types, some of which are opposition pairs [Daxner, 2007]. First of all, there is the differentiation into "forced" and "voluntary mobility". *Voluntary mobility* is referred to young students, mainly in their first career to degree, who seek diversity in their study curriculum and eventually return to their home country, either with a degree earned abroad, or ready to take one at home. *Forced mobility* is motivated by poor study condition, political repression, by bleak labour market. The forced or involuntary mobility is also associated with refugee status, gender related, ethnic, religious, language base rain-drain. From this list, it is clear that the interface between mobility and migration is blurred. What is certain is the fact that in the higher education, they are both part of a large system of brain circulation.

International student mobility involves students leaving their country of residence for a period of higher education abroad, or to pursue a related activity such as a foreign work placement or study tour.

International student mobility is defined² as *any form of international mobility that takes* place within a student's programme of study in higher education. The length of absence ranges from a short trip to a full-duration programme of study such as a degree. In addition to study at a foreign higher education institution, mobility can also involve a period in a workplace or other non-higher education environments. Ideally the period of mobility should be long enough to have an impact on the student's appreciation of a foreign culture, and it should have some defined role within a student's learning experience. For many students, this includes the opportunity to apply skills in a foreign work context. However, definitional boundaries are not easy to draw, particularly with regard to short trips abroad, and especially when these do not have an explicitly educational purpose. In Erasmus programme the period of mobility is between 3 month and 12 month.

The beginning of century XXI marked a spectacular ascent in the number of international students at world-wide level. In 2004, at least 2.5 million students of tertiary level studied outside their country of origin, compared with 1.75 million that did it in 1999, which represents an increase of 41%.

Between 1991 and 2004, in Central and Eastern Europe the matriculations of tertiary level increased, in average, to annual 5%. After a slow beginning, from end of the 90 years, the growth level has stayed constant. Although the number of students of superior education in the Russian Federation lowered more than annual 3% between 1991 and 1996; in Poland, Romania and Turkey the matriculations increased.

In the last 17 years, emigration has started to be a more serious problem, as people counteract the lack of opportunities in Romania by migration prospects. Moreover, it is rather the skilled and young who are the most likely to move abroad and, unfortunately, they usually choose permanent migration [Paunescu, 2003]. It is not a surprise that the number of Romanian students that migrate towards the Western educational systems, without ever coming back home, is constantly increasing. The reasons for such a brain drain can be easily noticed. On the one hand, it is the academic environment that provides the youngsters with the guarantee of a qualitative educational process and international certification. On the other hand, it is the perspective of superior material stimuli and the promotion of the best students in the educational and research institutes, or even in the most competitive multinational companies.

Student and teaching staff exchange programs were set beginning with 1991 within the TEMPUS program between Romanian universities and universities in EU countries.

Higher education institutions in Romania have been involved in SOCRATES and LEONARDO da VINCI programs starting 1997. Starting with 1998 Romanian universities have

² International student mobility, Report by the Sussex Centre for Migration Research, University of Sussex, and the Centre for Applied Population Research, University of Dundee, Commissioned by HEFCE, SHEFC, HEFCW, DEL, DfES, UK Socrates Erasmus Council, HEURO, BUTEX and the British Council

taken part in projects developed within the CEEPUS Programme (Central European Exchange for University Students Programme) that promote student mobility for full academic studies, master's and doctorate programmes, as well as exchanges between teaching staff and researchers.

The National Office for Student Grants Abroad was created in January 1998. It manages grants through which the Government of Romania supports Romanian students, in order to study abroad for relatively short periods of time.

After 1998, over 9,000 students have participated to ERASMUS mobilities. During the academic year 2002/2003 45 universities participated in ERASMUS activities, involving approximately 2,400 students. The percentage of Romanian students who are studying in Europe was 2.4% in 2004 and is has been moving upward during last years, so that it has overcome the European average, of 2.2%.

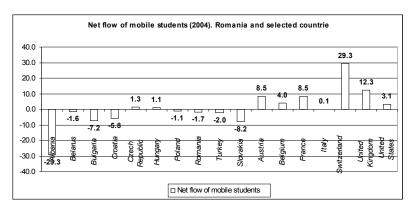
Although the mobility of students was not only in one way, many of our students leave the country for study in some other country for new experiences and probably a better access to information. The most wanted destination countries, within Europe are: France, Germany, Hungary, Italy, and it is also important to notice the important number of students that go overseas, in United Stated.

This East-West student mobility is a well known form of vertical mobility. There is made in the literature [Daxner, 2007] the difference between the two forms of mobility: vertical and horizontal mobility. Vertical mobility is defined as a move from a country or institution of a lower academic quality to a country or institution of a higher education or superior quality, while horizontal mobility is a move between countries and institutions of similar academic quality.

Horizontal mobility is noticed in Hungary's case. In this case the important number of Romanian students is explained by Hungarian language spoken in Transylvania by Hungarian minority, as well as by increasing cooperation between higher education institutions from Transylvania and Hungary.

At the same time, a significant number of students from various EU countries have studied in Romania. Starting with the academic year 1990/1991, several Romanian universities have offered complete study programs in foreign languages like English, French and German. The outbond mobility rate was 3.2 %, which compared to the inbond mobility rate of 1.5% leads to a negative net flow ratio of 1.7%. The situation is common for most of the countries from Central and Eastern Europe, which are student providers for Western countries, rather than student receivers. On the other hand, net flow ratio is positive in Western Europe, as well as in United States.

Figure 1. Net flow of mobile students (2004). Romania and selected countries



Source: adapted from OECD 2006

It is not a surprise that the number of Romanian students that migrate toward the Western educational systems, without ever coming back home, is constantly increasing. It seems that rather the skilled and young who are the most likely to move abroad and they usually choose permanent emigration³.

The reasons for such a brain drain can be easily noticed. On the one hand, it is the academic environment that provides the youngsters with the guarantee of a qualitative educational process and international certification. On the other hand, it is the perspective of the superior material stimuli and the promotion of the best students in the educational and research institutes, or even in the most competitive multinational companies. Of course, the receiving country benefits from the capitalization of the foreign talents, whereas, Romania (the sending country) faces the loss of the value added that could have been directed toward the society's development.

The social dimension of the Bologna Process is a necessary condition for the attractiveness and competitiveness of the European Higher Education Area. This implies making quality higher education equally accessible to all, and stress the need for appropriate conditions for students so that they can completed heir studies without obstacles related to their social and economic background. The social dimension⁴ includes measures taken by governments to help students, especially from socially disadvantaged groups, in financial and economic aspects and to provide them with guidance and counselling services with a view to widening access. At numerous meetings and seminars it has been concluded that among the obstacles to mobility, issues related to visas and social security protection for students and staff engaged in

³ Brain Drain and the Academic and the Intellectual Labour Market in South East-Europe- International Roundtable, www.ad-astra.ro/library/papers/Aferro_Brain_Drain.pdf

⁴ Key issues for the European Higher Education Area – Social Dimension and Mobility Report from the Bologna Process Working Group on Social Dimension and Data on Mobility of Staff and Students in Participating Countries, Ministry of Education and Research, Sweden, 2007

mobility, recognition of study and work periods and lack of financial incentives are some of the most commonly observed problem areas¹⁰. Beside this, language and cultural aspects are regarded by many specialists as a barrier in student mobility.

The liberalization of access in all EU countries is a huge progress compared to the years before, when obtaining a visa was often a big challenge for Romanian students. There are also European countries in which case a visa in needed (Russia, Ukraine), and countries from North America, which are often targets for mobility of Romanian students (US, Canada). In such cases, the application requirements for getting a visa or a residence permit can be very detailed and time consuming as well as expensive.

The finance obstacle is one of the most important brakes in the Romanian students' mobility⁵, mainly financed by scholarships (e.g. Erasmus, Raiffeisen, ONBSS etc.), subventions, and, in a very small proportion, by loans. It should be noted that the average value of an Erasmus monthly grant is €140, which is only intended to cover the travelling expenses and differences between the cost of living. While the range of the monthly grant lies between €100-400, even the highest amount is scarce to cover the vast differences in the standard of living between some countries in Europe.

At this moment, through commitments assumed at the European level, focused on quality assurance, credit transfers and transparency of educational programmes description, qualifications (diplomas) obtained in the Romanian Higher Education ensure the academic and professional mobility of the graduates all over the world. Nevertheless, for a long period of time, Romanian academic degrees have faced recognition problems in Western Europe and North America. In the case of subject matters such as medicine, the problems still continue today. The topic is consequently sensitive, in terms of the need for external recognition.

An extremely important measure that should be taken is raising the attractiveness of Romanian university for foreign students. In addition, more courses and programs in Romanian Universities have to be taught in English.

In all countries language is a barrier to student mobility. Romanian students, as we show previous, are studying both in Anglophone and non Anglophone countries and they not seem to have a linguistically problem. According to the study conducted by Open Society Foundation⁶, it seems that one third of the students believe that most of their colleagues would have no problem understanding a course in another language, and another third believes that half of their colleagues would be able to deal with such a situation. The study also noticed that the courses in English (contemporary lingua franca) are absolutely rare outside the faculties with teaching in

⁵ SOPEMI 2006

⁶ Comsa, Tufis, C., Voicu, B. (2007), <u>Romanaina Academic System, Students and teacher's opinion, OSF, www.osf.ro</u>

this language. So it is necessary to introduce more language courses to assist inward mobility, together with increasing provision in English and other widely used European languages.

3. DEMOGRAPHIC TRENDS OF SCHOOL POPULATION IN TERTIARY EDUCATION

The prognosis of school population offers information about the future evolution of number and structure of school population by: age groups, gender or territorial profile⁷. This means that the evolution of the school population in the last 16 years in Romania was affected directly by the general decrease of total population. Year by year, generations of students diminished, and were also characterized by raised absenteeism and educed rates for passing the secondary school admission exams.

The National Institute of Statistics carried out a population projection⁸ for the year 2025 based on the Romanian population structure at the 1st of July 2003 and on the demographic phenomena evolutions during the recent years: the maintenance of a low fertility level (1.3 children per woman), a slight increase of the average life expectancy at birth and a negative net international migration rate.

The National Institute of Statistics¹⁸ confirms in the population projections (reviewed in 2003) the continuation of the population ageing. In the next 23 years (up to 2025) the number of under–15 years age people diminishes by about 1.3 million, and the number of the elderly increases by 130 thousand. Therefore, the young persons will account for 14.8 percent of all population in 2010 and only 12.9 percent in 2025, while the elderly account for 19.8 percent and 22.5 percent, respectively. The share of the 60 and over population increases to a greater extent in 2025 when among the elderly we find even more "very old" people.

The decrease of the population has affected directly the education by continuous fall of the school population, and this fact generated major dysfunctions on a local plan (the reorganization of the teaching posts, the closing of the school units). As a consequence, there was a diminishing number of school units in 2004/2005 in the public system of education, less with 15140 than 1995/1996.

In 2005-2025 the number of pupils from post secondary education will diminish with 37.4% reaching an estimated value for 2025 of 30.5 thousands of people.

⁷ It derives from the demographic projection of total population, conducted on Components Method basis.

⁸ National Institute of Statistics, Proiectarea populatiei Romaniei in profil teritorial pana in anul 2025, 2004

The number of students from higher education will diminish with 40.8% reaching 382,5 thousands persons in 2025. This dramatic decrease is mainly connected with the reducing number of total population. The population aged 19-23 years will rapidly decrease after 2010, as the smaller birth cohorts born after 1989 will enter the population aged 19-23 years, and the number of students in higher education will automatically and objectively decline. The speed of this decline could be lower than expected - for 2-3 years, by opposite compensating effect of increasing enrolment ratio, but the downward trends will reach dramatic speed after 2015.

The impact of demographic trends on higher education

There are a number of important aspects in which higher education and demographic developments in Romania intersect. In the coming twenty years there will be the ageing process of the population and significant changes in the labour force. At this moment, the labour force is at its maximum historical value, but the next year will bring important changes.

Therefore, the education system will have to face less and less numerous young cohorts, along with more and more large older cohorts.

Adjusting the higher education system to theses changing conditions is a central political task. In my view, at this moment, the political and institutional responses are not sufficient to successfully approach these problems.

New types of socio and demographic behavior have emerged during transition, such as single member families, co-habitation, the increase of the average age at first marriage as well as of the average age of mother at birth. Moreover, the institution of marriage and the behavior of avoiding the marriage are strongly influenced by the economic unpredictability associated with the "stop and go" transition, which marked the Romanian society between 1990 and 2000. The *new life cycles* are dynamic and these tendencies are analyzed *extensively* when it comes to the fertility decline after 1990. I consider that all these types of new behavior had a certain impact on higher education.

The universities need o reset their interests and to adapt to this new demographic and social situation. They need to refocus teaching and learning from disciplines to problems and to diversify their educational offer. The universities also need to calibrate learning for the mind of so called "digital natives" [Miclea, 2007] and to increase the offer of *e-learning* programmes. E-learning field require to be developed, in order to a more individual approach of students. Also, the curricula must be design taking into account students needs, previous learning and working experience. Learning must be better connected with student's life and work.

Ageing process will increase the need of *long life learning*. In Romania participation in LLL is estimated to 1.6%. According to EUROSTAT Romania is on the last position considering

participation in any type of learning activities as a percentage of population aged 25 to 64. The European Union average level of participation in Lifelong Learning (one of the Lisbon' targets) should be by the year 2010 at least 12.5% of the adult working age population (25-64 age group). A university interested to become a valuable player on lifelong learning market must provide a problem center teaching and learning in order to respond to the adults needs.

Universities need to raise their *attractiveness* in order to balance the decreasing number of students, but also to face the increasing competition with foreign universities.

Attractiveness of the universities can be reached by ensuring and improving the quality of education and research within the institutions and by developing a good international network of co-operation with various partners. Raising attractiveness requires major transformations such as: more flexibility and openness, quality assurance, cooperation with labor market institutions, inter-university cooperation.

When the number of students decreases, academic staff should invest more time in *research*. Universities and professors must have more open minds and flexibility and also a number of young scientists must internal prioritizing their needs for this. The highly competitive research involves networks between universities and companies

CONCLUSIONS

I consider that universities must enhance their research area and improve the cooperation based on R&D, with the companies. A more flexible academic environment should be created, based on mores specific response to learner individual needs, in order to rise his/her employability. Virtual learning must play a decisive role in this.

The on going quality assurance programme at national level must increase attractiveness of Romanian university, both at national and international level. There is also a need for increasing the international cooperation between universities, in order to improve educational offer and to attract foreign students.

Aging process is, after all, an opportunity for Romanian higher education because it contributes to increasing need in life long learning. This is a recommended tool for active ageing, but is undeveloped in Romania. Higher education institution should be ready to satisfy bigger and bigger demands for this kind of training.

To summarize, statistics reveal an unseen development of Romanian higher education, in terms of number of students and an increasing international cooperation, but the perspective are more pessimistic. Demographic trends will have a crucial impact on higher education. Romanian universities apply fairly passive policies which reflect rather adjustment to current demographic

situation than anticipation of changes to come. Obviously, combining the two approaches would be an optimum solution.

REFERENCES

Altbach, P.G., McGill Peterson, P. (2007)- <u>Higher Education in the new century</u>, Sense Publishers, Rotterdam, the Nederlands

Bogoi, Laura, Breabăn, Diana, Burtoiu, Cristiana and Buşe, Maria. (2004). <u>Calling for an answer: Is migration a solution?</u>, Students' Scientific Research Session, April 2004;

Comsa, Tufis, C., Voicu, B. (2007), <u>Romanaina Academic System, Students and teaches opinion</u>, OSF, <u>www.osf.ro</u>

Dinca, G. and Damian, R. (2005). <u>Financing of Higher Education in Romania</u>, Bucharest, Editura Alternative.

Daxner, M (2007)- Migration and its Impact on Higher education in Europe, International Conference on Demographics and higer education in Europe. An institutional perspective, CEPES-UNESCO, 12-13 October, Bucharest

Dobre, R. (2007). "Băncile au oferte sărace de credite pentru studii" in Compact, 4 June 2007, p.6

European Commission. 2001. 'Making a European area of lifelong learning a reality', COM(2001) 678 final of 21 November 2001

EURYDICE. 1997. Supplement to the Study on the Structures of the Education and Initial Training Systems in the European Union: The Situation in Bulgaria, the Czech Republic, Hungary, Poland, Romania, and Slovakia, Brussels: EURYDICE

Eurostat- Key Data on Higher Education in Europe, 2007

Ghetau, Vasile. 2007. The population decline and the future of Romania's population. Alpha MDN Publishing House, Romania

Institutul Național de Statistică. 2006 a. Anuarul demografic al României, ediția 2006

(Demographic Yearbook of Romania – 2006).

Miron, Dumitru. (2007). <u>Romania, Bergen to London 2007</u>, Secretariat Report on the Bologna Work Programme 2005-2007.

Ministerul Educației și Cercetării. 2005. Raport asupra stării sistemului național de învățământ, București

Păunescu, C. A.- (2003)- <u>Brain drain and brain gain: a new perspective on highly skilled migration</u>, Diplomatic Academy, Ministry of Foreign Affairs, Bucharest

Roman, M., Suciu C (2006).- International students mobility of Romanian students: from statistics to policy measures, Romanian Journal for European Studies, no 4-5/2006

Schoenmaekers, Ronald and Irena Kotowska. 2005. Population ageing and its challenges to social policy Population Studies nr. 50, Strasbourg, Council of Europe Publishing.

Suciu, Marta Christina. (2000). <u>Investing in education</u>, Economica Pub House Bucharest

Suciu, M.C., Roman, M., Ghetau, V (2007)- <u>Demographics and Higher Education in Romania</u>, Report presented at International Conference on Demographics and higer education in Europe. An institutional perspective, CEPES-UNESCO, 12-13 October, Bucharest

Vass, A. (2007)."<u>Migrația creierelor românești: Între risc și oportunitate</u>" in Piața Financiară, April 2007, p.78-80

Verboncu (2007)- Modernizarea managementului universitar şi calitatea învățământului superior economic, Amfiteatru Economic nr. 22/2007, ISSN 1582 - 9146 Editura: A.S.E.Bucuresti

UNESCO Institute for Statistics, Montreal. 2006. Education Counts: Benchmarking Progress in 19 WEI Countries World Education Indicators – 2006.

United Nations Population Division. 2007. World Population Prospects. The 2006 Revision. United Nations, New York.