

COMPARATIVE ANALYSIS OF THE DEVELOPEMENT OF HIGHER EDUCATION IN THREE COUNTRIES: THE RUSSIAN FEDERATION, THE REPUBLIC OF MOLDOVA AND ROMANIA

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Abstract: *The paper compares the university education system in three countries: the Russian Federation, the Republic of Moldova and Romania. Even though they are part of different geo-political and cultural spaces, the three states have important similarities in higher education. In all three countries processes of university education reform have been carried out to modernize and adapt to the demands of globalization and the new communication society. Also, the relation to the trends and contents of European higher education has been and remains a constant of the managerial activity of education ministries and of other institutions with educational attributions. At the same time, there are differences between the higher education systems of the Russian Federation, the Republic of Moldova and Romania, which come from the specifics of their evolution so far, but also from the society in which they operate.*

Keywords: *university education system, education reform, geo-political and cultural spaces.*

1. Introduction

The paper presents the evolution of higher education in the last three decades in three countries: the Russian Federation, the Republic of Moldova and Romania, in order to identify both the common aspects and the particularities of this process.

In the elaboration of the paper, the tools and notions of the statistical method were used. The information and data from the profile authorities from the three countries, the results of the opinion barometers, the scientific contributions of some researchers in

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the field of statistics, points of view expressed in the public sphere by some representatives of the university environment were used and correlated.

Issues related to: the development of higher education institutions, the dynamics of the number of students, the evolution of the material base (buildings, lecture and seminar rooms, laboratories, etc.), the relationship of universities with the labor market are researched. Also mentioned are the changes that have left their mark on the functioning of universities and their status in society.

2. Modern Trends in the Development of Russian Education

The practice of social management of higher education in Russia represents the evolution of the four chronological stages, the last of which is considered in view of the modernization of national education. In the last decade, higher education has undergone dramatic changes under the influence of a strategy worked out by the public and the state bodies of executive power and control, in terms of socio-economic instability and transformation of different spheres of life of Russian society. The beginning of the practice of social education administration reform created the All-Union Congress of the Creative Union of Teachers of the USSR in 1989, which has formed a new philosophy of education, ideological and methodological basis of the forthcoming reforms, and also secured the changes of social consciousness to the perception of new educational ideas and teaching methods. Particular attention is dedicated to the problems and contradictions faced by reformers and reforms in higher education of this period: the inability of the federal Office of the State education administration to fully implement the legal support, the transformation of education institutions and economic balance modernization of the management structure, the reluctance of the government and management to the rapid growth of consumer demand in educational services, which led to a public crisis in systemic education.

At the beginning of the third integration phase of education management development was the adoption in 2000 of the National doctrine of education in the Russian Federation, it set out goals and main directions of development of education by 2025, as well as the finalization and approval of Federal Law as updated by the Federal program of education development in Russia until 2005. The adoption of the National doctrine of education acted as an iconic element of the social management of higher education. In 2001, the RF Government approved the "Concept of modernization of Russian education for the period up to 2010", developed the principles of educational policies that have been defined in the federal law of education, in 1992, on higher and postgraduate professional education, that opened at the National Doctrine education, the Federal program of education development for 2000-2005.

Development of management of education was accompanied by the decentralization of governance in building a flexible educational system in order to maintain a unified multicultural educational space, upgrading the national high school. The introduction of the liberal model was accompanied by the inclusion of education in the European Higher Education Area, as well as a number of internal measures that change the entire system

of higher education: from the selection of applicants (EGE) and targeted funding of students (SIFO) to changing the state system of standards through the adoption of the federal state educational standards of the second generation (GEF-2) and the reorganization of the administrative structure of higher education.

The fourth stage - innovative modernization of higher education management - is connected with the further improvement of the state policy in the field of education and training of qualified specialists to meet the requirements of an innovative economy, a massive transition in 2011.

The total number in 2015 of higher education educational institutions compared to 2014 decreased by 5.7% (or 54 units): the number of state and municipal educational institutions of higher education in 2015 decreased by 3.3% (18 units); and the number of existing private educational institutions of higher education - by 9.0% (36 units). At the same time, the number of students of educational institutions of higher education, compared with 2014 decreased by 442.5 thousand people, of whom 77.8% - students of the state and municipal educational institutions.

Therefore, the Government of the Russian Federation in recent years paid special attention to the design and development of a strategy for further development of Russian universities. Therefore, Presidential order no. 599 from May 7th 2012, ensured that there are at least 5 Russian universities in the first hundred of the world's leading universities (according to the world ranking of universities).

3. The Educational System in Moldova

Education is the basic factor in the creation and dissemination of new knowledge and universal-humanitarian cultural values of human capital development, the formation of national identity and consciousness in promoting European integration aspirations, by taking a leading role in creating conditions for sustainable human development and building a knowledge-based society. Moldova has been through a difficult transition period. The last two decades have been marked by economic recession, demographic decline, emigration and more recently, the financial crisis, etc. Moldova's ongoing population decline leads to population decline generally speaking and those in educational process in particular.

The development of the educational system currently is facing several problems, which have already been underway for two decades:

- Permanent change of the direction and focus of reforms and insufficient funding;
- Inefficient interaction of the two major players: schools and businesses - representing labor market;
- increased flow of international students - the number of people who decide to continue their studies outside Moldova;
- Improving educational methods and information technologies, access to sources of information, education internationalization, etc.

Moldova ensured equal access to Bachelor and Master courses by offering graduates a certain level of training/qualification to a higher level of education in the trends of

social, economic forecasting employment by region, in line with developments in mobility at European level. Access to education and participation in higher education are ensured by the Constitution and the rights of citizens to education, but also facilitated by allocating scholarships to students. Also, depending on their performance in academic work, students are entitled to receive scholarships from the state budget. Just from the state budget allocated 52 grants annually to students with the best performance through: President Stock Exchange which is 1200 lei, Government Scholarship worth 1,100 lei and National Bursary worth 1,320 lei.

Moldova operates 29 higher education institutions, including 19 public institutions and 10 - private. In Chisinau, 25 institutions.

Table 1

Evolution of the number of higher education institutions in Moldova

Type/Years	2012	2013	2014	2015	2016	2017
Total institutions	34	32	31	31	30	29
Public institutions	19	19	19	19	19	19
Private institutions	15	13	12	12	11	10

Source: prepared by the author based on information from the Ministry of Education, Culture and Research (2019)

The number of students studying at higher education institutions in Moldova is steadily falling. This is reviewed annually by the ministry. Thus, at the beginning of academic year 2017-2018, the number of students in higher education was 65.5 thousand people (excluding foreign students), recording a decrease of 9200 (12.3%) compared to the previous school year 2016-2017. The number of students studying in state institutions was 55 300 people, this representing 84.4% percent of students and 10 200 people have selected a private institution which also was a share of only 15.6%.

The field of business, administration and law have attracted the largest number of students in higher education Master's (38.8%) and undergraduate (36.8%). Another favorite was the education field, with 21.8% of students in Master's degree programs and 13.8% - in Bachelor's degree programs.

The most popular professions: law (12.1% of the total enrolled), business and administration (8.1%), accounting (4.9%), finance and banking (4.4%), marketing and logistics (3.5%), medicine (3.4%), primary teaching (3.3%) and information technology (2.9%). The labour market shows a substantial imbalance between supply and demand and a shortage of skilled labour. Analysis of fields of employment and unemployment structure indicates that the education system is not sufficiently connected to the labour market requirements and provides no relevant qualifications.

In 2017 the number of graduates was 19943 of whom 13.421 - Cycle I and Cycle II - 6522. It is a problem regarding the continuity in Cycle II studies. Fewer graduates of Level I Bachelor's degree programs are attracted by educational offers in Cycle II Master's degree programs.

Quality assurance in higher education institutions is the duty of and commitment to each unit by ensuring the implementation of quality systems and compliance with the national legal framework in education. Since proclaiming the independence of the

Republic of Moldova and creating governmental structures, the quality of education was managed and monitored by the Ministry of Education. Despite reforms that continued for 27 years of independence, the Ministry of Education had many changes, joint ventures and mergers, but the basic function of ensuring the quality of education has not been abandoned. At present deals with quality assurance in education. National Agency for Quality Assurance in Education and Research deals with quality assurance in education.

4. Higher Education in Romania

After 1989, Romanian higher education went through a period of substantial prefaces in all aspects. As in the other Eastern European states from the communist period, including the Russian Federation and the Republic of Moldova, higher education in Romania has since entered modernization, under the impact of the new political, economic and cultural conditions.

The new transformations in the university environment were urgently required by the new trends registered worldwide as a result of the consequences of the globalization process and of the establishment of the new society. Also, the political process of integration in the European Union required for Romania, among many conditions, the adaptation to the requirements and norms of European education, in general, of the higher education one, in particular, adaptation which will gradually lead to a full integration in the European educational and cultural space. This happened with the adoption by the Romanian higher education of the Bologna Process. Last but not least, the education system, as a whole, had to respond, through new strategies and especially through a reorganization of specialties and curricular areas, to the multiple changes that took place on the labor market. There was a need for greater flexibility of the study programs the challenges of the economic environment, but also of better communication with it.

Reform was the magic word that expressed the new reality of higher education after 1989. By reform, higher education institutions were to become more efficient and more connected to the needs of society.

Therefore, the Romanian education system entered a vast reforming process, immediately after the Revolution. There have been many transformations, some good and some less good. The problem was that there was no coherence or continuity in the reform process. Each new minister of education came with his or her own vision, removing everything their predecessors did, even what was good! And when we think that so far under the leadership of the Ministry of National Education, no less than ... 28 ministers, from different parties and political alliances, have been able to figure out what has happened with the long-awaited and expected reform. It can be said, then, that Romanian education, including the higher one, is in a continuous reform!?

However, beyond this aspect, which has also been related to government instability, in the higher education in Romania, there have been essential changes, which cannot be denied. Of the great transformations that happened, we mention:

- a new statute for universities, in which the basic rule is university autonomy;

- democratization of higher education. Romanian university institutions have opened their doors wide, passing from an elitist education, as it had been until 1989, to a mass one;
- the emergence and development of private higher education, as an alternative to the public one;
- alignment with the norms and the European model of higher education, which ended with the accession and implementation of the Bologna system.
- other significant achievements of the reform of Romanian higher education represented:
- the emphasis placed on the quality of the teaching process, by establishing standards and performance indicators to be met by universities. For this purpose, the Romanian Agency for Quality Assurance of Higher Education (ARACIS) was created.

The first and most serious of the problems facing higher education in Romania at the moment is the decrease in the number of students. If by 2010 the trend was increasing, this year the number of students gradually decreased from 761,541 students for the Bachelor's degree cycle, in 2010, to almost half in 2019 (377,370 students).

The data contained in the "Report on the status of higher education 2018", confirms the negative demographic trend regarding the senior resident population corresponding to higher education, with a decrease in most age groups, especially for the age of 21, 22, 23 and 24. If, in 2011, it is emphasized in the Report, generations aged 18-21 were over 220,000 people, in 2017 the same generations comprised only 205-215 thousand people. At the age of 22 to 24, the difference between the number of people between 2017 and 2011 was 70-80,000 people.

A conclusive image of the process of demographic decline in Romania, this time of the young and very young population, also results from a statistic presented in the paper "*The genesis and evolution of higher education in Romania in statistical data*". The authors of the paper emphasize that from 1992 to 2017, the population in the 0-24 year old segment dropped by four million, and the share of this segment in the total population was 26.5% (2016), while in 1992 share was 40.3%. (Petrescu, Anghelache, Gogu, Anghel, 2018)

The migration of young people is another major cause of the decrease in the number of students from Romanian university institutions. Some young people choose to leave the country to work abroad, others go to school. In the absence of accurate information from the Ministry of Education, the data held by UNESCO show that every year more than 34,000 Romanian young people continue their studies abroad. However, UNESCO statistics are incomplete, not taking into account Romanian students from several European countries, for example the Netherlands (Petcilă, 2019).

The main reasons that motivates young people from Romania to migrate, according to a Europe FM Barometer, carried out by IMAS, are: distrust of authorities and corruption. Other reasons given by the survey respondents are the absence of jobs, lack of infrastructure (hospitals, roads, schools, etc.) but also the impossibility of promotion in their career (Europa FM, 2019).

Finally, the reduction in the number of students was also caused by the decrease, from year to year, of the number of graduates of the baccalaureate examination. With the lowering of the baccalaureate rate of graduation, the number of candidates for universities decreased proportionally. In 2004 there were a total of 177,457 baccalaureate candidates, of whom 165,106 were promoted, and 12,351 students were declared not promoted. In 2008, when a peak of attendance occurred, there were 232,692 candidates, of whom 204,883 were promoted and 27,809 were not promoted. The number of candidates and graduates in the baccalaureate decreased considerably in 2017 (136,868, respectively 101,398 students), while the substantial increase in the non-promoted ones (35,470 students). Until 2019, the number of candidates remained around 136.00 students, but decreasing the number of those promoted (96,751 in 2018 and only 86,794 students in 2019!) (Petrescu et al., 2018).

However, in Romania, according to the National Institute of Statistics (INS), in the academic year 2019-2020 a number of 406 institutions of higher education in the state and 148 individuals started their courses. In Master's degree and doctoral courses (postdoctoral students), there are 533,749 people enrolled.

Financing is another major issue of higher education in Romania. It is true that the amounts for universities from the national budget have increased more and more, that many measures have been taken through which their financing has been optimized, among which the most important was the one regarding the basic financing established on the basis of the average cost per student in cycles and fields of study. The basic funding is allocated following the conclusion of an institutional contract between the Ministry of Education and each state university. In addition to the basic funding, universities, by virtue of their autonomy, can add funding from their own sources (grants, research projects, etc.). Given that the needs of higher quality in higher education today are increasing and that the amount allocated to education from the national budget manages to cover primarily the operational needs, the identification of alternative sources of funding is a permanent, challenge for the leading factors in the field. It must be said that although the Education Law states that 6% of the Gross Domestic Product (GDP) is awarded annually to education, from 2010 onwards the financing from the budget is around 3% of the GDP, therefore half of the budget allocation established.

The law of national education in 2011 has brought a new reform in the education system in Romania. The new law came, among other, with a new perspective on the financing of higher education. The funding was to be closely linked to university performance. For this reason, universities have been classified into three categories:

- universities of advanced research and education, which had to receive the most places in Master's degree and doctoral programmes, so a much higher funding. A number of 12 higher education institutions fell into this category, those of tradition, from the major university centers of the country (Bucharest, Cluj, Iasi and Timișoara);
- universities focused on education. Institutions in this category had the right to organize only bachelor's and master's degree programs. All private universities were included in the latter category.

As expected, the classification operated by the Ministry of Education in 2011 generated dissatisfaction among academics, especially among the representatives of higher education institutions in the last two categories. They questioned the fairness of the criteria according to which the classification was made and the lack of transparency. Moreover, one of the institutions in the third category, "Stefan cel Mare" University of Suceava, sued the Ministry of Education regarding the classification of universities. Eventually, the Ministry won the trial, the courts legally declaring the ranking of universities.

The effects of the university classification were felt only for a short time and not in their fullness, considering that the funding was obtained through direct negotiation of each university with the Ministry of Education. For this reason, in 2018, the Consortium "Universitaria", which groups the first five universities in the country in terms of performance and international recognition, requested the return of the higher education system to the three categories of universities and to "applying the qualitative criteria, based on the results of the prestigious international rankings, in the financing of universities" (Pantazi, 2018).

Until 2010, the development of Romanian higher education was extensive. The number of students increased greatly, about six times, while the number of teachers increased only 2.35 times! (from 11,803 in 1990 to 27765 in 2011 (Drăgoescu, 2013). This fact could not fail to influence the quality of educational activity. Although since 2010, as we have seen above, the number of students has dropped sharply, reaching 2019 or at almost half. In 2018, the number of teachers was 26,266 for a number of 578,725 people enrolled in higher education (Ministry of Education, 2018). As a consequence, it is still necessary to maintain an optimal ratio between the number of teachers and students, but also to improve the structure of the teaching staff from Romanian universities. The number of students must also be correlated with the development of the material base of higher education institutions. If in 1990 universities had 933 lecture halls, 2361 seminar rooms and 3994 laboratories, in 2011 there were 3160 lecture halls, 4316 seminar rooms and 9456 laboratories. Thus, the statistical data show that in the case of lecture halls the growth was 3.3 times, in the case of seminar rooms 1.82 times and in that of laboratories 2.36 times, given that the increase in the number of students during the same period was 6 times (Ministry of Education, Romanian Government, 2018). The new economic-social and political conditions after 1989, namely the establishment of the democratic regime and of the capitalist economy, have determined a continuous adaptation of education to the demands and expectations of the labor market. The curricula were reconfigured, by renounce some specializations not required on the market, but also by including some new ones, imposed by the new changes in the list of professions. Last but not least, among the academic concerns is also the issue of ethics and academic integrity. This appeared from the necessity of achieving a cleaner and fairer higher education, under the impulse of processes that were taking place in Romanian society, the question of ethics and academic integrity brought significant changes to the activity of higher education institutions in Romania. From this point of view, all universities have a code of ethics and integrity, as well as an ethics commission.

5. Conclusions

For all three countries, higher education is a factor in the development of society.

Coming out of the communist period, Romania, the Republic of Moldova and the Russian Federation had to face new challenges in all spheres of social life, including education. An extensive reform process has taken place in all three countries at all levels of education, which has made it possible to modernize education systems and achieve new performance standards. In terms of higher education, the number of universities has increased, the material base has developed, private educational institutions have appeared. From this point of view, it is found from our analysis, an extensive development of university education in these countries, and then, as the number of students decreases (especially in Romania, but also in the Republic of Moldova), in recent years, the process of institutional expansion to be further reduced. Some demographic phenomena mattered a lot in this process, such as the decrease of the birth rate, but also the migration of young people to the western university centers.

In order to adapt to the requirements of the labor market, the universities of the three countries have diversified their educational offer and paid more and more attention to university marketing actions.

The integration in the European university space was and remains a constant of the academic policy of the three analyzed countries. The universities of Romania, Russia and the Republic of Moldova have joined the Bologna system and have aligned themselves with the relevant European requirements and standards. From this perspective, Romania, being also a member of the European Union, provides assistance and expertise to the Republic of Moldova, consisting of study programs for Moldovan youth, including university and doctoral programs, teacher training programs, quality assessment services education etc.

Therefore, the higher education systems in the Russian Federation, Romania and the Republic of Moldova have important similarities, despite the fact that they are part of different geo-political and cultural spaces. The differences are only related to the size indicators.

References

- Drăgoescu, R. M. (2013). Transformări în sistemul de învățământ superior din România [Transformations in the higher education system in Romania, in The Romanian]. *Romanian Statistical Review*, 3, 19-27.
- Europa FM. (2019). *Barometru Europa FM: De ce pleacă tinerii din România* [Barometre Europa FM: Why are young people leaving the country]. *Europa FM*, September 9. Retrieved from www.europafm.ro/barometru-europa-fm-de-ce-pleaca-tinerii-din-romania/.
- Ministry of Education, Culture and Research. (2019). *Învățământul superior* [Higher education]. Retrieved from <https://mecc.gov.md/ro/content/invatamantul-superior>.
- Petrescu, I., Anghelache, C., Gogu, E., & Anghel, M. (2018). *Geneza și evoluția învățământului superior din România în date statistice* [The Genesis and Evolution of

- Higher Education in Romania in Statistical Data]. Bucharest: Economica Publishing House.
- Sputnik Moldova. (2018). O treime din populație a migrat, pleacă și cei bogați. Mai departe, tot așa? [One Third of the Population Has Migrated, the Rich Also Leave. Anyway, all the Same?]. *Sputnik Moldova*, February 19. Retrieved from <https://ro.sputnik.md/moldova/20180210/17216677/populatia-moldovei-migratie-depopulare.html>.
- Pantazi, R. (2018). *Cele mai mari 5 universități din România cer o clasificare care să readucă cele trei categorii de universități stabilite în 2011* [The 5 Largest Universities in Romania Require a Classification that Brings Back the Three Categories of Universities Established in 2011]. *Edupedu.ro*, November 26, Retrieved from <https://www.edupedu.ro/cele-mai-mari-5-universitati-din-romania-cer-revenirea-la-cele-trei-categorii-de-universitati-din-clasificarea-facuta-in-2011>.
- Pantazi, R. (2014). *Clasificarea universităților a fost declarată legală de Înalta Curte de Casație și Justiție. Ministerul Educației a câștigat procesul cu Universitatea Ștefan cel Mare din Suceava* [The classification of universities was declared legal by the High Court of Cassation and Justice. The Ministry of Education won the trial with the Ștefan cel Mare University in Suceava]. *HotNews.ro*, April 11. Retrieved from www.hotnews.ro/stiri-esential-17016842-clasificarea-universitatilor-fost-declarata-legala-inalta-curte-casatie-justitie-ministerul-educatiei-castigat-procesul-universitatea-stefan-cel-mare-din-suceava.htm.
- Petciță, M. (2019). *Doar 377 de mii de studenți roman încep azi facultatea. Este cel mai mic număr din ultimii 20 de ani* [Only 377 thousand Romanian students start the college today. It is the smallest number in the last 20 years]. *Edupedu.ro*, September 30. Retrieved from www.edupedu.ro/grafic-doar-377-de-mii-de-studenti-romani-incep-azi-facultatea-este-cel-mai-mic-numar-din-ultimii-20-de-ani/.
- Ministry of Education, Romanian Government. (2018). *Raport despre starea învățământului superior din România* [Report on the state of higher education in Romania 2017-2018]. *Edu.ro*. Retrieved from www.edu.ro/sites/default/files/Raport%20privind%20starea%20%C3%AEenv%C4%83%C8%9B%C4%83m%C3%A2ntului%20superior%20din%20Rom%C3%A2nia_%202017%20-2018.pdf.