
AICEI PROCEEDINGS

Dragana Beljanski, Saša Raletić, Dragan Janjušić: Comparative Analysis of Applications to Erasmus Mundus and Tempus Programs in Slovenia, Croatia and Serbia

153

Comparative Analysis of Applications to Erasmus Mundus and Tempus Programs in Slovenia, Croatia and Serbia

Dragana Beljanski, Saša Raletić, Dragan Janjušić

Abstract

Lagging, in an economic sense, behind USA and Asia, rising unemployment, high costs of pensions in the national framework of member states, are some of the reasons why the European Union developed a strategy for economic development which is based on knowledge and scientific research. Namely, the European Union saw a way out of the recent crisis in improving the higher education system and in increasing the number of educated people. In this paper, the authors emphasise the relevance of higher education and its role in raising productivity not only in the national framework of each country, but also on the level of the EU. The paper discusses the main issues of the Bologna Declaration, the Lisbon Strategy, Europe 2020 Strategy, and the programs implemented by the European Union to raise the level of the higher education system, to recognise foreign diplomas and to increase the mobility of students and lecturers. In a comparative approach the paper shows how Erasmus Mundus and Tempus programs are used in Serbia, Croatia and Slovenia. The authors chose to compare these three countries considering that Croatia recently gained the status of candidate for EU, that Serbia still has not gained the candidate status, while Slovenia has been in the EU since 2004. The research was done on the basis of the old status of countries because more recent data was not available to the authors. The research problem is set in the form of the question: "Which country, Serbia, Croatia or Slovenia, makes more use of European educational programs?" The conclusion of this work, as well as the empirical part, contains suggestions for the improvement of higher education and the Lifelong Learning Program, i.e. their application.

Keywords: Higher Education Policy, Lisbon Strategy, Europe 2020, Bologna Declaration, Lifelong Learning Programme

The Importance of Education for the European Union

Lagging, in an economic sense, behind USA and Asia, rising unemployment, high costs of pensions in the national framework of member states, are some of the reasons why the European Union developed a strategy for economic development which is based on knowledge and scientific research, which was called the Lisbon Strategy. Knowledge is the basic moving force of every society and the main prerequisite of progress. An important premise for the functioning and the development of the EU economy is the improvement of higher education systems and policies in each member state. By definition, every investment demands certain start up costs, and this is also true for investing in education. Thus, economically speaking, the costs of investing in pedagogics, education and the health of people are investments in human capital. Increasing the number of people with higher education, as well as improving higher education systems and policies, are conditions for the development of the EU. Education is one of the key elements in the Europe 2020 Strategy, with the aim to encourage development and improve international competitiveness, economic growth, social cohesion and democracy.

In order for the European Union to gain the status of the strongest competitor in the economy, and in order to get closer to the USA and the continuously growing countries of Asia, the EU developed programs and strategies for managing education policy. Namely, the objectives of the EU education policy are: enhancing the quality of general and vocational education, advancing the comprehensive approach to education and the maximum level of knowledge through constant professional improvement, writing up a program of lifelong learning, promoting equality, promoting creativity and innovation. EU member states could not fulfill all these goals on their own, i.e. without mutual cooperation, which is exactly why a need for cooperation between the member states is emphasised, through equalising the value of diplomas and duration of studies, through an exchange of information and experiences, as well as through an exchange of students and teachers.

The objective of our paper is to present the existing higher education policies in the European Union, as well as the existing programs which aim to fulfill the objectives of the Lisbon Strategy, and to offer suggestions for improving them, which would contribute to the status of the EU as a competitive player in the global market.

Theoretical Framework: Higher Education Strategies of the European Union

The Lisbon Strategy

The Lisbon Strategy, 2000, is the main strategic framework for increasing the economic growth of the European Union. It was revised in 2005, since it did not achieve the expected results with its original contents. With the Revised Lisbon Strategy, or, as it is also called, "Renewed strategy for growth and jobs", the European Union, in order to accomplish the set objectives, put emphasis on knowledge, new ideas and human capital. The instruments which were to accomplish these objectives and which were foreseen by the Strategy, are the highest quality of general, as well as vocational, education, legal recognition of diplomas, compatibility of educational systems in Europe and their development, greater investments in research, etc. As one of the main points in raising education to a higher level in Europe there is a need for an international exchange of students and teachers, in order for them to meet the cultures, languages and systems of other countries, as well as for other countries to get acquainted with their country. Furthermore, this point is important for the exchange and the gain of experiences among young educated people. The Strategy should be implemented on the level of the European Union, but also on the national level of each member state in order to ensure that the strongest weapons in the fight against economic instability in the European Union are knowledge and innovation (Council of Europe, 2012).

As a response to the global crisis that has been affecting the EU in recent years, the European Commission has adopted a number of measures and programs, most importantly the so-called fifth freedom, i.e. the freedom of mobility of knowledge, which has complemented the existing four freedoms: free mobility of goods, services, people and capital (European Commission, 2010). In addition, a new strategy has been formed – Strategy Europe 2020, which was begun in 2011, and which sees knowledge as one of three key pillars of the development of competitiveness and productivity (European Commission, 2010).

The Strategy of Europe 2020

In March 2010, the European Commission adopted a new strategy “Europe 2020: A strategy for smart, sustainable and inclusive growth”, which contains the most important elements of the new program. The three most important goals given are: smart growth – developing the economy on the basis of knowledge and innovation, sustainable growth – promoting a more resource-efficient, green and competitive economy, and inclusive growth – ensuring high employment with social and territorial cohesion. Five main objectives of this strategy are (European Commission, 2010):

- increasing the employment rate of the population aged 20-64 to 75% through various programs and activities, including a greater participation of youth, the elderly and the lower qualified workers, as well as a better integration of legal migrants;
- improving the conditions for development and research, especially bearing in mind the aim of increasing the joint public and private investment in this sector to 3% GDP;
- reducing gas emissions which cause the greenhouse effect by 20% in relation to the levels noted during the 1990s; increasing the share of recyclable energy sources in the overall energy consumption to 20%; increasing the efficiency of energy by 20%;
- improving the quality of education, with a special emphasis on reducing the rate of school drop outs to less than 10% and increasing the share of 30-34 year olds in tertiary or an equivalent level of education to at least 40%;
- improving social inclusion, especially through reducing poverty, in order for at least 20 million people to rise from poverty and exclusion.

These objectives are mutually linked. For instance, improving the quality of education will result in increasing the employment rate. Each state should attempt to achieve the objectives proclaimed in the Strategy, and this can be done by implementing them in national legislature. Smart growth, as has already been said, should be accomplished by improving the system of higher education, through lifelong learning programs, financing research and improving information and communication technologies. The emphasis is also on the need to increase mobility of students and lecturers through various programs and grants. Each state is obligated to invest in its educational system, to monitor achieved results, to enable its professionals to enter the work market through apprenticeships, internships, etc.

Bologna Declaration

The main aim of the Bologna process is to create the European Higher Education Area which is supposed to improve employment and mobility of citizens, as well as the international competitiveness of European higher education. The Bologna process encompasses over forty countries, which decided on this plan due to facing the growing problem of uncompetitiveness of higher education. The countries voluntarily opted to reform their higher education systems in keeping with the priorities agreed upon in the Bologna Declaration. The priorities of the Bologna process are (Ministry of Education and Science, 2012):

- adopting a joint framework for comparing diplomas,
- introducing joint undergraduate and graduate levels in all countries,
- introducing a European system of credit transfer,
- introducing European standards for providing quality higher education,
- improving the free movement of students, teachers and researchers.

Instruments of Implementing Education Policy in the European Union

Instruments which the European Union employs in order to improve its education policies are directives and numerous action programs. Through directives the EU coordinates the legal and administrative regulations of member states in the field of education, and defines the field of recognition of vocational and higher education diplomas. All action programs were consolidated in the Lifelong Learning Programme in 2007. Their objectives are: increasing student mobility, exchange of experiences and innovation, improving linguistic and cultural skills, and many others. Aside from the action programs and directives, educational-political activities include other instruments of support to the national policies of member states. It is especially important to mention the founding of a European Centre for the Development of Vocational Training and European Training Foundation (Foundakon Konrad Adenauer, 2010).

Lisbon Recognition Convention, 1997

Recognition of qualifications and diplomas is a goal which most European governments and international organizations strive towards. It is a necessary condition for increasing the mobility of students and teaching staff. The objective of the Lisbon Recognition Convention was to enable students of all countries equal access to all levels of higher education, including doctoral studies, under the same conditions that exist for candidates from the country where the degree is sought, and the use of academic titles, in keeping with the laws and regulations of the country where the title is sought. Upon filing an application to the appropriate body in a country that has signed this Convention, the holder of qualifications should have adequate access to the assessment of their qualifications, without any discrimination. Each country that has ratified the Lisbon Recognition Convention should recognize higher education qualifications acquired in another country that has signed the Convention, unless there are important, essential differences between qualifications of those two countries.

The Committee of the Lisbon Recognition Convention also adopted four additional documents: Recommendation on International Access Qualifications, Recommendation on Criteria and Procedures for the Assessment on Foreign Qualifications, Code of Good Practice in the Provision of Trans-national Education, and Recommendation on the Recognition of Joint Degrees. These additional texts further define and supplement certain points of the Convention and through them the Convention is implemented.

Other important conventions that have been adopted in this field by the Council of Europe and UNESCO are: European Convention on the Equivalence of Diplomas leading to Admission to Universities, European Convention on the General Equivalence of Periods of University Study, European Convention on the Academic Recognition of University Qualifications, Convention on the Recognition of Qualifications concerning Higher Education in the European Region (Council of Europe, 2009).

Action Programs

All action programs of the education policy in the European Union have been over time consolidated in the framework of the Life long Learning Program (LLP), which aims to increase the employment rate and to strengthen the competitiveness of the European economy in the global game, which makes this program a key element of the Lisbon Strategy. The Program also encourages social inclusion, active citizenship and personal growth (Council of Europe, 2009). The following subsections discuss those programs which are the most important, which are being implemented in our country and which are generally well-known in the public.

Erasmus Mundus

Erasmus Mundus enables the exchange of students and university professors, as well as the cooperation of higher education institutions throughout Europe. Through this program every student from a country that participates in the realization of the program is able to spend one semester at a university in an EU member state. Achieved results from this semester are then recognized as part of the regular studies in the student's own country.

The main aim of Erasmus Mundus is the creation of the program "European Union Master Courses" which would provide grants, researchers and lecturers for students at European universities. Erasmus Mundus was established in the framework of the Lisbon Strategy. Objectives of this program are (European Commission):

1. increasing cooperation of international universities of Third Countries,
2. promoting cooperation of sending and receiving institutions,
3. enabling students to gain new experiences by studying in other countries, meeting new languages, cultures, and promoting EU values,
4. improving the recognition and transparency of studies, qualifications gained in Bologna process,
5. developing educational, cultural, political and economic ties between member states of the EU and Third Countries,
6. expanding the knowledge and qualifications of teaching staff, in order to improve the quality of education,

7. building the private and public sector, developing capacities of administration by having their staff participate through doctorates of higher education.

Erasmus Mundus is implemented through the following actions (European Commission):

- One action applies to master studies and is called the “European Union Master Courses”. This action should be implemented through linking at least three different universities from different countries through exchange, and getting a joint final degree at the end of studies.

- Second action includes scholarships and fellowships that are granted to qualified individuals who participate in masters and doctoral studies of Erasmus Mundus.

- Next action is called Partnership. Its goal is to improve the exchange of students and activities.

- Final action is conceived with the goal of furthering activities that would lead to enhancing the profile, the visibility and the availability of European higher education.

Tempus

The Tempus program is the oldest program conducted by the European Union in the field of international cooperation in higher education. Through this program the EU develops and promotes higher education in the countries of Eastern Europe and Central Asia, North Africa and Middle East, and Western Balkans. The European Union attempts through Tempus by an analogue of the existing educational programs to meet the specific needs of Middle and East-European countries. The Tempus Program was established in 1990. It provides financing and encourages cooperation between universities in said countries and the European Union (European Commission). The Tempus program should contribute to the reform of higher education structures, to the development of teaching programs in priority fields, to the development of expert training for the advanced, to strengthening regional connections through the participation of multiple partner countries, especially among the countries of South-East Europe (European Commission).

Methodological Approach to the Problem

The aim of the research is to compare the presence of European educational programs in Serbia, a country that does not have the status of candidate for the European Union when the authors wrote this paper, Croatia, a country with the status of candidate for membership into the EU, Slovenia, a country which has been a member of the EU since 2004. The research was done on the basis of the old status of countries because more recent data were not available to the authors. These countries were chosen because they are all countries of former Yugoslavia, which allows for a closer comparative approach.

The research problem is set in the form of the question: "Which country, Serbia, Croatia, or Slovenia, makes more use of European educational programs?" In other words, the problem points to establishing differences in the distribution of European educational programs in the afore-mentioned countries.

The research has been conducted on a *sample* that is comprised of two parts: the first part of the sample are students of master and doctoral studies that have applied to some of the Erasmus Mundus programs, while the second part of the sample are countries, or their institutions, that have applied to some of the Tempus projects. The sample, that is formed from the above-mentioned subjects, applies to the *period* from 2007 to 2011, and is distributed by year. This period was taken as relevant by the authors considering the fact that the Republic of Serbia as a country exists from 2006, when Montenegro became an independent country, separating from the country Serbia and Montenegro, whose legal successor is the Republic of Serbia.

The research has been conducted by comparing secondary data, statistical data of the European Commission on Erasmus Mundus programs and Tempus projects, which can be considered as instruments of research. The authors used descriptive statistics in this research, as well as the method of statistic data analysis.

Results and Discussion

Table 1. - Descriptive representation of students of masters and doctoral studies who applied and were accepted to some of the Erasmus Mundus programmes from Serbia, Slovenia and Croatia

Slovenia		Croatia		Serbia			
Doctoral courses	Masters courses	Doctoral courses	Masters courses	Doctoral courses	Masters courses		
-	0	-	7	-	30	Accepted	2007
-	-	-	-	-	-	Total	
-	0	-	10	-	46	Accepted	2008
-	-	-	-	-	-	Total	
-	0	-	13	-	65	Accepted	2009
-	0	-	41	-	174	Total	
1	3	1	20	0	61	Accepted	2010
5	16	10	60	36	216	Total	
0	7	4	14	9	55	Accepted	2011
2	14	21	66	34	365	Total	

*data for doctoral studies for 2007, 2008, 2009 are missing in the table because doctoral studies in this form did not exist through Erasmus Mundus until 2010.

*total number of students who applied in 2007 and 2008 to some of the programs of Erasmus Mundus has not been statistically processed

Source: European Commission (2011).

By comparing the data in Table 1, we obtain the results that the Republic of Serbia, in the period from 2007 to 2011, had the highest number of students in masters and doctoral studies who applied to some of the European educational programs of Erasmus Mundus, and that it had the highest number of students that were accepted and attended those programs, in comparison with Slovenia and Croatia. The exception is the year 2010 if we only look at doctoral students, where Slovenia had one doctoral student who was accepted in one of the programs of Erasmus Mundus, while the other two countries had none. As suppositions for these results we may give the following reforms of educational systems and satisfaction or dissatisfaction of students with the offer and the past experiences of older colleagues of masters and doctoral studies. The reform of educational systems was the primary presupposition which explains the obtained result. Slovenia has been a member of the EU for eight years and its educational system is completely modernised, i.e. fully conformed to the Bologna process, while Croatia is in greater compliance with the Bologna process because it is a country with the status of candidate for membership in the EU from 2004. year, while in Serbia the Bologna process is still being developed and has lasted for five years. In the opinion of the author, and given the data, that Serbia from the total population 10% of people are highly educated (Statistic Office of Republic of Serbia, 2012) 12% in Croatia (Statistic Office of Republic of Croatia, 2012) and in Slovenia the percentage of 20 (Statistic Office of Republic of Slovenia, 2012), that the achieved level of implementation of the Bologna declaration in these countries does have an impact on students' commitment to higher education. This fact pertaining to the levels of development of educational systems could have influenced students in Serbia to be dissatisfied with the existing programs of masters and doctoral studies, which is the third supposition, and that is why they chose to attend Erasmus Mundus programs. Given the above percentages of highly educated people in Strbiji, Slovenia and Croatia the authors conclude that there is a causal link between the level of development in the application of the Bologne Declaration and the young leave because of the demand upon international programs for high-quality education, and offering Erasmus Mundus and Tempus. In addition, the results show that in all three countries from 2010 the tendency of applying to programs of Erasmus Mundus is in decline, which could be attributed to the global economic crisis.

Table 2. Descriptive representation of accepted projects for Serbia, Slovenia and Croatia for Tempus IV

			2008	2009	2010	2011
Serbia	coordinators	JP	1	5	5	4
		SM	6	1	3	2
	co-beneficiaries	JP	7	49	70	50
		SM	44	14	21	36
		<i>Total</i>	58	69	99	92
Croatia	Coordinators	JP	1	0	0	1
		SM	1	0	0	1
	co-beneficiaries	JP	3	14	9	14
		SM	14	30	29	21
		<i>Total</i>	<i>19</i>	<i>44</i>	<i>38</i>	<i>37</i>
Slovenia	Coordinators	JP	0	0	0	1
		SM	0	0	0	0
	co-beneficiaries	JP	0	5	6	5
		SM	16	5	3	1
		<i>Total</i>	<i>16</i>	<i>10</i>	<i>9</i>	<i>7</i>

*JP is short for type of project Joint Projects

*SM is short for type of project Structural Measure

Source: European Commission (2011).

By comparing the data from Table 2, we obtain the result that Serbia has the highest number of accepted projects in the cycle Tempus IV, regardless of whether they are coordinator or partnership projects, in comparison with Slovenia and Croatia. The suppositions for this result could be given as the following: the financial situation in the country; having or not having the knowledge relating to the projects; access to funds. The financial situation in these three countries is the primary supposition which might explain it. Slovenia is the country which in this comparison has the highest revenue per capita, and it is the most developed of the three, which is why Slovenia could have had the least need to apply for funds to finance projects, including Tempus IV. Slovenia has more opportunity for individual financing of both national and international educational projects than Serbia or Croatia,

which is confirmed by the obtained result. However, it is important to note that Serbia and Croatia are in a similar financial situation, but that Serbia considerably dominates in the number of approved projects in comparison with Croatia, which could be explained with a higher awareness of the importance of projects in Serbia and more skilled staff, which is the second supposition. Skilled staff as a supposition relates to defining the relationship between Serbia and Croatia, considering that the authors believe that Slovenia has the staff skilled for writing, applying with and realizing projects and that this cannot be an obstacle, or a reason for such a small number of approved Tempus IV projects in Slovenia. The final supposition relates to the number of accessible funds which countries or institutions have the opportunity to apply for. Slovenia as an EU member has the opportunity to apply to numerous funds for projects, while Serbia and Croatia have a decidedly lower number of accessible funds at their disposal, and so they turn to applying for Tempus IV, as the above given results illustrate. As in the previous descriptive analysis of Erasmus Mundus programs, the results here also show that in all three countries from 2010 the tendency of approved Tempus projects is in decline, which can also be explained due to the global economic crisis.

Limitations of the Research

- Disadvantages of the used method - descriptive statistics. For instance, this method does not allow for establishing a correlation or connection between certain variables.
- The time period of the research. This research was conducted in the time period when Serbia received the status of candidate for membership in the European Union while the data applies to the period when Serbia was still not a candidate.

Conclusion

The results obtained in the empirical research are not surprising, considering the economic, legal, political, social and cultural circumstances of Serbia, Croatia and Slovenia, which form the sample of the research. The obtained results show that Serbia, even though it is not a member of the European Union, had the highest number of masters and doctoral students

who used the program Erasmus Mundus in the period from 2007 to 2011, and that the highest number of Tempus IV projects was realized in Serbia for the period from 2008 to 2011. Based on the above stated, the initial hypothesis, which says that the European policy of higher education and the action programs through which it is implemented are equally applicable and accessible to all European countries, regardless of their status within the European Union, has been confirmed. In other words, the authors' conclusion is that the status of countries regarding membership in the European Union is not of importance for making use of accessible funds, or for implementing European higher education policies.

The results of this research into action programs ErasmusMundus and TempusIV show great potentials for Serbia, which may imply that Serbia is a country where young people have a high awareness of the importance of education, and that education represents the key to success not only of the individual but of the society as a whole.

The authors would suggest the following subjects of research in this field for some future time:

- A research which would deal with comparing the number of realized projects in Serbia while it did not have the status of a candidate for membership in the EU and the number of projects which it realized after gaining that status.
- A research which would deal with comparing the number of masters and doctoral students from Serbia who used the action programs of the higher education policy while Serbia did not have the status of a candidate for membership in the EU and the number of students who will use them after gaining that status.
- A research through correlation which would allow to reach a conclusion on which factors are related, or which factors mutually influence each other – for instance, to establish whether and to what extent skilled staff influences the number of approved projects.

References

- Foundation Konrad Adenauer. (2010). Europe from A to Z, Manual for European integration. Belgrade: Foundation Konrad Adenauer.
- Council of Europe. (2009). Standards for recognition: The Lisbon Convention for recognition and accompanying documents. Belgrade: Council of Europe, Office in Belgrade.
- Ministry of education and science. (2012). The Bologna process and higher education in Serbia. Retrieved on January 10, 2012 from <http://www.mpn.gov.rs/userfiles/dokumenti/visoko/Bolonjska.PDF>
- European Commission. (2010). Europe 2020 A strategy for smart, sustainable and inclusive growth Retrieved on January 10, 2012 from http://eunec.vlor.be/detail_bestanden/doc014%20Europe%202020.pdf
- Council of the European Union. (2010). Lisbon Strategy. Retrieved on January 10, 2012, from <http://register.consilium.europa.eu/pdf/en/10/st06/st06037.en10.pdf>
- European Commission.(n.d.). Erasmus Mundus - Scholarships and Academic Cooperation. Retrieved on January 10, 2012 from http://ec.europa.eu/education/external-relation-programmes/mundus_en.htm
- European Commission.(n.d.). Tempus: higher education in EU neighbours. Retrieved on January 10, 2012 from http://ec.europa.eu/education/external-relation-programmes/tempus_en.htm
- Statistic Office of Republic of Serbia. (2012). Yearbook. Retrieved on January 10, 2012 from <http://www.stat.gov.rs>
- Statistic Office of Republic of Croatia. (2012). Yearbook. Retrieved on January 10, 2012 from <http://www.dzs.hr>
- Statistic Office of Republic of Slovenia (2012). Yearbook. Retrieved on January 10, 2012 from <http://www.stat.si> *vertising research*, November/December, 27-34.