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THE HUMAN RESOURCES IN FUNCTION OF CREATION OF INNOVATIVE TOURISM OF THE REPUBLIC OF CROATIA - PERSPECTIVES OF EASTERN CROATIA

LJUDSKI POTENCIJALI U FUNKCIJI STVARANJA INOVATIVNOG TURIZMA REPUBLIKE HRVATSKE – PERSPEKTIVE ISTOČNE HRVATSKE

ABSTRACT

Tourism is now one of the leading activities of the global economy that constantly developing. In the Republic of Croatia tourism is one of the most important economic activities. Tourism is an extremely labor intensive and dynamic activity, which means that tourism services are based on the quality of human resources. In each knowledge-based economy, the knowledge and the human resources are becoming the key factors of development. Namely, the ability of economy depends on human resources and their permanent development to keep the level of success and to advance further.

The development is based on the principle of sustainability, which provides development based on protection of existing resources. Achieving sustainable development in tourism strongly depends on the acceptance of global tourism trends and the creation of knowledge.

In order better quality to respond the increasingly complex and diverse demands of competition in the European tourism market, in front of Croatia is set a need of creating more innovative tourism products to attract the potential foreign tourists. However, in front of tourism activities of Republic of Croatia, there are numerous and complex development problems that must be tackled faster in order to achieve a satisfactory level of competitiveness in the European Union market. Croatia needs to keep up with upcoming trends in order to survive in the market by constantly increasing its competitiveness.

Touristic significance of eastern Croatia is an extremely large because of its geographical and ecological factors. It also has a great potential for tourism development that could significantly contribute to the economic development of the country and improve the image of the Republic of Croatia in the European Union.

universities shows that it did not even occurred. In this way the potential of synergy effect on the level of the European Higher Education Area (EHEA) wasn't realized.

5. Conclusion

In modern society, the knowledge society, education is the key factor of development and positive change. Bologna project is in its structure complex "hybrid" that is made up of various elements. This further confirms previous requirement for need to align reforms implemented at the national levels. The implementation has resulted in a number of positive and negative consequences. On the positive side are equal opportunities for all participants in Bologna reform, openness to the outside, a larger percentage of higher education. As negative consequences of Bologna process occur: increase in administrative obligations, incompatibility of curricula, and generally insufficient use of opportunities that are provided as goals of Bologna process. Republic of Croatia is a full member and a signatory of Bologna Declaration since year 2001. As 28th member of European Union, Croatia has an opportunity to build up and gain better position in the European higher education area.

REFERENCES

Havelka, M. (2003.) Visoko obrazovanje u Hrvatskoj i europskim zemljama: prilog usklađivanju visokog obrazovanja u Hrvatskoj s europskim visokim obrazovanjem, Zagreb, Institut društvenih znanosti Ivo Pilar, 2003. ISBN 953-6666-29-4

Puzić, S., Doolan, K. & Dolenec, D. (2006.) Socijalna dimenzija "Bolonjskog procesa" i (ne)jednakost šansi za visoko obrazovanje: neka hrvatska iskustva, Sociologija i prostor, 172/173, 243-260, ISSN 1846-5226.

www.bib.irb.hr/prikazi-rad?rad=511210 (15-03-2013) Primjena bolonjskog procesa na hrvatskim sveučilištima (12-03-2013)

www.bologna-bergen2005.no/Docs/00-Main_doc/990719BOLOGNA_DECLARATION.PDF (14-03-2014)
www.bolognabergen2005.no/Docs/00Main_doc/030919Berlin_Communique.PDF (13-03-2014), Berlinsko priopćenje (2003.)

www.dfes.gov.uk/bologna/uploads/documents/050520_Bergen_Communique.pdf (13-03-2014), Bergensko priopćenje (2005.)

www.public.mzos.hr/Default.aspx?art=6254&sec=2273 (15-03-2014)

educational excellence. It is worth to note that adjustment to requirements of the Bologna process is basic requirement of international competitiveness and successful participation in European Higher Education Area. From the academic year 2005/2006, all university studies are aligned with requirements of the Bologna Declaration.

4. The debate on Bologna Process in Croatia

Reform of higher education system in Croatia is almost a permanent state in the past thirty years. Whole time, there wasn't longer period in which higher education system could stabilize and develop on the basis of some generally accepted principles, with occasional corrections, adjustments and necessary modernization. Instead, the system of higher education in Croatia has been changed with radical moves, often strongly influenced by politics, and these changes were never preceded by any systematic analysis or and precise study or proposed models on smaller parts of the system, or any projections of possible long-term effects of certain reform actions (Havelka, 2003., 31). Also, we should point out the importance of the Ministry of Science, Education and Sports as an umbrella institution which basically manages, defines and manages the application of the Bologna requirements. It takes a continuous cooperation of educational institutions (universities, colleges) with the Ministry. This cooperation is necessary to promote and expand through the use of existing consensus in achieving the defined vision and education strategy. Furthermore, it's essential to continue working on the harmonization of existing programs, and to develop new joint study programs in order to create a new common vision and strategy. The existing education system that is supply driven, should be modify in the demand driven system, i.e. educational programs should be harmonized with the current requirements that determines on the market. Therefore, redesigned educational plans and programs should be more associated with needs of the economy. Current state of centralization of financial resources must be seriously considered and through the new curriculum development at the Universities should bring certain measures of decentralization towards decision making on the lower levels. Of great importance would be improvement of dialogue and cooperation between universities and the private sector. General awareness of some participants involved in the education system is not at desirable level. Awareness about university council's work and activities is poor: 52% are familiar with their work and conclusions, and 44% isn't. It is apparent that information system at universities is not good when half of employees are not familiar with the work. Being informed is quite important for a sense of community involvement at the level of each employee (Kristof, Pisk, Radek, 2011., 30). Programs that relate to the acquisition of competencies for teachers of preschool and school age should significantly contribute to raise of awareness about importance of education in early childhood. Also, the general awareness of the importance of previously mentioned should be more significant. Although it have passed nearly ten years since the introduction of Bologna process, it has to be stated that there are no significant studies that would provide exact indications of quality and effect of Bologna implementation on lifelong education as well as the labor market in general. Accordingly, it's necessary to continue working on pointing out the importance of educational comprehensive system through the application of Bologna ideas. The current research results indicate a great potential of Croatian universities, but also throw light on the structural problems that Croatian universities are facing with. Among most significant problems are absence of a clear and identifiable mission and policies, poor high school preparation, disintegration of four major universities (thus inhibiting of their quality work), lack of funding and work equipment , lack of concern for hiring assistants and non-teaching staff, lack of interest and motivation of students, unequal presence of all stakeholders in university authorities, insufficient information on the work of key university bodies, undeveloped international collaboration and neglected science (Kristof, Pisk, Radek, 2011., 34). Also, the available data on the mobility of students, teaching and non-teaching staff at Croatian

	Total			
	2008.	2009.	2010.	2011.
Professional study	5429	4742	4621	4449
University study	14960	19785	22041	24640
Art academies	366	466	638	695

Source: Statistical Yearbook of Republic of Croatia 2012, p.479

Table 2. represents data about students who graduated at the professional and university studies in the period 2008 -2011 year. It's evident that the number of students who have graduated is constantly increasing in all studies except professional degree study. In comparison to year 2008 year and 2011 the number of graduates has increased by 42.53% at universities, number of graduates on University of Applied Sciences has increased by 32.23%, 56.53% on Universities, in colleges has increased by 42.67% and 64.71% on university studies. The largest percentage increase is recorded at graduates of art academies for 89.99%, while the decrease in numbers of those who graduated at the professional programs comparing the year 2008 and 2011 amounts 18.05%. We could say that the average increase for all studies was 51.75% total, therefore the number of students who graduated in observed period increased by more than 50%. Reasons for increasing number of graduates should seek in increasing enrollment of students, increased number of academic programs, opening of of new universities (colleges), as well as requirement of the Bologna process in general. In the Republic of of Croatia there 10 universities, 3 of them are private and 7 are public universities (Osijek, Zagreb, Pula, Rijeka, Zadar, Split and Dubrovnik).

Table 3 Ratio of university and professional study programmes

Professional programmes by type/level	**Number**
Professional programme shorter than 3 years	11
Three-year or longer professional programme	164
Specialist graduate professional programme	44
University courses by type/level	**Number**
Undergraduate university programme	351
Integrated graduate and undergraduate university programme	45
Graduate university programme	368
Postgraduate specialist programme	174
Postgraduate university (doctoral) study programme	102

Source:http://www.azvo.hr/index.php/hr/statistike/odnos-sveucilisnih-i-strucnih-studija (26-03-2013)

Croatian high education, as well as its continued adjustments and improvements, has to become a priority for long-term development strategies and whole process for finding

The following conferences have been held so far:

1. Prag, May 2001
2. Berlin, September 2003
3. Bergen, May 2005
4. London, May 2007
5. Leuven and Louvain-la-Neuve, April 2009
6. Budapest-Vienna, March 2010
7. Bucharest, April 2012

Based on these criteria, the number of signatories of the Bologna Declaration was 29. The Prague conference has been expanded the criteria for membership. Full memberships have countries that have met the criteria for programs: Socrates, Leonardo da Vinci, TEMPUS-CARDS. Next stage refers to the reception of the Council of Europe as an advisory member of the follow-up group in Berlin 2003. In Bergen, the country accepted successor States of Soviet Union, members of the TEMPUS-TACIS program: Armenia, Azerbaijan, Georgia, Moldova and Ukraine. Today, the total number of members who participate and apply Bologna is forty eight. Bologna project is associated with membership of European countries. It spreads to the east and the tendency is spreading all over the world. In 2003, The Council of Europe's suggested accession to the southern coast of the Mediterranean and North African countries.

3. The Republic of Croatia and the Bologna Process

The Republic of Croatia has signed the Bologna Declaration at the Ministerial Conference in Prague, in year 2001. All university studies are harmonized in accordance to the rules of the Bologna Declaration in the academic year 2005/2006. The signing of the Bologna Declaration and upcoming accession Croatian accession to European Union, have set great challenges to the Croatian higher education system. Based on the fundamental principles and objectives of the Bologna Declaration, the Republic of Croatia went through restructuring and adaptation of high education system in the last decade. The reform process resulted in new European educational framework suitable for achieving European educational standards through the acceptance of cycles based study at undergraduate, graduate and postgraduate levels, with introduction of the ECTS scoring system and supplementary Study Documents, the introduction of a new system of internationally recognized diplomas, the application of quality assurance, development of national qualifications frameworks compatible with the adopted qualification framework for the European higher Education Area, improvement and program innovations, and also promoting the mobility of students, teachers, researchers and administrative staff as well as the promotion of lifelong learning system.

Table 2 Graduates from professional and university study (ISCED 5)

	Total			
	2008.	2009.	2010.	2011.
Higher education institutions	25573	30156	32378	36448
University of Applied Sciences	3447	3226	3310	4558
Schools of professional higher education	1371	1937	1768	2146
Universities	20389	24527	26662	29089

3. Freedom in research and training is the fundamental principle of university life, and governments and universities-as much as in ther powers- must ensure respect for this fundamental requirement. Rejecting intolerance and being always open to dialogue, the university is an ideal meeting-ground for teachers capable of imparting their knowledge and develop it further by research and innovations, and students entitled,able and willing to enrich their minds with that knowledge.
4. A university is guardian of European humanistic tradition; its constant care is to attain universal knowledge; and to fulfil its vocation it transcends geographical and political frontiers, and affirms the vital need of different cultures to explore and to influence each other (Magna Charta Universitatum).

Since signing the Bologna Declaration 1999th by 29 countries, the number of members has grown day by day. Today, the total number of signatories and users of Bologna declaration is 48 countries. As shown in table 1; since the signing of the Bologna Declaration, members are in continuous increasing. By joining Russia as member of the club, the European higher education area expands from Atlantic to Pacific Ocean. Processes of creating boundaries have two aspects; «geographical» and «membership aspect».
Geographical boundaries are generally fixed until the issue of European borders was and still is an open question for discussion. Membership in the European area of higher education – EHEA, means acceptance of collectively defined regulations, principles or standards, even if members of EHEA were not involved in their creation. Since signing the Bologna Declaration, Ministerial Conferences are continuously being held. At the conferences the main subject is continually development monitoring of particular national legislations, adjustments and progress in reforms, governing reporting and upgrades done so far, accessing new members in the process, make joint decisions, and regulate matters of common goals.

Table 1 Chronology of the Bologna Process

Coference	Number	Growth	States
1998 Sorbona	04		Germany, France, United Kingdom, Italy
1999 Bologna	29	+ 25	Belgium (Flemish Community and, Bulgaria, Denmark, Estonia, Finland, Greece, Ireland, Iceland, Litva, Latvia, Luxemborg, Malta, Netherlands, Norway, Austria, Poland, Portugal, Romania, Sweden, Switzerland, Slovenia, Spain, Czech Republic, Hungary
2001 Prag	33	+ 04	Croatia, Liechtenstein, Turkey, Cyprus
2003 Berlin	42	+ 09	Albania, Andorra, BiH, Vatikan, Macedonia, Russia, Serbia, Montenegro, Council of Europe (counseling member)
2005 Bergen	47	+ 05	Armenia, Azerbaikan, Georgia, Moldova, Ukraine
Budapest/Vienna, March 2010	48	+ 1	Kazakhstan

Source: Author´s view

Criteria for membership and non-membership are the essential element of the entire project organization and processes were changed several times. For Sorbonne declaration and preparation for Bologna conference there were the two groups of countries: EU member and EU candidate countries, and Members of the European Free Trade Association (EFTA). The overall number of signatories Bologna Declaration, based on these criteria, was 29.

system that will be in function of common goal. Precisely the last facts became the foundation for creating a European Higer Education Area - EHEA.

To achieve the goals which are equal and harmonized for all EU members should be based on the reform of the educational system. Reform of the educational system is a demanding and complex project. This project is popularly called the Bologna process. The beginning of the Bologna process does not reach far back into the past. First time the idea of creating a European area of higher education is mentioned in the Charter of European universities (called Magna charta universitatum), which was signed in 1988th in Bologna. Although creating a unified the educational environment is not so old it is extremely dynamic and is constantly adjusted and updated. The European Union is the engine that launches the Bologna process. The main goal of the Bologna process is raising quality of national educational system through mutually comparable and measurable system.

As challenges to realization of the Bologna process there is a need which aims to protect the wealth and diversity of European cultures. Besides the cultural dimension attention should be paid also to the social dimension of Bologna Process.

Exactly the social dimension states and emphasizes the importance of the presence of social aspects in the entire reform, and also adjustments of certain national education systems (Communiqué of the Conference of Ministers responsible for Higher Education in Berlin on 19 September 2003rd and Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005).

The importance of the social dimension, which is defined in the most important documents of the Bologna Process, lies primarily in pointing to the problems with financial burdening of students (Puzic Doolan, Dolenec, 2006., 243). We may say that the challenges of the Bologna process are to ensure:

1. Clearly readable and comparable degrees of knowledge system (Diploma Supplement)
2. System of higher education based on two cycles, undergraduate and graduate
3. European Credit Transfer System ECTS
4. Mobility
5. EU cooperation and quality assurance,
6. EU dimension of higher education
7. Lifelong learning,
8. High education and students
9. Promoting the benefits of the European higher education area.

2. Chronology of the Bologna Process in brief

The fundamental document which has started the renovation of the higher education system was Sorbonne declaration (1998.). Signatories of the Sorbonne declaration were France, Italy, United Kingdom and Germany. The next declaration was signed in Bologna officially titled EHEA (European Higher Education Area) and popularly is called Bologna Declaration. The fundamental principles the Bologna Declaration are:

1. The university is an autonomous institution in the heart of societiy differently organized due to geographical and historical heritage; it produces, examines, evaluates and transmits culture by research and teaching. To meet the needs of the world, its research and teaching must be morally and intellectually independent of all political authorities and intellectually independent of all political authorities and economic powers.
2. Teaching and research in universities has to be inseparable in order to follow changing needs and demands of society, and scientific progress.

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THE IMPLEMENTATION OF THE BOLOGNA PROCESS IN REPUBLIC OF CROATIA

PRIMJENA BOLONJSKOG PROCESA U REPUBLICI HRVATSKOJ

ABSTRACT

Reform of higher education system in Croatia is almost a permanent state in the past thirty years. Whole time, there wasn't longer period in which higher education system could stabilize and develop on the basis of some generally accepted principles, with occasional corrections, adjustments and necessary modernization. Based on the fundamental principles and objectives of the Bologna Declaration, the Republic of Croatia went through restructuring and adaptation of high education system in the last decade. The implementation of Bologna process has resulted in a number of positive and negative consequences. The aim is to show the importance of the education system and the relationship beetween the economy and education through an analysis of the introduction of the Bologna Process in Republic of Croatia.

Key words: *Bologna process, higher education, educational institutions, development*

SAŽETAK

Reforma sustava visokog obrazovanja u Republici Hrvatskoj gotovo da je trajno stanje u posljednjih tridesetak godina. Za cijelo to vrijeme nije bilo dužega razdoblja u kojem bi se sustav visokog obrazovanja mogao stabilizirati i razvijati na temelju nekih općeprihvaćenih načela, uz povremene korekcije, prilagodbe i modernizacije nužne svakom, pa i najstabilnijem sustavu visokog obrazovanja. Temeljeći se na osnovnim načelima i ciljevima Bolonjske deklaracije, Republika Hrvatska je u posljednjem desetljeću krenula putem restrukturiranja i prilagođavanja sustava visokog obrazovanja. Primjena Bolonjskog procesa rezultirala je kako pozitivnim tako i negativnim posljedicama. Cilj rada je ukazati na važnost obrazovnog sustava i međusobnu povezanost gospodarstva i obrazovanja kroz analizu uvođenja Bolonjskog procesa u Republici Hrvatskoj.

Ključne riječi: *Bolonjski proces, visoko obrazovanje, obrazovne institucije, razvoj*

1. Introduction

Foundations of European Union rest on common constitution, various community policies, budget, etc. If we want to have all the common parts harmonized and balanced, it is necessary that the accomplishment of previous goals is based on the unique and common education

The charts confirm the expected positive correlation between the increase in income and the level of human resources development. It is important to note that, although there is a positive correlation in both cases a) and b), faster income growth is achieved by increasing the level of education of the population (and therefore, the correlation coefficient in Chart a) of 84,57%, which means that a strong correlation was established between the increase in the education of the population index and income growth). This means that the Republic of Croatia (and all analysed counties) should make significant investments in education in order to increase generation coverage of the population at all levels of education and extend its duration. In order to achieve this objective, it is necessary to increase allocations for science and education, to fund vocational education (which is currently being accessed in a traditional manner), and the reform of vocational education should be used to fulfill the need for specific practical knowledge and skills as well as general knowledge and skills such as interpersonal relationships and social competence, to encourage life-long learning which is currently mainly carried out through adult education policy, to use best practice from other European economies, to apply ICT in education and encourage diverse, innovative approaches to learning.

3. Conclusion

In recent years, the rise of the role of human resources in the development of enterprises and national economies has resulted in more frequent attempts of their reporting and measuring their impact on economic growth. HDI is increasingly used as an indicator of human development. Analysis of human resources development in Eastern Croatian counties and in the Republic of Croatia indicated that all the analysed counties in 2011 had Human Development Index greater than 0,800 (according to the classification until 2010 – high Human Development Index), and that they made progress in relation to 2007. However, human resources development in Eastern Croatia had a slower dynamics than the average human resources development in Croatia, and, in fact, these counties recorded a developmental lag. Analysis of the impact of education of human resources and life expectancy has shown that it is necessary to make further investments in human resources development through education policy.

REFERENCES

Bahtijarević Šiber, F. (1999): ***Management ljudskih potencijala***, Golden marketing, Zagreb

Bowman, M.J. (1968): ***Principles in the Valutation of Human Capital***, The Review of Income and Wealth, No. 3., Groningen

Harbison, Myers (1964): ***Education, Manpower and Economic Growth***, McGraw-Hill Book Company, New York

Jarvis, P. (2000.): ***Human resource development Handbook***, Kogan Page Limited, London

Mervar, A. (2003.): ***Esej o novijim doprinosima teoriji ekonomskog rasta***, Ekonomski pregled, vol. 54, no. 3-4, pp. 369-392

Schultz, T.W (1985): ***Ulaganje u ljude***, Centar za kulturnu djelatnost, Zagreb

Vinski, I. (1997.): ***Valorizacija ljudskog potencijala***, Ekonomski pregled, Zagreb
(2003., 2007., 2011., 2013): ***Human Development Report, World Bank, Washington
*** (2013): ***Statistički ljetopis Republike Hrvatske***, Popis stanovništva, Državni zavod za statsitiku, Zagreb

Table 5 The change in the HDI for the Republic of Croatia and Eastern Croatian counties in 2011/2007

	Human Resources Education Index	GDP/ Pc USD	GDP Index	Life expectancy	Life exp. index	HDI
Republic of Croatia	101,93	104,44	100,89	103,48	105,20	102,69
Virovitica-Podravina County	101,65	96,16	99,13	100,85	101,30	100,73
Požega-Slavonia County	101,88	101,03	100,23	102,23	103,36	101,88
Brod-Posavina County	102,42	113,31	102,93	102,31	103,46	102,94
Osijek-Baranja County	100,98	107,21	101,50	101,66	102,50	101,65
Vukovar-Srijem County	102,50	112,43	102,69	100,04	100,06	101,69

Source: Authors' calculation

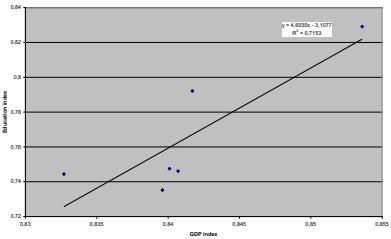
The Republic of Croatia and all the Eastern Croatian counties recorded a positive change in the HDI, while the changes in the Eastern Croatian counties are of lower intensity (with the exception of Brod-Posavina County). Brod-Posavina County (13,31%) and Vukovar-Srijem County (12,43%) achieved the highest income growth per capita in 2011 in relation to 2007. In the same period, Virovitica-Podravina County (one of the analysed counties), recorded a reduction of income (3,84%). Brod-Posavina County and Vukovar-Srijem County also had the highest increase in the education of human resources (Education Index increasing by 2,42 % and 2,5%). However, the Vukovar-Srijem County recorded the smallest increase in life expectancy in 2011 in relation to 2007, and therefore, this county realised HDI growth on the level of other analysed counties. The only county which changed the HDI on the national level of HDI change is Brod-Posavina County. Therefore, it can be concluded that, although all the counties recorded HDI growth in the analysed period, this increase was insufficient for reaching the development dynamics of the most developed Croatian counties in Human Development Index.

3.3. Regression Analysis of the Relationship Between HDI Components

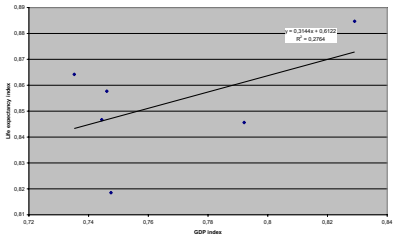
The Least Squares Method is used below to analyse the impact of HDI components on income growth.

Chart 1 The relationship between a) Income Index and Human Resources Education Index, and b) Income Index and Life Expectancy for the Republic of Croatia and Eastern Croatian counties, linear regression

a)



b)



Source: Authors' calculation

	Human Resources Education Index	GDP/ Pc USD	GDP Index	Life expectancy	Life exp. index	HDI	HDI deviation from the Croatian average
Virovitica-Podravina County	0,8265	9163	0,7540	73,48	0,8080	0,7962	95,53
Požega-Slavonia County	0,8252	8649	0,7444	74,79	0,8298	0,7998	95,97
Brod-Posavina County	0,8198	7222	0,7143	75,12	0,8353	0,7898	94,77
Osijek-Baranja County	0,8335	10733	0,7804	74,5	0,8250	0,8130	97,55
Vukovar-Srijem County	0,8124	7694	0,7249	75,77	0,8462	0,7945	95,33

Source: Authors' calculation

In 2007, all of the analysed counties lagged behind the average Croatian Human Development Index. The greatest lag was recorded in Brod-Posavina County, which lags behind the Croatian average by 5,23%. This is primarily due to the fact that in 2007, Brod-Posavina County had 48% less income than the Croatian average. All the counties have a lower level of education of human resources in comparison with the Croatian average, but Osijek-Baranja County lags behind the least. The county with the highest human resources development, as measured by the HDI Index, is the Osijek-Baranja County (HDI=0,8130), and, according to the OUN methodology that was used until 2010, this county is the only county that groups among the counties with high Human Development Index (other counties group among the counties with medium Human Development Index).

Table 4 HDI for the Republic of Croatia and Eastern Croatian counties in 2011

	Human Resources Education Index	GDP/ Pc USD	GDP Index	Life Expectancy	Life exp. index	HDI	HDI deviation from the Croatian average
Republic of Croatia	0,8536	14364	0,8291	78,083	0,8847	0,8558	100,00
Virovitica-Podravina County	0,8401	8811	0,7475	74,107	0,8185	0,8020	93,72
Požega-Slavonia County	0,8407	8738	0,7461	76,46	0,8577	0,8148	95,21
Brod-Posavina County	0,8396	8183	0,7352	76,853	0,8642	0,8130	95,00
Osijek-Baranja County	0,8417	11507	0,7921	75,734	0,8456	0,8264	96,57
Vukovar-Srijem County	0,8327	8650	0,7444	75,8	0,8467	0,8079	94,41

Source: Authors' calculation

Osijek-Baranja County was also in 2011 the county with the highest level of human development (HDI=0,8264); however, all the other counties also exceeded the Human Development Index of 0,800. The subject of the following analysis is the change in individual components of the Human Development Index in 2011 compared to the year 2007.

	Total number of employees per 100 inhabitants, 2012	Number of employees in the secondary sector per 100 employees, 2012	Secondary school qualifications per 100 inhabitants, in 2011	Number of high school students per 100 inhabitants, in 2012	University qualifications per 100 inhabitants, in 2011	Number of university students per 100 inhabitants in 2012
Croatia						
Virovitica-Podravina County	15,48	32,17	38,44	4,49	6,93	2,75
Požega-Slavonia County	17,30	33,74	39,41	4,98	8,33	3,57
Brod-Posavina County	15,73	39,78	42,04	4,79	7,85	3,14
Osijek-Baranja County	22,55	31,90	43,37	4,61	10,78	3,07
Vukovar-Srijem County	16,95	27,21	41,32	4,78	7,85	2,78

Source: Authors' analysis according to the NBS, the 2011 Census

Analysis of the data in Tables 1 and 2 indicates below-average level of development of the global human component in Eastern Croatian counties in comparison with the Croatian average. In fact, all the counties recorded a lag in the number of employees per 100 inhabitants in relation to the Croatian average (Virovitica-Podravina County the most – 37,81%, and Osijek-Baranja County the least – 9,4%), lag in the number of the population with secondary education per 100 inhabitants (Virovitica-Podravina County the most, 13,85%, and the Osijek-Baranja County the least – 2,8%), negative deviation of the number of university graduates per 100 inhabitants (Virovitica-Podravina County the most, 50,11%, and Osijek-Baranja County the least – 22,39%), as well as negative deviation of the number of university students per 100 inhabitants (Virovitica-Podravina County the most, 22,97%, and Brod-Posavina County the least – 14,01%, and no deviations in relation to the Croatian average – Požega-Slavonia County). All the counties recorded positive deviations in the number of high school students per 100 inhabitants (the largest positive deviation had Požega-Slavonia County, 14,22%), and positive deviations in the number of employees in the secondary sector per 100 employees (except Vukovar-Srijem County which had negative deviations in case of this indicator, too). These data indicate that the preconditions have been created for the formation of high-quality human factor in Eastern Croatia.

3.2. Human Development Index (HDI)

As noted above, HDI is an indicator of human resources development. HDI of Eastern Croatian counties and the Republic of Croatia for 2007 and 2011 is analysed below.

Table 3 HDI for the Republic of Croatia and Eastern Croatian counties in 2007

	Human Resources Education Index	GDP/ Pc USD	GDP Index	Life expectancy	Life exp. index	HDI	HDI deviation from the Croatian average
Republic of Croatia	0,8374	13754	0,8218	75,46	0,8410	0,8334	100,00

simple linear regression is also used (Ordinary Least Squares Method, OLS). In statistics, the Least Squares Method, (OLS) is a method for estimating unknown parametres in the linear regression model. This method minimises the sum of squares of the vertical distance between the observed indicators and the collection of indicators provided by the linear approximation. The resulting estimates can be expressed by a simple formula, especially in the case of one regressor. Using the Ordinary Least Squares Method, the authors analysed the impact of changes in certain variables of the HDI on the increase in GDP per capita. The same model was also analysed by the graphicalal method.

3. Analysis of Human Resources Development in Eastern Croatia

3.1. Global Human Component

According to the results of the 2001 Census, a total of 891,259 inhabitants lived in Eastern Croatia, or 20,1% of the total population of the Republic of Croatia. In 2011, 805,998 inhabitants lived in Eastern Croatia (18,81% of the total Croatian population; the Census, 2011). This means that East Slavonia recorded depopulation of 9,56% in the ten-year census period. This is a consequence of negative natural population growth and mechanical attrition. The following table presents the basic data on population, households, and population density of the counties in Eastern Croatia and in the Republic of Croatia in 2011.

Table 1 Population, number of households, proportion of urban population in total population and population density in Croatia and Eastern Croatian counties in 2011

	Population in 2011	Number of households in 2011	The average number of household members in 2011	The proportion of urban population in total population in 2011 (%)	Population density in 2011 (inh./km^2)
Republic of Croatia	4284889	1519038	3,15	70,39	75,71
Virovitica-Podravina County	84836	29622	3,53	47,48	41,92
Požega-Slavonia County	78034	26408	3,76	74,90	42,81
Brod-Posavina County	158575	52056	3,36	46,27	78,12
Osijek-Baranja County	305032	110009	3,34	63,58	73,41
Vukovar-Srijem County	179521	61094	3,79	49,13	73,15

Source: Authors' analysis according to the NBS, the 2011 Census

The largest population, according to the 2011 Census, lives in Osijek-Baranja County, which also has the highest number of households. In comparison with the analysed counties, Požega-Slavonia County in 2011 had the highest proportion of urban population (74,9%), and Brod-Posavina County has the highest population density (78,12 inhabitants per km^2), which represents a positive deviation in comparison with the Croatian average.

Table 2 Global human component of the Republic of Croatia and Eastern Croatian counties

	Total number of employees per 100 inhabitants, 2012	Number of employees in the secondary sector per 100 employees, 2012	Secondary school qualifications per 100 inhabitants, in 2011	Number of high school students per 100 inhabitants, in 2012	University qualifications per 100 inhabitants, in 2011	Number of university students per 100 inhabitants in 2012
Republic of	24,89	28,93	44,62	4,36	13,89	3,57

taken into account), labour productivity. Finally, the achieved level of education indirectly expresses the level of mastery of knowledge and skills necessary to achieve growth and development. Until 2009, all countries of the world were ranked into three groups according to the level of HDI: (0,000 - 0,499 low HDI countries; 0,500 – 0,799 medium HDI countries; 0,800 – 1,00 high HDI countries. Since 2009, the OUN classifies countries into four groups: very high HDI countries (0,9 - 1,00), high HDI countries (0,8 - 0,899), medium HDI countries (0,5 - 0,799), low HDI countries (0 - 0,499). As this is a relatively new indicator composed of multiple components, it is constantly upgraded and its contents therefore constantly change. From 2010, the World Bank introduced a new methodology for calculating the Human Development Index. According to the calculation methodology, by 2010, knowledge and education were expressed by a combined index of literacy of the population and the proportion of corresponding population groups in primary, secondary and tertiary education. Since 2010, this indicator was replaced by a new indicator that shows the level of education which presents access to knowledge and is measured by average and expected years of schooling of the population. Since 2010, new ranking criteria of the countries have been applied in terms of Human Development Index. All countries are classified into four groups; ¼ of the analysed countries is included in each of the groups. 25% of the highest-ranked countries are countries of very high human development level, other 25% of the ranked countries are high human development countries, the third 25% of the ranked countries are countries of medium human development, and the final 25% are low human development countries (Human Development Report 2011). HDI can also be used to measure development of human resources in certain regions and local communities.

The objective of the paper is to analyse the development of human resources in Eastern Croatia and to establish their impact on the economic growth of Eastern Croatian counties. This will be conducted in three steps: the subject of analysis in the first step will be global human component through quantitative and qualitative indicators (population density, average household size, level of urbanisation); indicators that directly express the degree of utilisation of human resources (employment per 100 inhabitants, employment per sectors), indicators pointing to the existence of the preconditions for the formation of high-quality human factor (coverage of relevant age groups by secondary and tertiary education, the number of students and university students per 100 inhabitants). In the second part of the research, the authors will use the Human Development Index (HDI) to evaluate human resources development in the Osijek-Baranja County, Požega-Slavonia County, Brod-Posavina County,Vukovar-Srijem County, and Virovitica-Podravina County. In the third part of the research, quantitative methods will be used to analyse the relationship between the HDI and GDP per capita of Eastern Croatian counties and some possible measures for human resources development will be proposed.

2. Methodology

Data by the National Bureau of Statistics are used in the paper to calculate the HDI. To ensure that all the data are transformed into an index which obtains the values from zero to one, which allows for their comparison and aggregation, the Method of Transformation of Variables is used:

$$x - index = \frac{x - \min(x)}{\max(x) - \min(x)}$$

wherein min(x) and max(x) are minimum and maximum values of the variable x. Given the availability of statistical data and the possibility of comparison, the HDI is calculated according to the methodology of the World Bank that was used until 2010. Furthermore,

England (Vinski, I., *Valorizacija ljudskog potencijala [Valuation of Human Resources], Ekonomski pregled*, [*Economic Review*]11-12/1977). Petty defined it as budget of total income of the population and the appropriate size of capital the earnings would bring if they were invested at a particular interest rate. Friedrich and Johann von Thunen used two methods to assess the value of human capital: capitalisation of the net value of future earnings per market interest rate and the total cost of development of a person of a certain age (Jarvis, P. H., 2000). They found that the value of human capital in Great Britain in 1891 was five times greater than the value of stocks of physical capital. M. J. Bowman advocated the opinion that human resources should be assessed as a total value of services the employees will provide in predictable working life decreased by a discount for an appropriate number of years (Bowman, M. J., 1974). In their work *Education, Labour Force and Economic Growth*, (Harbison, F., Myers, Ch., 1964), Harbison and Myers developed quantitative indicators to measure human resources development after they had found that economists neglected the study of the human factor and its significance and contribution to economic growth. They concluded that this is primarily due to the inability to determine the input-output relationship, that is indisputable in case of physical capital, because the value of this capital is directly measurable. Interest in the study of human capital was growing in the second half of the 20th century, which is primarily the merit of Nobel Prize Laureates Theodor Schultz and Gary Becker. However, it should be taken into account that this was the time when development of national economies was impossible without an increase in education of the population. Therefore, Schultz and Becker primarily engaged in investments in education which they treated as an investment in human capital, although Schultz found that there were several groups of activities and flows that affect the increase in human capital. These are improvement of health services, formal education, education in the workplace, adult education outside the company, as well as individual and family migrations due to greater employment opportunities (Mervar, A., 2003). OECD publications list three ways of measuring human capital: through the costs of education and training, through testing of competences, through the indicators of „achievements“: wages, job security, work place status.

Lately, the Human Development Index (HDI) is calculated by the OUN. With regard to the content of the HDI, it can be used as a good indicator of human resources development, and the HDI is at the same time a good indicator of the achieved level of development of a country or a region. The index was constructed at the beginning of the 1990s by Amartya Sen, Mahub ul Hak, Gustav Ranis, Meghan Desai, and it has been used ever since by the OUN and is published in the annual Human Development Report. The concept of human development in a broader sense is defined by the OUN as development of the people, development for the people and development by the people (Human Development Report, 1993). The HDI is calculated as a combined index of three indicators. These are: 1. the life span and health condition of the population measured by life expectancy, 2. knowledge and education of the population, 3. purchasing power i.e. the standard of living of the population measured by GDP per capita The first two indicators indirectly show human resources development, while the third provides a better image of the achieved level of development of a country.

These three indicators are appropriate for indirect demonstration of human resources development at the macro level, because longer life expectancy of the population implies a better state of health, which results in better mental and physical abilities, i.e. greater vitality of the population. Purchasing power of the population indirectly expresses the degree of fulfillment of the needs, and thus satisfaction and motivation of employees. Also, it indirectly expresses, although not precise enough (because GDP per capita, and not per employee is

opremljenosti različitim komponentama infrastrukture. Uočavaju se i značajne razlike u razvijenosti ljudskih potencijala. Cilj rada je analizirati razvijenost ljudskih potencijala istočne Hrvatske i utvrditi njihov utjecaj na gospodarski rast županija istočne Hrvatske. To će se napraviti u tri koraka: u prvom će se analizirati: globalna ljudska komponenta putem kvantitativnih i kvalitativnih pokazatelja (gustoća naseljenosti, prosječna veličina domaćinstva, stupanj urbanizacije); pokazatelja koji posredno iskazuju stupanj korištenja ljudskih potencijala (zaposlenost na 100 stanovnika, zaposlenost po sektorima); pokazatelja koji ukazuju na postojanje preduvjeta za formiranje kvalitetnog ljudskog faktora (obuhvat relevantnih dobnih skupina sekundarnim i tercijarnim obrazovanjem, broj učenika i studenata na 100 stanovnika). U drugom dijelu istraživanja autori će putem indeksa ljudske razvijenosti (HDI) ocijeniti razvijenost ljudskih potencijala u Osječko-baranjskoj, Požeško-slavonskoj, Brodsko-posavskoj, Vukovarsko-srijemskoj i Virovitičko-podravskoj županiji. S obzirom na sadržaj, indeks ljudske razvijenosti može se koristiti kao dobar pokazatelj razvijenosti ljudskih potencijala, a istodobno je i pokazatelj dostignute razine razvijenosti neke zemlje/regije jer mjeri životni vijek, obrazovanost i BDP po stanovniku. U trećem dijelu istraživanja će se kvantitativnim metodama analizirati odnos HDI-a i BDP-a po stanovniku županija istočne Hrvatske te će se navesti neke moguće mjere za razvoj ljudskih potencijala.

Ključne riječi: *ljudski potencijali, gospodarski rast, razvoj, HDI (indeks ljudske razvijenosti)*

1. Introduction with the Literature Review

In the scientific and techical literature covering studies about the importance and contribution of the human factor to production and development of enterprises, local and regional communities or the national economy, commonly used categories are „human capital“ and „human resources“. They are often interchanged in terms of content and are used as synonyms. Following the historical process of research and measurement of the value of investment in people and the values which people bring into the business process through labour as well as contribution they provide to the creation of a new value, it is concluded that it is necessary to make a distinction between these two categories. In the analysis of human capital, one is focused on the value of investing in people through education and health care, but also all other activities that contribute to human development. These investments reperesent individual and social cost and increase human abilities, knowledge and skills. In contrast, in the analysis of human resources, one analyses the contribution people provide to the creation of a new value by including their abilities, knowledge, and skills into the business process. When a person, i.e. employee, includes his or her human capital into the business process, this capital becomes the key component of human resources.

The term „human resources“ implies total mental and physical abilities at the disposal of enterprises which they can use to achieve their business goals (Bahtijarević Šiber, F., 1999). At national level, human resources can be defined as total psycho-physical energy owned by the inhabitants of a country, i.e. a society, which can be used to achieve its development goals. In the pre-working age, society has a crucial influence on the formation and development of human resources, primarily through education and health care, but also through other activities such as child care, sports, and cultural activities.

Human resources cannot be directly expressed in value; thus, their value and development are measured indirectly through human capital. The literature covers various criteria for assessment of the value and development of human resources at the macro level. W. Petty was the first person who tried to quantitatively evaluate human resources in the 17th century

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ANALYSIS OF HUMAN RESOURCES DEVELOPMENT OF EASTERN CROATIA AND THEIR IMPACT ON ECONOMIC GROWTH

ANALIZA RAZVIJENOSTI LJUDSKIH POTENCIJALA ISTOČNE HRVATSKE I NJIHOV UTJECAJ NA GOSPODARSKI RAST

ABSTRACT

In Croatia, there are great differences in the development of certain regions measured by standard indicator of GDP per capita, unemployment and employment rate trends, and equipment with various components of the infrastructure. There are noticeable and significant differences in human resources development. The objective of the paper is to analyse human resources development in Eastern Croatia and to establish their impact on the economic growth of Eastern Croatian counties. This will be conducted in three steps: the subject of analysis in the first step will be global human component through quantitative and qualitative indicators (population density, average household size, level of urbanisation); indicators that directly express the degree of utilisation of human resources (employment per 100 inhabitants, employment per sectors), indicators pointing to the existence of the preconditions for the formation of high-quality human factor (coverage of relevant age groups by secondary and tertiary education, the number of pupils and university students per 100 inhabitants). In the second part of the research, the authors will use the Human Development Index (HDI) to evaluate human resources development in Osijek-Baranja County, Požega-Slavonia County, Brod-Posavina County, Vukovar-Srijem County, and Virovitica-Podravina County. With regard to content, the Human Development Index can be used as a good indicator of human resources development, and is, at the same time, the indicator of the achieved level of development od a certain country/region, because it measures life expectancy, education, and GDP per capita. In the third part of the research, quantitative methods will be used to analyse the relationship between HDI and GDP per capita of Eastern Croatian counties and some possible measures for human resources development will be proposed.

Key words: *human resources, economic growth, development, HDI (Human Development Index)*

SAŽETAK

U Hrvatskoj postoje velike razlike u razvijenosti pojedinih regija mjerene standardnim pokazateljem BDP-a po stanovniku, kretanjem stope nezaposlenosti i zaposlenosti te

The analysis of the various tourism resources, leads to the conclusion that the Osijek-Baranja County has exceptional advantages for the development of various forms of sport and recreation tourism. It is necessary to invest in outdated tourism objects and adapt to the modern demands of tourism demand, animate tourism professionals and small family farms in order to raise the level of offer and using economic and financial potential of this tourism niche.

REFERENCES

Bartoluci, M. (2003.): **Economics and sport management,** Informator, Zagreb, pp 71

Jurlina, M., Vida, D., (2013.): **Development level of health tourism in Osijek-Baranja County,** 2nd International Scientific Symposium Economy of Eastern Croatia – Yesterday, Today, Tomorrow, Osijek 2013.

Mirna Andrijašević, Possibilities for the development of selective tourism in Croatia based on sports - recreational offers, http://www.uhpa.hr/docs/files/zagreb%20kif%20HUPA%20%20SPORTSKO%20REKREACIJSKI%20TURIZAM%20U%20REPUBLICI%20HRVATSKOJ2.pdf (accessed March 2014.)

Čačić, M., Baban, M., Korabi, N., Tadić, D. (2007.): **Geographical - cultural aspects of breeding Lipizzaner in Croatia,** 1. Hrvatski simpozij o lipicanskoj pasmini, Đakovo, 2007., pp 1

State Lipizzaner stud farm Đakovo: **Stud farm Đakovo today;** http://www.ergela-djakovo.hr/content/ergela-dakovo-danas (accessed April 2014.)

Tourist Bord of Osijek – Baranja county: **Hunting and Fishing**, http://www.tzosbarzup.hr/en/experience/hunting-and-fishing/ (accessed March 2014.)

Poslovni dnevnik: **Lovni turizam u EU okreće 10 mlrd. eura, Hrvatska uzima mrvice**, http://www.poslovni.hr/hrvatska/lovni-turizam-u-eu-okrece-10-mlrd-eura-hrvatska-uzima-mrvice-240329 (accessed February 2014.)

The European Federation of Associations for Hunting & Conservation: **Hunters for conservation**, http://www.face.eu/nature-conservation/hunters-for-conservation (accessed February 2014.)

Jurlina, M. Vida, D., (2014.): **Survey** n=50, unstatistical, random sample, Slavonija – Baranja county inhabitants

comparison, in Europe is active even 7 million hunters[43]. The above data shows that the increase in this form of tourism definitely has. The biggest competitors are our Hungary, Czech, Slovakia, Romania and Bulgaria, which offer a range of facilities, as well as hunting grounds tour and photo safari. If this added in our service we could get possibility of an increased number of arrivals.
Increased hunters arrivals are expected when Croatia enters the Schengen zone, which will facilitate complicated signing and transfer of weapons across the border, as well as transportation of trophies and wildlife.
Special emphasis should be given on the development strategy of hunting Osijek-Baranja. Tourists hunters spend two or three times more than ordinary tourists, but foreign hunters in Croatia consume only 30% of the tourist services and 70% on hunting wildlife while abroad, the ratio is reversed. The increase in revenue per hunter tourists can be expected when the public sector recognize the potential in promoting hunting activities and when hunting societies overcome voluntarism and amateurism in terms of hunting tourism businesses. The solution surely lies in cooperation Association of Croatian Travel Agencies and Croatian Hunting Association, the standardization of services, professionalization, and the inclusion of non-hunting areas in international competition worth 10 billion euros[44].
Because water is rich in all kinds of fish, fishing in the Osijek-Baranja county is prevalent in all its parts. The county has a substantial basis for the development of sport fishing tourism.
Water-resource potential of the area are:
- Lakes formed by natural or artificial means
- Rivers with tributaries and backwaters
- Old riverbeds
- Wetlands
- Sport-fishing ponds and economic ponds

Current interest of foreign tourists fishing for the Osijek-Baranja County is great. But it would be greater if there is prepared offer within the continental tourism. To foreign fishermen really started to come in Osijek-Baranja County, it is necessary to work on obtaining permission from the relevant ministries to increase fish stocks and protect it. It should be available via the media and trade shows to present the beauty and richness of the county, call them at selected places to hunt fish and offer them appropriate accommodation with traditional local cuisine.

6. Conclusion

"Sharein the overallcontinentalCroatiantourist tradeis stillnegligiblysmall.Low shareis the resultof disproportionatefunds reallocation, poor accommodation, low share of private investment, lack of attractive content."[45]. This is typical description of continental Croatian tourism.

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http://www.poslovni.hr/hrvatska/lovni-turizam-u-eu-okrece-10-mlrd-eura-hrvatska-uzima-mrvice-240329 (accessed February 2014.)

[43] The European Federation of Associations for Hunting & Conservation: **Hunters for conservation**, http://www.face.eu/nature-conservation/hunters-for-conservation (accessed February 2014.)

[44] Poslovni dnevnik: **Lovni turizam u EU okreće 10 mlrd. eura, Hrvatska uzima mrvice**, http://www.poslovni.hr/hrvatska/lovni-turizam-u-eu-okrece-10-mlrd-eura-hrvatska-uzima-mrvice-240329 (accessed February 2014.)

[45] Jurlina, M., Vida, D., (2013.): **Development level of health tourism in Osijek-Baranja County,** 2nd International Scientific Symposium Economy of Eastern Croatia – Yesterday, Today, Tomorrow, Osijek 2013.

4. Horseback riding

State stud farm in Đakovo was established 1506.[38], and thus ranks among the oldest stud farm in Europe. Horses Lipizzaner breed in Ergela grown since the beginning of the 18th[39] century. For breeding and selecting horses used two locations - Stallion, located in the Đakovo, and Ivandvor, close to the city. But apart from breeding and selection of horses, studfarmhas the quality of which prove noted places in equestrian competitions.

State Lipizzaner stud farm Đakovo on three core activities[40]:

- breeding and selection of horses lipizzan
- Training of horses for sporting events, including treadmills, hand driving, driving fourwheeler
- food production on their own land, or land of 350 hectares land, hay, straw, oats

In addition to core activities, state Lipizzaner stud farm Đakovo offers tourist activities with this in mind: tourist visits to Stallion and Ivandvor, shows for tourists, themed shows, Christmas Ball Lipizzaner horses and ride Lipizzan horse-drawn carriage. Although, all of the above has the features and recreational tourism through a walk, it would be commendable if in the future offer we could see the riding school for children and adults. As part of the riding school could be realized and added value in terms of the development of health tourism (therapeutic riding).
Horseback riding is an ideal form of recreation which releases stress and raises the level of mental and physical abilities. It is important to note that this type of recreation may commence regardless of age would certainly contributed to greater numbers of tourists interested to visit to Osijek-Baranja county, and city Đakovo.

5. Hunting and fishing

The natural environment of Slavonia and Baranja rich with hunting base and fish resources, plenty of river flows and Slavonian forests, as well as economic characteristics of Slavonia and Baranja region's main source of hunting and fishing tourism development. Osijek-Baranja County is among the richest fund of wildlife, fish, forests and rivers, which significantly affects the development of sports and recreational tourism. The county owns 83 hunting grounds the total hunting area of 347,685 ha managed by hunting associations and 14 state hunting grounds[41]. Hunting Association of Osijek-Baranja county consists of six hunting office: Baranja, Donji Miholjac, Đakovo Našice, Osijek and Valpovo.
County has a rich tradition of hunting and can offer high trophy wild animals in open hunting (deer, wild boar) and in fenced hunting grounds (mouflon, fallow deer). Formula for successful hunting is a combination of excellent hunting grounds and wildlife and the quality of accommodation and food, all of which the county can offer. When we add to that from July 1st 2013 European hunters can easily come to Croatian hunting area, we have the opportunity to increase the number of foreign fighters which so far has been between 7000-7500[42]. For

[38] Čačić, M., Baban, M., Korabi, N., Tadić, D. (2007.): **Geographical - cultural aspects of breeding Lipizzaner in Croatia,** 1. Hrvatski simpozij o lipicanskoj pasmini, Đakovo, 2007., pp 1
[39] Čačić, M., Baban, M., Korabi, N., Tadić, D. (2007.): **Geographical - cultural aspects of breeding Lipizzaner in Croatia,** 1. Hrvatski simpozij o lipicanskoj pasmini, Đakovo, 2007., pp 1
[40]State Lipizzaner stud farm Đakovo: **Stud farm Đakovo today;** http://www.ergela-djakovo.hr/content/ergela-dakovo-danas (accessed April 2014.)
[41] Tourist Bord of Osijek – Baranja county: **Hunting and Fishing**, http://www.tzosbarzup.hr/en/experience/hunting-and-fishing/ (accessed March 2014.)
[42] Poslovni dnevnik: **Lovni turizam u EU okreće 10 mlrd. eura, Hrvatska uzima mrvice**,