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# INVESTIGATION OF THE IMPACT OF THE GLOBAL ECONOMIC CRISIS ON THE TOURISM SECTOR AND COMPETITIVENESS OF EUROPEAN COUNTRIES\*

### Abstract

The purpose of this study is to analyze the impact of the global economic crisis on the tourism sector and competitive position of European countries with the help of the gross domestic product (GDP), the Travel & Tourism Competitiveness Index (TTCI), and the Global Competitiveness Index (GCI) and to explore the correlation between these indicators. The aim of this paper is to monitor changes in GDP, GCI, and TTCI, which occurred as a result of the global economic crisis in 2008, based on selected groups of European countries. The classification of the countries is carried out according to the level of their development. The research is conducted on the basis of secondary sources and classical statistical tools with an emphasis on descriptive statistics and correlation analysis. The obtained results indicate that the effects of the global economic crisis are more prominent in the group of developed countries than in the group of developing countries. The study provides a framework for determining the goals and strategies to improve competitiveness of tourism and the competitive position of European countries.

Key words: global economic crisis, tourism, competitiveness, Europe

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### ИСПИТИВАЊЕ УТИЦАЈА ГЛОБАЛНЕ ЕКОНОМСКЕ КРИЗЕ НА СЕКТОР ТУРИЗМА И КОНКУРЕНТСКУ ПОЗИЦИЈУ ЕВРОПСКИХ ЗЕМАЉА

#### Апстракт

Сврха истраживања је да се анализира утицај глобалне економске кризе на сектор туризма и конкурентску позицију европских земаља уз помоћ информација о бруго друштвеном производу (GDP – Gross Domestic Product), Индекса конкурентности путовања и туризма (TTCI –Travel & Tourism Competitiveness Index) и Индекса глобалне конкурентности (GCI – Global Competitiveness Index), као и да се испита степен корелације ових показатеља. Циљ рада јесте праћење промена индикатора GDP, GCI и TTCI, насталих као последица светске економске кризе из 2008. године, по дефинисаним групама европских земаља. Груписање земаља извршено је према степену развијености. Истраживање је спроведено на бази секундарних извора и класичне статистичке методологије с нагласком на дескриптивну статистику и корелациону анализу. Резултати истраживања указују на то да су се ефекти глобалне економске кризе више осетили у групи развијених земаља у односу на групу земаља које су све мање неразвијене. Истраживање пружа оквир за детерминисање циљева и стратегија за унапређење конкурентности туризма и конкурентске позиције европских земаља.

Кључне речи: глобална економска криза, туризам, конкурентност, Европа

### INTRODUCTION

Tourism is one of the most dynamic service industries in both developed and developing countries. The World Tourism Organization stresses the importance of tourism at the beginning of the 21<sup>st</sup> century as one of the fastest growing sectors with significant multiplicative functions, for which further rapid growth is predicted. This is supported by the data of the constant increase in the number of tourists worldwide. The number of tourists increased from 25 million in 1950 to 277 million in 1980, 435 million in 1990, 675 million in the 2000, and 935 million in 2010 (The Travel and Tourism Competitiveness Report 2011, 45). According to the WTO, the tourism sector is expected to reach 1.6 billion in tourist arrivals until 2020, out of which 717 million are in Europe. The tourism sector improvement is increasingly dependent on the tourism organizations' competitiveness improvement, especially the tourist destinations improvement (Balan, Balaur & Veghes, 2009, p. 979). The aforementioned expectations of the WTO have been significantly shaken by the global economic crisis. This event emphasizes the development and implementation of new management models in the tourism sector, which has been affected by the crisis. Through partnerships, tourism services

diversification, tourism promotion, etc., new business models should provide the tourism sector not only with higher efficiency and competitiveness but also with solutions to the current problems associated with the private and public sector partnership, social inclusion, implementation of the sustainable development concept, new job creation, and poverty reduction.

The global economic crisis emerged in the USA on the mortgage market in the middle of 2007. This market was one of the most developed and operations on this market were performed with a negligible amount of risk. At first, the crisis manifested itself as the crisis of liquidity, due to the difficulty in repaying mortgages, but then it grew into a mortgage crisis of banks and other financial institutions, the crisis of companies and their stocks, as well as the crisis of money and capital markets (Gorčić, 2009, p. 129). In the first half of 2008, the crisis evolved into a global economic crisis. Although the shock wave affected the financial sector, the returning wave also included the real sector. Within the real sector, the tourism sector was particularly adversely affected. The focus of this paper is the impact of the global economic crisis on the tourism sector and the competitive position of European countries.

# GLOBAL ECONOMIC CRISIS AND ITS IMPACT ON TOURISM COMPETITIVENESS

The tourism sector is particularly sensitive to the emergency situations caused by conflicts, political instability, natural disasters, and the like. This sector is very sensitive to both naturally and artificially induced crises. Unexpected adverse events affect the tourists' confidence in the organization or the destination. However, adverse effects manifesting themselves in the tourism sector were particularly prominent during the global economic crisis in 2008/2009. There are numerous studies that deal with the analysis of the relationship between the economic crisis, the tourism sector, and its competitiveness (Perles-Ribes, Ramon-Rodriguez, 2013; Perles-Ribes, Ramon-Rodriguez, Rubia-Srrano & Moreno-Izquierdo 2013; Smeral, 2010). Most of these studies focused on specific regions or countries. A number of authors cover the impact of the economic crisis on the tourism sector in the United Kingdom, the United States, Romania, Egypt, and other European countries (Page, Song & Chenguang Wu, 2012; Ritchie, Amaya-Molinar & Frechtling, 2010; Smeral, 2009; Balan, Birsan, 2010; Badr, Zakareya & Saleh, 2009).

The decline in economic activity during 2008 and 2009 has led to uncertainty in predicting the long-term growth of the tourism sector for which, until then, a high annual growth rate was implied each year. A large number of tourist destinations and countries are increasingly facing uncertainty and the risk which, in short term, can seriously harm the tourism industry. Regardless of several promising short-term forecasts for tourism and travel by the World Travel and Tourism Council, tourist destinations will face a more fluctuating demand caused by short-term shocks.

After a continuous growth of this sector until 2008, the tourism industry faced a crisis as evidenced by the fact that the number of international tourist arrivals fell by 4.2% between 2008 and 2009, which is the biggest drop in the previous period. This crisis caused a more drastic decline in the operations performed in the tourism sector, since a large number of people significantly changed their travel plans. The reason for this lay in the deterioration of the economic situation, which resulted in the decline of real GDP by 0.6% in the 2008-2009 period (The Travel and Tourism Competitiveness Report 2011, p. 35) and the decline in the standard of living. The result of the economic crisis was also seen in the tendency of movement of travellers from the Western hemisphere towards the East and the reduction in the number of people who could afford luxury packages, as pointed out in the abovementioned Report.

Bearing in mind that there are different risk factors in the tourism sector (terrorism, natural disasters, epidemics, etc.), in the sense that some of them are government-controlled while others are not, it is necessary to develop new concepts of crisis macro management for tourism development. The report of the *World Economic Forum* from 2011 on competitiveness in the tourism industry proposes a concept for improving competitiveness and development of tourism in order to make this sector more flexible to changes in the business environment affected by the crisis and facing relatively smaller opportunities for control by the authorized institutions (Figure 1).

Based on the experience concerning the global economic crisis of 2008, the WTO has set guidelines to overcome the crises in the tourism sector in its new concept for competitiveness improvement and tourism development (Tourism Confronting the Economic Downturn, 2009). These guidelines emphasize the need for fast action to mitigate the consequences caused by the global economic crisis by better cooperation of all stakeholders in the tourism sector, as well as by creating and implementing innovation in sectors related to tourism and activities in managing the tourist offer (development of tourism product/service, marketing, human resource management, etc.). In addition, to support these activities, the need to improve the system of data collection and analysis is highlighted, with a view to rapidly diagnosing the causes of the crisis and controlling and specifying the required set of measures and actions to mitigate the crisis. These systems represent a necessary support for the creation of long-term development policies and improvement of the tourism competitiveness.



Figure 1. New concept for competitiveness improvement and development of tourism

Source: The Travel and Tourism Competitiveness Report 2011, p. 41.

The World Tourism Organization emphasizes the importance of tourism for the recovery of national economies. Specifically, during a period of economic crisis, tourism can play a key role in the recovery process, because it is a sector that has huge potential for job creation and utilization of capacities and natural resources. According to the data from the International Monetary Fund from October 2010, the consumption of travel and tourism has increased by more than one percent in the period from 2009 to 2010. When this data is compared to global changes in GDP in the same period (growth of global GDP by 4.7%), it leads to a conclusion that the GDP growth is much higher compared to the growth of the tourism sector.

This fact underpins the view expressed in the report of the World Economic Forum from 2011 entitled "After the crisis" (Travel & Tourism Report Focuses on Moving beyond the Downturn, 2011), on the cautiously optimistic view of the tourism sector development. This Report emphasizes that there are many complexities the tourism industry is still facing and that they must be overcome to ensure the dynamic growth in the future.

### GROSS DOMESTIC PRODUCT, GLOBAL COMPETITIVENESS INDEX, AND TRAVEL & TOURISM COMPETITIVENESS INDEX

For the purpose of analyzing the impact of the global economic crisis on the tourism sector and competitiveness, the indicators used in this study are gross domestic product, the global competitiveness index, and the travel and tourism competitiveness index. The importance of the analysis of gross domestic product comes from the assumption that the adverse crisis effects may manifest themselves in the decline of social production results. These results can be expressed by gross domestic product and gross national product. In addition, the adverse effects of global economic crisis could threaten national economies, as well as the competitiveness of the tourism sector.

Gross domestic product (GDP) is the sum of the market value of all market goods and services generated within a country in a certain period. However, nowadays, there are critical views regarding the interpretation of this indicator in the aforementioned sense. Despite this, GDP is still used as a key indicator for assessing the "health" of a national economy. GDP per capita is traditionally used to show the standard of living in a country (Beyond GDP, 2012), i.e. it represents a measure of the general well-being of people.

There are a number of definitions of the concept of competition and a general agreement that there is no generally accepted definition. "It is perhaps too broad and complex a concept, defying attempts to encapsulate it in universally applicable terms" (Crouch, Ritchie, 1999, p. 140). Competitiveness is, among other things, defined as a set of institutions, policies, and factors that determine the productivity level of a country (The Global Competitiveness Report 2011-2012, p. 4). When discussing the determinants or variables that determine the competitiveness of the tourism sector, there are opinions that they can be quantitative, such as "number of visitors, market share, tourist expenditure, employment, value added of the tourism industry, or qualitative measured variables, such as cultural heritage, quality of tourism services, etc." (Kulcsar, 2009, p. 124.) Centre for Strategy & Evaluation Services in its document "Enhancing the Competitiveness of Tourism in the EU" (2013) stresses that innovation, i.e. "ability to generate and apply new ideas can be seen as a critical characteristic, especially over time" for tourism sector competitiveness improvement. There are opinions that "every destination has its own set of competitiveness factors, depending on the nature and structure of its tourism industry compared with alternative tourism products offered in the international arena" (Kozak, Rimmington, 1999, p. 282).

For the assessment of national competitiveness, the methodology of the World Economic Forum is used, on the basis of which it is possible to evaluate the impact of certain factors on national competitiveness and a country's positioning/ranking on the world list. The Global Competitiveness Index is a widely accepted methodological framework for measuring competitiveness at the national level. This index consists of key competitiveness factors, called pillars of competitiveness. The twelve pillars of competitiveness, according to this methodology, have been systematized into three key groups (Figure 2):

1. *Basic Requirements*: institutions, infrastructure, macroeconomic stability, health care, and primary education;

2. *Efficiency Enhancers*: higher education and training, goods market efficiency, labour market efficiency, financial market development, technological equipping, and market size;

3. Innovation and sophistication factors: business sophistication and innovation.

All of these pillars represent factors that directly or indirectly affect a national economy's competitiveness.



Figure 2. Elements of the Global Competitiveness Index

Source: World Economic Forum, The Global Competitiveness Report 2012-2013, p.8

Internationally, tourism competitiveness is defined as the ability of an economy to attract demand for tourist services intended for export and to invest in the creation of supply to meet the stated demand in accordance with social norms, all with the aim of improving the social standards of the population (Bobirca, 2007, p. 31). Tourism competitiveness is not only linked to economic growth or economic characteristics of the country; tourism should also take into account the so-called "soft factors" of competitiveness, such as the environment, quality of life, knowledge, and the like (Balkyte, Tvaronavičiene, 2010, p. 344). Competitiveness in tourism can be observed at three levels: the company level, the sector level, and the level of national economy (Cvjetičanin, 2003, p. 88). At the level of national economy, it is of great importance for tourism development policy makers to identify national tourism potentials and tourism sector performances, as well as to compare them to other countries. Improving the competitiveness of a country's tourism is very important for the development of national competitiveness. However, it should be emphasized that there are many complexities the tourism industry is still facing that must be overcome to ensure its dynamic growth and competitiveness improvement in the future.

It is important to make the comparison with the tourist facilities and competitive advantages of tourism in other countries so that policymakers could be in a position to assess the tourism potential performances and comparative advantages for tourism development. In this respect, the benchmarking analysis of the tourism sector heavily relies on the calculation of the TTCI (The Travel and Tourism Competitiveness Index). This methodology has been created by the World Economic Forum (The Travel and Tourism Competitiveness Report 2009).

The main objective of the TTCI is to measure factors and policies that influence the attractiveness and development of the tourism sector in different countries (Crouch, 2007, p. 46). The basis of this index consists of three sub-indices, whereby each contains a number of the so-called pillars that help to perform the calculation and tourism competitiveness evaluation. Through a detailed analysis of each pillar within the TTCI, the business sector and policy makers can specify concrete measures for the improvement and growth of the tourism sector (The Travel and Tourism Competitiveness Report 2011, p. xiii). The TTCI is composed of three sub-indices (Figure 3):

- 1. T&T Regulatory Framework,
- 2. T&T Business environment and infrastructure and
- 3. T&T Human, Cultural and Natural Resources.

According to the Travel and Tourism Competitiveness Index of 2011, "Switzerland, Germany, France, and Austria are ranked highest" (Travel & Tourism Report Focuses on Moving beyond the Downturn 2011), which means that European countries are at the top of the list. The essence of their competitiveness in the tourism sector is the support of the state to the operations of this sector, the adequacy of regulatory framework, high level of traffic and tourism infrastructure, as well as focus on human and natural resources which make the environment favourable for tourism development. These factors are the drivers of tourism competitiveness and should serve as the basis for making business decisions and defining government measures for the improvement of this sector.



Figure 3. Elements of the Travel & Tourism Competitiveness Index Source: World Economic Forum, The Travel and Tourism Competitiveness Report 2011, p.5.

Table 1 presents the value and the rank of GCI and TTCI indicators for European countries in 2011. In this study, European countries are divided into two groups: A (Advanced) and E (Emerging), according to the International Monetary Fund methodology in the *World Economic Outlook* report from 2010. Group A indicates the so-called advanced (developed) countries, while Group E indicates the less developed countries compared to those in group A, i.e. countries that are becoming less undeveloped. Some of the key indicators in this categorization of countries are GDP *per capita*, total export of goods and services, population, etc. This classification, therefore, is not based solely on economic criteria.

Based on the analysis of the differences in GCI and TTCI indicator ratings, a group of countries with the most expressed difference in ratings of these indicators is separated and will be in the focus of further research (the first 17 countries in Table 1). The expressed difference in ratings shows that the group of 17 separated countries is more competitive on the global market according to the tourism sector determinants, as compared to the competitiveness of the total national economy. Limit value of the difference in ranks is 15, which also represents the average deviation from the average of difference in ranks. In this separate set of European countries, 11 of them belong to group A, while 7 belong to group E.

Table 1. Value and rank of TTCI and GCI in European countries for 2011

		Value of	Rank by	Value	Rank	Difference
No. Country	Group	TTCI	TTCI		by GCI	in ranks
1. Greece	А	4.78	29	3.92	90	-61
2. Croatia	Е	4.61	34	4.08	76	-32
3. Spain	А	5.29	8	4.54	36	-28
4. Bulgaria	Е	4.39	46	4.16	74	-28
5. Portugal	А	5.01	18	4.40	45	-27
6. Malta	А	4.88	26	4.33	51	-25
7. Slovenia	А	4.64	33	4.30	57	-24
8. Montenegro	Е	4.56	36	4.27	60	-24
9. Cyprus	А	4.89	24	4.36	47	-23
10. Iceland	А	5.19	11	4.75	30	-19
11. Slovakia	А	4.35	52	4.19	69	-17
12. Romania	Е	4.17	60	4.08	77	-17
13. Serbia	Е	3.85	78	3.88	95	-17
14. Italy	А	4.87	27	4.43	43	-16
15. Austria	А	5.41	4	5.14	19	-15
16. France	А	5.41	3	5.14	18	-15
17. Latvia	Е	4.36	49	4.24	64	-15
18. Albania	Е	4.01	67	4.06	78	-11
19. Hungary	Е	4.54	37	4.36	48	-11
20. Turkey	Е	4.37	48	4.28	59	-11
21. Ireland	А	4.98	21	4.77	29	-8
22. Luxembourg	А	5.08	15	5.03	23	-8
23. Estonia	Е	4.88	25	4.62	33	-8
24. Czech Republic	А	4.77	31	4.52	38	-7
25. Bosnia and	Е	3.63	93	3.83	100	-7
Herzegovina						
26. Macedonia	Е	3.96	72	4.05	79	-7
27. Russia	Е	4.23	59	4.21	66	-7
28. Armenia	Е	3.77	86	3.89	92	-6
29. Germany	Α	5.5	2	5.41	6	-4
30. Great Britain	Α	5.30	7	5.39	10	-3
31. Ukraine	Е	3.83	81	4.00	82	-1
32. Switzerland	Α	5.68	1	5.74	1	0
33. Sweden	А	5.34	5	5.61	3	2
34. Moldova	E	3.60	95	3.89	93	2
35. Norway	А	4.98	20	5.18	16	4
36. Poland	Е	4.38	47	4.46	41	6
37. Netherlands	А	5.13	14	5.41	7	7
38. Belgium	А	4.92	23	5.2	15	8
39. Denmark	А	5.05	16	5.4	8	8
40. Lithuania	E	4.34	53	4.41	44	9
41. Finland	А	5.02	17	5.47	4	13
42. Azerbaijan	E	3.85	79	4.31	55	24

Source: World Economic Forum, The Travel and Tourism Competitiveness Report 2011; World Economic Forum, The Global Competitiveness Report 2011

### SUBJECT, AIM, HYPOTHESES, AND METHODOLOGY OF RESEARCH

The subject of the research presented in this paper is the analysis of the global economic crisis' impact on the competitiveness of the tourism sector and the competitive position of selected 17 European countries. The aim of this paper is to track changes in indicators GDP *per capita*, GCI, and TTCI with respect to the selected groups of countries (A and E), incurred as a result of the global economic crisis of 2008. The aim is also to examine whether the changes made in the values of the aforementioned indicators resulting from the global economic crisis are more pronounced in the A or E groups of countries.

In order to accomplish the defined objective of the research, we formulated the following hypotheses:

H1: The global economic crisis has had a greater impact on the decline in competitiveness of group A compared to group E of European countries.

H2: The global economic crisis has not had a negative impact on the competitiveness of tourism in European countries.

For testing the confirmed hypotheses, it is relevant to analyze the impact of the *global economic crisis* on GDP *per capita in the observed countries, as well as the degree and the direction of correlation for GDP per capita, GCI, and TTCI in the analyzed countries.* 

The information base for this analysis consists of *World Economic Forum* reports on the national economies' competitiveness and the competitiveness of the tourism sector in the period from 2007 to 2011, as well as the *International Monetary Fund* data on the movement of GDP *per capita* for European countries. In this research we used the following statistical methods: descriptive statistics, correlation analysis, and methods of statistical inference.

### RESEARCH RESULTS AND DISCUSSION

This part of the study consists of four segments. Each part is dedicated to the testing of predefined hypotheses.

### a) Analysis of GDP per capita in the observed countries in 2011 compared to 2009

Information on GDP *per capita* is relevant for assessing the potential negative effects of the global economic crisis on the national economy development. Table 2 shows the value and ranking of GDP *per capita* in separate European countries in the period from 2007 to 2011.

		GDP	GDP	GDP	GDP	GDP
No. Country	Group	2007	2008	2009	2010	2011
		value	value	value	value	value
1. Greece	Α	27379.01	30605.22	28582.39	26074.16	25654.78
2. Spain	Α	32168.13	35112.83	31746.74	30113.76	31563.40
<ol><li>Portugal</li></ol>	А	21876.73	23827.95	22076.37	21562.44	22334.03
4. Malta	А	18863.22	21390.77	20056.38	20249.30	22015.54
5. Slovenia	А	23585.23	27266.56	24273.80	23001.88	24534.02
6. Cyprus	А	28039.00	31685.53	28657.34	27501.52	29021.34
7. Iceland	А	59405.70	59146.01	49858.39	46056.37	49452.98
8. Slovakia	А	13937.59	17552.80	16167.98	16120.59	17831.91
9. Italy	А	36025.60	28882.75	35250.64	34126.25	36227.33
10. Austria	А	45245.55	49914.99	46003.57	45111.55	49444.29
11. France	А	41849.57	45789.28	42046.84	40943.40	44140.19
12. Croatia	Е	13385.75	15694.07	14055.59	13321.89	14021.39
13. Bulgaria	Е	5520.38	5654.98	6432.50	6.374.12	7311.80
14. Montenegro	Е	5965.40	7360.43	6715.05	6648.85	7251.39
15. Romania	Е	7916.74	9496.89	7649.48	7683.83	8539.55
16. Serbia	Е	5304.35	6485.40	5497.16	5030.10	6030.44
17. Latvia	Е	12971.06	15262.65	11953.72	11364.94	13728.01

 Table 2. Value and rank of GDP per capita in 17 European countries
 (2007-2011), GDP per capita current prices, US dollars

Source: International Monetary Fund http://www.imf.org/external/pubs/ft/weo/2013/02/weodata/weoselgr.aspx

Based on the data in Table 2, an analysis of the movement of GDP per capita has been performed in a separate set of European countries in the period from 2007 to 2011. The results of this analysis are shown in Table 3. Specifically, this table shows the minimum, maximum, and average values of GDP *per capita* in the surveyed countries for the period between 2007 and 2011.

Year	Minimum GDP	Maximum	Average GDP	Chain index
	per capita	GDP per capita	per capita	
2007.	5304.35	59405.70	23496.41	-
2008.	5654.98	59146.01	25360.54	107.93
2009.	5497.16	49858.39	23354.35	92.08
2010.	5030.10	46056.37	23431.93	100.33
2011.	6030.44	49452.98	24064.85	102.70

Table 3. Minimum, maximum, and average GDP per capita (2007-2011)

Table 3 shows that the highest average GDP *per capita* in the observed countries was registered in 2008. This piece of data clearly indicates that the economic crisis did not affect the value of GDP *per capita* in 2008, but that a decline in GDP *per capita* occurred in 2009. Quantification of extreme changes in GDP *per capita* is shown in Table 4.

Bearing in mind that the purpose of this research is to identify the impact of the global economic crisis on key performance indicators (social production and competitiveness), it is inevitable to follow up on the changes in GDP *per capita* in 2011 compared to the previous years.

Period	The highest fall of GDP per capita	The highest growth of GDP per capita	The average change of GDP per capita
2011/2010	-419,38	4332.74	1636.32
2011/2009	-2927.61	3440.72	710.49
2011/2008	-9693.03	7344.58	-1295.69
2011/2007	-9952.72	4198.74	568.43

Table 4. Changes of GDP per capita in observed countries (2007-2011)

The analysis of changes in GDP *per capita* in 2011 compared to 2007, 2008, 2009, and 2010 yielded the following data:

- In 2011, compared to 2007 (before the global economic crisis), there is a positive change in average GDP *per capita* for the observed group of European countries;
- The average GDP *per capita* in 2011 in the surveyed countries decreased by 5.1%, compared to the average GDP *per capita* in 2008 (when the global economic crisis occurred);
- GDP per capita recorded in 2011 is higher than the GDP per capita achieved in 2009;
- In 2011, compared to 2010, there is a positive change of average GDP *per capita* in the surveyed countries by 7.2%.

This analysis indicates a gradual recovery from the negative effects of the global economic crisis manifested in the value of GDP *per capita* in 2011.

Period	Group	Average change	Percentage change
2011/2007	А	349.50	1.1035
	Е	969.8167	11.3954
2011/2008	А	-1723.17	-5.107
	Е	-511.973	-5.124
2011/2009	А	681.7609	2.1755
	Е	763.18	8.7548
2011/2010	А	1941.69	6.4555
	Е	1076.475	12.8091

Table 5. Changes of GDP per capita in A and E groups of countries

If the change of GDP *per capita* is analyzed by groups of countries (see Table 5), in 2011 both groups have a decline of the average GDP *per capita* in comparison to 2008, with the exception that GDP *per capita* in group A declined by 5.107%, and in group E by 5.124%.

# *b)* Correlation analysis of the value of GDP per capita, GCI, and TTCI for A and E groups of countries for 2009 and 2011

Examination of the mutual agreement degree of selected indicators (*GDP per capita, GCI, and TTCI*), which reflect the effects of the global economic crisis, requires the calculation of the Pearson's correlation coefficient value for 2009 and 2011 (Table 6).

Table 6. Value of correlation coefficient between selected indicators

Pearson's correlation coefficient for the observed	2009	2011
group of European countries between:		
<ul> <li>Value of GCI and TTCI</li> </ul>	0.831(0.000)	0.840 (0.000)
<ul> <li>Value of GCI and GDP per capita</li> </ul>	0.852 (0.000)	0.841 (0.001)
<ul> <li>Value of TTCI and GDP per capita</li> </ul>	0.876 (0.000)	0.875 (0.000)
Pearson's correlation coefficient for group A between:	2009	2011
<ul> <li>Value of GCI and TTCI</li> </ul>	0.687 (0.020)	0.826 (0.002)
<ul> <li>Value of GCI and GDP per capita</li> </ul>	0.730 (0.051)	0.838 (0.001)
<ul> <li>Value of TTCI and GDP per capita</li> </ul>	0.732 (0.010)	0.791 (0.004)
Pearson's correlation coefficient for group E between:	2009	2011
<ul> <li>Value of GCI and TTCI</li> </ul>	0.662 (0.152)	0.765 (0.076)
<ul> <li>Value of GCI and GDP per capita</li> </ul>	0.261 (0.617)	0.314 (0.545)
<ul> <li>Value of TTCI and GDP per capita</li> </ul>	0.708 (0.115)	0.524 (0.286)

Note: \*values in brackets are p-values

Correlation analysis of the GDP *per capita*, GCI, and TTCI on a sample of 17 European countries showed that: 1. There is a high degree of agreement in the values of indicators GDP *per capita*, GCI, and TTCI in 2009 and 2011; 2. Regarding the relationship of GCI and TTCI indicators, their agreement in 2011 has a slightly higher intensity compared to 2009; 3. Correlative relationship between GCI and GDP *per capita* in 2011 compared to 2009 is lower in intensity; 4. The quantitative agreement degree of variation of TTCI and GDP *per capita* in 2011 is lower compared to 2009.

Correlation analysis of the values of indicators GDP per capita, GCI, and TTCI in groups of countries A and E revealed that: 1. The intensity of agreement between indicators GCI and TTCI and GCI and GDP per capita in the group of countries A in 2011 is higher compared to 2009, as well as the correlative relationship between GDP per capita and TTCI; 2. In the group of countries E, no significant correlation exists between the selected indicators (all realized significance levels are greater than 0.05). However, the change in agreement between indicators GCI and TTCI, as well as between GCI and GDP per capita in this group of countries follows the direction of the change in their agreement that is established for the whole group of selected countries. Correlative relationship between indicators TTCI and GDP per capita in 2011 is lower compared to 2009.

The degree of agreement of variations of GDP per capita, GCI, and TTCI in the surveyed countries is very high, which indicates a very strong relationship and compatibility of selected indicators in the countries under analysis.

### c) Analysis of changes in value and rank of GCI for A and E groups of European countries in 2011 in relation to 2009

The information necessary for the aforementioned analysis is provided by the World Economic Forum, as shown in Table 7. Based on these data, the largest negative change in the rank of GCI in 2011 in relation to 2009 was recorded for Slovakia, which dropped 21 places. Slovenia records a drop in rank by 20 places, whereas Greece dropped 19 places. The largest rise in the GCI rank during the observed years was recorded for Italy, which rose five places.

 Table 7. Rank and value of GCI for A and E groups of countries in 2009

 and 2011

		GCI 2	2009	GCI 2	2011	Rank	Value
No. Country	Group	Value	Donk	Value	Donk	change	change
		value	Kalik	value	Kalik	2011/2009	2011/2009
1. Greece	А	4.04	71	3.92	90	-19	-0.12
2. Spain	А	4.59	33	4.54	36	-3	-0.05
3. Portugal	А	4.40	43	4.40	45	-2	0
4. Malta	А	4.30	52	4.33	51	+1	0.03
5. Slovenia	А	4.55	37	4.30	57	-20	-0.25
6. Cyprus	А	4.57	34	4.36	47	-13	-0.21
7. Iceland	А	4.80	26	4.75	30	-4	-0.05
8. Slovakia	А	4.31	47	4.19	69	-21	-0.12
9. Italy	А	4.31	48	4.43	43	+5	0.12
10. Austria	А	5.13	17	5.14	19	-2	0.01
11. France	А	5.13	16	5.14	18	-2	0.01
12. Croatia	Е	4.03	72	4.08	76	-4	0.05
13. Bulgaria	Е	4.02	76	4.16	74	+2	0.14
14. Montenegro	Е	4.16	62	4.27	60	+2	0.11
15. Romania	Е	4.11	64	4.08	77	-13	-0.03
16. Serbia	Е	3.77	93	3.88	95	-2	0.11
17. Latvia	Е	4.06	68	4.24	64	+4	0.18

Source: World Economic Forum, The Global Competitiveness Report 2009; World Economic Forum, The Global Competitiveness Report 2011

The data also show that the biggest decrease in GCI value in 2011 in relation to 2009 was recorded in Slovenia, and that the biggest increase in GCI value during the observed years was recorded in Latvia. If we analyze the changes in GCI value within the selected groups of countries, it is evident that most countries within group A underwent a decrease in GCI value in 2011 in relation to 2009, while in group E only Romania had a decrease in GCI value during the observed years.

Analysis of changes of the surveyed countries in GCI rank and value in 2011 in relation to 2009 (Table 8) identified a drop in rank in both groups of countries, a decrease in value in the group of countries A, and the average increase in GCI value in the group of countries E.

 Table 8. Changes of value and rank of GCI in 2011 compared to 2009 in

 A and E groups of countries

Value and rank change of GCI	Group	Average change	Percentage change
Value change of GCI in	А	-0.0573	-1.26
2011 compared to 2009	Е	0.0933	2.32
Rank change of GCI in 2011	А	-7.2727	-18.86
compared to 2009	Е	-1.8333	-2.52

The average decrease in GCI value for the group of countries A equals 1.26%, while the group of countries E increased their GCI value by 2.32% on average. In other words, group A felt the negative impact of the crisis on the competitiveness of economies more than group E. The average drop in GCI rank is 18.86% for group A and 2.52% for group E. Accordingly, hypothesis H1 is confirmed, because the decrease in GCI rank and value in 2011 in relation to 2009 is bigger in group A than in group E of European countries.

# *d)* Analysis of changes in rank and value of indicator TTCI for A and E groups of European countries in 2011 compared to 2009

Analysis of the rank of TTCI for 2011 and 2009 (Table 9) shows that the largest negative change in rank was recorded in Slovakia, showing a drop by six places, followed by Greece, which dropped five places, and Cyprus, which dropped three places. The greatest rise in TTCI rank in 2011 in relation to 2009 was recorded in Montenegro, which rose 16 places.

With respect to changes in TTCI value, the biggest negative change is observed in the case of Greece, whereas the biggest increase is observed in the case of Montenegro. If we analyze changes in TTCI value by the selected groups of countries, we see that group E did not undergo negative changes in TTCI value, whereas in group A negative changes were recorded in the case of three countries (Greece, Austria, and Cyprus). Analysis of the data confirms hypothesis H2, because TTCI value in 2011 in relation to 2009 grew by 0.062 on average, i.e. 1.3%.

 Table 9. Rank and value of TTCI for A and E groups of countries in 2009

 and 2011

		TTCI	2009	TTCI	2011	Rank	Value
No. Country	Group	Value	Rank	Value	Rank	change 2011/2009	change 2011/2009
1. Greece	А	4.91	24	4.78	29	-5	-0.13
2. Spain	А	5.29	6	5.29	8	-2	0
3. Portugal	А	5.01	17	5.01	18	-1	0
4. Malta	А	4.77	29	4.88	26	+3	0.11
5. Slovenia	А	4.53	35	4.64	33	+2	0.11
6. Cyprus	А	4.92	21	4.89	24	-3	-0.03
7. Iceland	А	5.07	16	5.19	11	+5	0.12
8. Slovakia	А	4.34	46	4.35	52	-6	0.01
9. Italy	А	4.78	28	4.87	27	+1	0.09
10. Austria	А	5.46	2	5.41	4	-2	-0.05
11. France	А	5.34	4	5.41	3	+1	0.07
12. Croatia	Е	4.54	34	4.61	34	-	0.07
13. Bulgaria	Е	4.30	50	4.39	46	+4	0.09
14. Montenegro	Е	4.29	52	4.56	36	+16	0.27
15. Romania	Е	4.04	66	4.17	60	+6	0.13
16. Serbia	Е	3.71	88	3.85	78	+10	0.14
17. Latvia	Е	4.31	48	4.36	49	-1	0.05
Average	values:	4.68	33.29	4.74	31.65	+1.65 ≈ 2	+0.06

Source: World Economic Forum, The Travel and Tourism Competitiveness Report 2009; World Economic Forum, The Travel and Tourism Competitiveness Report 2011

 Table 10. Changes of value and rank of TTCI in 2011 compared to 2009
 in A and E groups of countries

Value and rank change of TTCI	Group	Average change	Percentage change
Value change of TTCI in 2011	А	0.0273	0.55
compared to 2009	Е	0.1250	2.98
Rank change of TTCI in 2011	А	-0.64	-3.09
compared to 2009	Е	5.83	10.35

Bearing in mind that the average rank of countries according to the observed TTCI values in 2011 is  $31.65 \approx 32$  years and in 2009  $33.29 \approx 33$  years, positive change, i.e. advancement in the rank, is obvious. Hence, hypothesis H3 is confirmed. If, however, changes in rank and values of TTCI are viewed by groups of countries (A and E), it can be stated that the TTCI value for group A increases by 0.55% on average, while in the case of group E the increase is significantly bigger and amounts to 2.98% on average (Table 10). With respect to the rank of the determined groups of countries, there is a decline in the average change in rank by 3.09% in the case of group A, while group E records a positive average change of 10.35%.

### CONCLUSION

The global economic crisis called into question the optimistic forecasts about the development of the tourism sector on a global level. This fact has imposed the necessity to develop new concepts for the management of tourism development during the crisis, with the aim of mitigating the effects of the crisis in terms of identifying the causes and controlling and specifying programs and strategies to improve competitiveness. The reason for this lies in the fact that tourism as a sector can significantly contribute to the recovery of national economies.

Differences in ranks of GCI and TTCI indicators served as the basis for selecting 17 European countries in which these differences were the most pronounced. In order to analyze the impact of the global economic crisis on the tourism sector and the competitive position of countries, we identified changes in GDP per capita, GCI, and TTCI.

Analysis of GDP per capita in a selected set of European countries in 2011 compared to 2009 showed that the negative effects of the global economic crisis particularly manifested themselves in 2009, in which the lowest average GDP per capita was recorded. The average GDP per capita in the surveyed countries gradually increased in 2010.

Analysis of changes in GCI values for A and E groups of European countries in 2011 in relation to 2009 showed drops in rank in both groups. However, with respect to the analysis of changes in GCI value, group A was characterized by a notable decrease, while in the case of group E we identified an average increase in GCI value. The negative effects of the crisis on the competitiveness of the economy are reflected to a greater extent in the countries of group A than of group E, which confirmed our hypothesis H1.

Analysis of changes in value and rank of the TTCI indicator for the observed group of European countries in 2011 in relation to 2009 showed that the average TTCI value increased by 1.3% and that the average rank was higher by 4.96%, thus confirming our hypothesis H2.

The degree of agreement of variations in values between indicators GDP per capita, GCI, and TTCI in 2009 and 2011 is high and statistically significant. The strongest quantitative agreement was observed between the TTCI and GDP per capita for the observed group of countries, while the lowest agreement was observed between GCI and GDP per capita within the group of countries E.

The key result of studying the influence of the global economic crisis on the tourism sector is the fact that its negative effects are reflected in group A of selected European countries to a greater extent than in group E. The recommendation following this study is that tourism development policy makers in the group of countries A should incorporate in their development strategies the recommended guidelines outlined in the new World Tourism Organization concept for stimulating the development and improvement of competitiveness during the crisis.

### REFERENCES

- Badr, A., Zakareya, E., & Saleh, M. (2009). Impact of Global Economic Crisis on Tourism Sector in Egypt: A System Dynamics Approach. The Egyptian Cabinet, Information and Decision Support Center. Economic Issues Program.
- Balan, A., & Birsan, M. (2010). Impact of Economic Crisis On The Tourism Industry in Romania. An Econometric Analysis of Overhights Stay. *The Annals of The* "*Ştefan cel Mare" University of Suceava. Fascicle of The Faculty of Economics and Public Administration*, 10(special number), 110-116.
- Balăn, D., Balaure. V. & Vegheş. C. (2009). Travel and tourism competitiveness of the world's top tourism destinations: an exploratory assessment. *Annales Universitatis Apulensis Series Oeconomica*, 11(2), 979-987.
- Balkytė, A., & Tvaronavičienė. M. (2010). Perception of competitiveness in the context of sustainable development: facets of "sustainable competitiveness". *Journal of Business Economic and Management*, 11(2), 341–365.
- Beyond GDP. Retrieved from: http://www.beyond-gdp.eu/index.html.
- Bobirca, A. (2007). Assessing the international competitiveness of tourism services trade. *Romanian Economic Journal*, 10(23), 29-43.
- Centre for Strategy & Evaluation Services. (2013) Enhancing the Competitiveness of Tourism in the EU: An Evaluation Approach to Establishing 20 Cases of Innovation and Good Practice, Retrieved from: http://ec.europa.eu/enterprise/ dg/files/evaluation/cses-gp-tourism\_en.pdf.
- Crouch, G. (2007). Measuring Tourism Competitiveness: Research. Theory and the WEF Index. Retrieved from:
  - http://conferences.anzmac.org/ANZMAC2007/papers/Crouch 1.pdf
- Crouch, G.I., & Ritchie, J.R.B. (1999) Tourism, Competitiveness and Societal Prosperity. Journal of Business Research, 44(3), 137-152.
- Cvjetičanin, D. (2003). Competitiveness concept and Serbian economy. *Ekonomist*, 1(39), 86-92.
- Gorčić, J. (2009). Upravljanje krizom svet i mi. Poslovna edicija. Proinkom d.o.o. Valjevo print, 129-218.
- IMF (International Monetary Fund) (2010). World Economic Outlook: Recovery. Risk and Rebalancing. Washington DC. 169. Retrieved from: www.imf.org/external/pubs/ ft/weo/2010/02
- International Monetary Fund. Retrieved from:
- http://www.imf.org/external/pubs/ft/weo/2013/02/weodata/weoselgr.aspx
- Kozak, M., & Rimmington, M. (1999). Measuring tourist destination competitiveness: conceptual considerations and empirical findings. *International Journal of Hospitality Management*, 18(3), 273-283.
- Kulcsar, N. (2009). Rural tourism in Hungary: the key of competitiveness. In: *Proceedings of FIKUSZ '09 Symposium for Young Researchers* (121-127). Budapest: Tech Keleti Károly Faculty of Economics.
- Page, S., Song, H., & Chenguang Wu, D. (2012). Assessing Impacts of the Global Economic Crisis and Swine Flu on Inbound Tourism Demand in the United Kingdom. *Journal of Travel Research*, 51(2), 142-153.
- Perles-Ribes, J.F., & Ramon-Rodriguez, A.B. (2013). Economic Cycles, Asymmetric Crises and Tourism Competitiveness: Emerging Versus Mature Destination. *Economics Bulletin*. 33(3). 2080-2097.
- Perles-Ribes, J.F., Ramon-Rodriguez, A.B., Rubia-Serrano, A., & Moreno-Izquierdo, L. (2013). In: From Economic Crises to Tourism Competitiveness. Celebrating and Enhancing the Tourism Knowledge-based Platform: A Tribute to Jafar Jafari. University of the Balearic Islands, Palma de Mallorca. Spain.

- Ritchie, J.R.B., Amaya-Molinar, C.M., & Frechtling, D.C. (2010). Impacts of the World Recession and Economic Crisis on Tourism: North America. *Journal* of Travel Research, 49(1), 5-15.
- Smeral, E. (2009). The Impact of the Financial and Economic Crisis on European Tourism. *Journal of Travel Research*, 48(1), 3-13.
- Smeral, E. (2010). The Impact of the Financial and Economic Crisis on European Tourism. *Journal of Travel Research*, 49(1), 31-38.
- Tourism confronting the Economic Downturn. Meeting of the UNWTO. Madrid. Spain. 5 March 2009. Retrieved from:

http://www.unwto.org/media/news/en/press\_det.php?id=3781&idioma=E.

- Travel & Tourism Report Focuses on Moving beyond the Downturn. 7 March 2011. Retrieved from: http://www.weforum.org/news/travel-tourism-report-focusesmoving-beyond-downturn.
- World Economic Forum. The Global Competitiveness Report 2012-2013 (2012). Geneva. Switzerland. Retrieved from: http://www3.weforum.org/docs/WEF\_Global CompetitivenessReport 2012-13.pdf
- World Economic Forum. The Travel and Tourism Competitiveness Report 2011 (2011). Geneva. Switzerland. Retrieved from: http://www3.weforum.org/docs/WEF\_TravelTourismCompetitiveness\_Report 2011.pdf
- World Economic Forum. The Travel and Tourism Competitiveness Report 2009 (2009). Geneva. Switzerland. Retrieved from:

http://www3.weforum.org/docs/WEF\_GCR\_TravelTourism\_Report\_2009.pdf

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## ИСПИТИВАЊЕ УТИЦАЈА ГЛОБАЛНЕ ЕКОНОМСКЕ КРИЗЕ НА СЕКТОР ТУРИЗМА И КОНКУРЕНТСКУ ПОЗИЦИЈУ ЕВРОПСКИХ ЗЕМАЉА

#### Резиме

Туризам је једна од најдинамичнијих услужних делатности у развијеним земљама и земљама у развоју. Светска туристичка организација истакла је значај туризма на почетку 21. века као један од сектора који се најбрже развија и има изразите мултипликативне функције, а за који се такође предвиђа брз даљи раст. Међутим, светска економска криза је довела у питање оптимистичке прогнозе о развоју туристичког сектора на глобалном нивоу. Ова чињеница наметнула је захтев развијања нових концепата за управљање развојем туризма у условима кризе, са циљем ублажавања последица у смислу идентификовања узрока, контроле остварених перформанси и спецификовања програма и стратегија за унапређење конкурентности.

Циљ рада јесте праћење промена индикатора GDP per capita, GCI и TTCI, насталих као последица светске економске кризе из 2008. године, по дефинисаним групама европских земаља. Груписање земаља извршено је према степену развијености. Истраживање је спроведено на бази секундарних извора и класичне статистичке методологије с нагласком надескриптивну статистику и корелациону

анализу. Резултати истраживања указују на то да су се ефекти глобалне економске кризе више осетили у групи развијених земаља (А) у односу на групу земаља које су све мање неразвијене (Е). Истраживање пружа оквир за детерминисање циљева и стратегија за унапређење конкурентности туризма и конкурентске позиције европских земаља.

Разлике у ранговима показатеља GCI и TTCI послужиле су као основ за издвајање седамнаест европских земаља у којима су ове разлике најизраженије. У циљу анализе утицаја глобалне економске кризе на сектор туризма и конкурентску позицију земаља, идентификују се промене GDP per capita, GCI и TTCI.

Анализом промена вредности TTCI по дефинисаним групама земаља. уочено је да у Е групи земаља нису забележене негативне промене вредности TTCI, док се у групи А земаља у случају само три земље бележе и негативне промене (Грчка, Аустрија и Кипар).

Анализа промена вредности GCI за A и E групу земаља Европе 2011. у односу на 2009. годину, показује пад у рангу у обе групе земаља. Међутим, када је у питању анализа промене вредности GCI, у A групи земаља је приметан пад, док је за E групу земаља идентификовано просечно повећање вредности GCI. Наиме, негативни ефекти кризе на конкурентност привреда у већој мери су се одразили на земље из групе A.

Кључни резултат истраживања утицаја светске економске кризе на сектор туризма је да су се њени негативни ефекти у већој мери испољили у А групи издвојених земаља Европе у поређењу са Е групом земаља. Препорука овог истраживања је да креатори политике развоја туризма А групе земаља треба да у своје развојне стратегије инкорпорирају препоручене смернице истакнуте у новом концепту за стимулисање развоја и унапређење конкурентности Светске туристичке организације у условима кризе.