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TRENDS IN TOURISM DEMAND IN THE TOP VISITED EUROPEAN COUNTRIES

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Abstract

The paper aimed to analyze the main trends in tourism demand in the top European countries in terms of tourist arrivals, overnight stays, tourism intensity, receipts, receipts/arrival, receipts/inhabitant. The correlation coefficient and regression function were used to analyze the relationship between tourist arrivals and tourism receipts. The top visited countries in Europe registered 377.8 million international tourist arrivals in 2015, by 17.07 % more than 322.7 million in the year 2007. Their market share in the EU international tourist arrivals was 78.8 % and at the world level 31.55 %. The decreasing order of these countries based on their market share in the EU tourist arrivals is: France, Spain, Italy, Germany, United Kingdom, Austria, Greece, Poland, Netherlands, Croatia and Portugal. These countries contributed by USD 302.2 Billion to the EU receipts coming from tourism, representing 80.2 % of the EU receipts. In 2015, all these 11 countries registered 2,035 million overnight stays, representing 86.5 % of the total overnight stays in the EU. Based on this indicator, the decreasing order of these countries is: Spain, France, Italy, Germany, United Kingdom, Austria, Netherlands, Greece, Croatia, Poland and Portugal. The number of overnight stays/inhabitant, reflecting tourism intensity, varied between 16.9 in Croatia and 1.9 in Poland. While the receipts/tourist arrival varied between USD 1,323 in United Kingdom, and USD 532 in France, the receipts per overnight stay varied between Euro 88 in Germany and Euro 194 in Portugal, and the receipts/inhabitant varied between Euro 248 in Poland and Euro 1,909 in Austria. The correlation coefficient, the coefficient of determination and the regression equations attested that between the number of international tourist arrivals and tourism receipts is a positive strong correlation in case of United Kingdom and Croatia. In case of Greece and Germany it was found a moderate positive correlation, while in case of Austria, France, Italy, Netherlands, Poland, Portugal and Spain it was noticed a weak correlation. Therefore, the number of tourist arrivals reflects an increased tourism demand, but it can't entirely explain the growth of tourism receipts, which are determined by many other factors.

Key words**:** *demand, tourism, top European countries, tourist arrival , tourism receipts, regression*

INTRODUCTION

Tourism is the most dynamic branch of the world economy, a key driver of the economic development.

The international tourist flows have continuously increased. In 2016, there were recorded 1,235 international tourist arrivals and USD 1,220 Billion receipts from tourism at the world level [12].

In 2016, travel and tourism contributed by USD 2.3 trillion (3.1 %) to the globe GDP, while the its total tourism contribution accounted for USD 7.6 trillion (10.2 %).

Travel and tourism has directly generated 108.7 million jobs representing 3.6 % of the total world employment, and its total contribution accounted for 292 million jobs with a share of 9.6 % in the glove employment. Also, travel and tourism contributed by 6.6 % to the total global exports and 30 % to the world service exports. Tourism comes on the 3rd position after chemicals and fuels, automotive products and food in the world export [14].

In 2015, Europe was visited by 603.7 million international tourists, of which 477.8 million (79 %) visited the EU countries. Europe is the most important tourist attraction in the world with a market share of 50.7 %, while the EU countries keep 40 % in the world international tourist arrivals.

Europe's receipts from international tourism accounted for USD 449 billion in 2015, representing 37.6 % of the world tourism

receipts. The EU receipts coming from international tourism accounted for USD 376.5 billion, representing 83.8 % of the Europe receipts and 31.5 % of the tourism receipts at the global level [12].
In the EU-28, in the non-financial business industry are operating 2.3 million enterprises assuring employment for 12.3 million persons, representing 9.1 % of the employment in this economic sector and 21.5 % of the employment in the service sector.
Tourism industry contributes by 3.7 % to the turnover and 5.6 % to the value added in the non-financial business economy of the EU [11].
As a concept, tourism demand is characterized by the number of persons who travels for various purposes and use tourist facilities and services in a different location away from the place of residence or work [1]. It was and still continue to be a subject of various research studies being analyzed in different ways: economically, socially, geographically, psychologically, and politically, depending on each author.
Various indicators are used to quantify tourism demand such as: tourist arrivals, tourist departures, tourism receipts, tourism expenditures, overnight stays, average length of stay, tourist density, tourist intensity, tourism function, as well as their determining factors: economic factors (GDP/capita and income/capita in the country of origin, tariffs and prices of tourism offer: accommodation, food, entertainment, transportation etc; exchange rate variation and service quality related to price), demographic factors (population and its structure by various criteria: such as age, education level etc), technical factors (transport facilities, communication ways etc), psychological factors and cultural factors (tourist preferences, life style, habits, expectations), random factors: climate change, weather conditions, natural disasters, potential risk diseases, political instability, risk of terrorist attack etc. [2, 4, 5, 7, 9, 13].
These factors have been taken into account in different econometric models to estimate tourism demand more accurately. However, most of the studies analyzed tourism demand based on the number of visitors and the related indicators [3, 8, 9, 10].
In this context, the paper aimed to present the trends in tourism demand in the top visited European countries: France, Spain, Italy, Germany, United Kingdom, Austria, Greece, Poland, Netherlands, Croatia, and Portugal, using international tourist arrivals, overnight stays in establishments with touristic function, international tourism receipts, and determining the correlation between arrivals and receipts, and the regression of receipts depending on international tourist arrivals and some other related important aspects in the period 2007-2015.

MATERIALS AND METHODS

The main specific indicators taken into consideration to characterize tourism demand in the top visited European countries have been the following ones: (i)number of tourists arrivals, (ii) tourism receipts, (iii)overnight stays in establishments with touristic function, (iv)tourism intensity, (v) receipts/tourist arrival, (vi)receipts/inhabitant, (vii)correlation coefficient between tourism receipts and international tourist arrivals, (viii) coefficient of determination of the variation of tourism receipts depending on the variation of tourist arrivals, (ix) regression function for tourism receipts depending on tourist arrivals.
The data were collected from UNWTO Tourism Highlights and Eurostat Tourism Statistics Explained for the period 2007-2015.
The main methodological aspects refer to the fixed index method used to evaluate the growth or decline the variables across the chronological series, according to the formula: IFB =(Xn/X0)*100.
The tourist intensity (TI) was determined based on the formula:

$$TD = \frac{\text{Overnight stays}}{\text{Permanent population of the country}}$$

The Pearson correlation coefficient was also calculated to evaluate the sense and intensity of the relationship between these indicators.

The linear regression equation, Y= bx + a, where Y is de dependent variable and X is the independent variable, was utilized to establish the relationship existing between tourism receipts and international tourist arrivals.
The data have been statistically processed using Excel facilities, and the results have been graphically illustrated and tabled.

RESULTS AND DISCUSSIONS

The dynamics of international tourist arrivals in the world and Europe. The number of international tourist arrivals registered a spectacular increasing trend in the last decade. In 2015, it was reached the record figure of 1,196 Million international tourists arrivals, by 39.39 % more than in the year 2007 (858 million). The general trend had only one inflexion in the year 2009 when it was recorded a decline by 9.36 % compared to the year 2008, due to the economic crisis impact on tourists income (Fig.1).
The number of international tourist arrivals also increased in Europe by 24.37 %, from 485.4 million in 2007 to 603.7 million in 2015. The impact of the economic crises in the European tourism was very small, in 2009 the decline was of only 0.5 % compared to the year 2008. But in 2011 and 2013, the number of international tourists declined by 3.61 %, and respectively by 5.34 % compared to the previous years (Fig.1.).

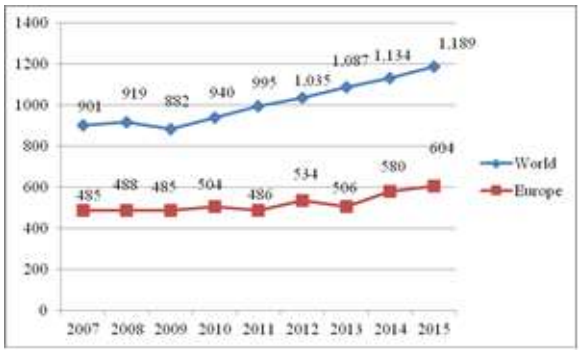

Fig.1.The evolution of the number of international tourist arrivals in the world and Europe, 2007-2015 (million)
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

The share of tourist arrivals in Europe in the international tourist arrivals at world level recorded a decline from 53.8 % in the year 2007 to 50.7 %, reflecting that Europe is still the most favored destination continent in the world. The decrease is justified but a new growing trend in international tourist flows to the Asian countries.
The role of Europe in the world tourism is justified by the large diversity of countries with beautiful landscapes, cultural heritage, historical places, and high quality services. The South Mediterranean countries are the most attractive with an increased share in the European international arrivals from 36.5 % in 2007 to 37.1 % in 2015, being followed by the Western countries with a share of 31.7 % in 2007 and 30.4 % in 2015. On the 3rd position are situated the Central and Eastern European countries which attracted 19.9 % of foreign tourists in 2007 and 20.10 % in 2015. The Northern European countries received 11.9 % of the international tourists in 2007 and 12.4 % in 2015 [12].
The European Union plays an important role in the European and world tourism. In 2015, the number of foreign tourists who visited the EU countries accounted for 477.8 million, being by 33.91 % higher than in the year 2009 (356.8 million).
The share of the EU in the Europe's international arrivals increased from 73.50 % in 2009 to 79.14 % in the year 2015 [12].
The dynamics of international tourism receipts at world and Europe level. As a consequence of the increased number of international tourists, the tourism receipts grew up by 39.39 % in the analyzed period. In 2015, it accounted for USD 1.196 Billion compared to USD 858 Billion in 2007.
The increase of tourism receipts in Europe was small, just 3.2 %, in 2015 accounting for USD 449.5 Billion compared to USD 435.3 Billion in the year 2007. Even though the number of tourists arrivals increased, the reduction of the length of stay mainly after the economic crisis has led to a slight growth in tourism receipts (Fig.2.).

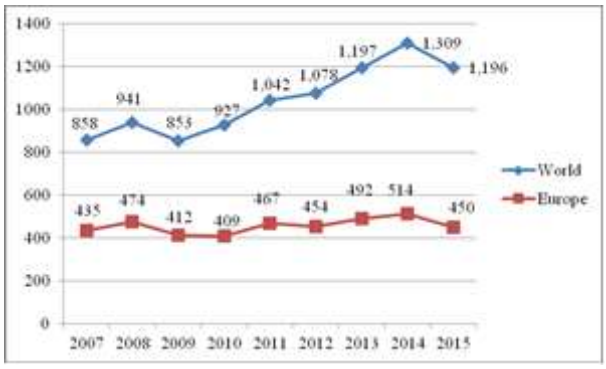

Fig.2.The evolution of the international tourism receipts in the world and Europe, 2007-2015 (USD billion)
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

The share of the Europe to the international tourism receipts in the world declined from 50.73 % in 2007 to 37.58 % in the year 2015 as a result of the diminished duration of stay and amount of money the tourists were disposed to spend [12] .

In 2015, the contribution of various groups of European countries to the Europe's receipts coming from tourism activities was the following one: the South Mediterranean countries were on the top position with the highest contribution, 39.2 %, the Western European countries were on the 2nd position with 32.4 %, the Northern European countries were on the 3rd position with 17.2 % and Central and Eastern European countries on the 4th position with 11.2 %.

In 2015, the tourism receipts registered by the EU accounted for USD 376.5 Billion, being almost equal with the receipts recorded in 2011. However, they were by 12 % less than in 2014, when it was recorded the highest level of receipts.

The share of the EU in the Europe's tourism receipts increased from 81 % in 2011 to 83.7 % in the year 2015 [12].

The evolution of international tourist arrivals in the top visited European countries. In almost all the top visited European countries, the number of international tourist arrivals increased in the analyzed period. In 2015, the number of tourists arrival accounted for: 84.4 million in France, 68.5 million in Spain, 50.7 million in Italy, 35 million in Germany, 34.4 million in United Kingdom, 26.7 million in Austria, 23.6 million in Greece, 16.7 million in Poland, 15 million in Netherlands, 12.7 million in Croatia, and 10.1 million in Portugal.

In 2015, these figures were higher than in 2007 by: 4.45 % in France, 16.69 % in Spain, 16.28 % in Italy, 43.4 % in Germany, 11.3 % in United Kingdom, 28.8 % in Austria, 46.58 % in Greece, 12.08 % in Poland, 36.36 % in Netherlands, 36.55 % Croatia, but by 17.9 % lower in Portugal (Fig.3.).

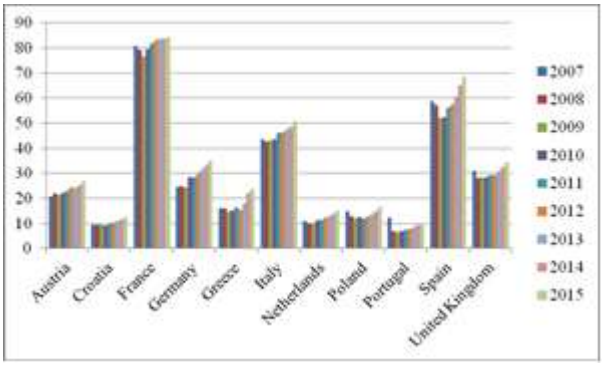

Fig.3.The evolution of the number of international tourist arrivals in the top European countries, 2007-2015 (million)
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

These 11 European countries totalized 322.7 million international tourist arrivals in 2007 representing 66.4 % in the total tourist arrivals in Europe and 35 % in total arrivals in the world. In 2015, they totalized 377.9 million tourists, by 17.1 % more than in 2007. This figure represented 62.3 % of Europe's tourist arrivals and 31.8 % of the world tourist arrivals. Therefore, the number of tourists arrivals recorded a slight reduction both at the European and at the globe level.

The evolution of international tourist receipts in the top visited European countries. Tourism receipts recorded an increasing trend in a few countries, but also a decreasing trend in other countries of this top group. In 2015, international tourism receipts accounted for: USD 56.4 billion in Spain, USD 45.5 billion in United Kingdom, USD 44.9 billion in France, USD 39.4 billion in Italy, USD 36.9 billion in Germany, USD 18.2 billion in Austria, USD 15.7 billion in Greece, USD 13.2 billion in Netherlands, USD 12.7 billion in Portugal, USD 10.5 billion in Poland, and USD 8.8 billion in Croatia.

Compared to the level recorded in 2007, in 2015 the growth rate was: + 25.7 % in Portugal, +17.8 % in United Kingdom, + 2.5 % in Germany and + 1.2 % in Greece, but - 0.8 % in Netherlands, - 1% in Poland, -2.1 % in Spain, -2.7 % in Austria, - 4.4 % in Croatia, -7.6 % in Italy and - 17.2 % in France (Fig.4).

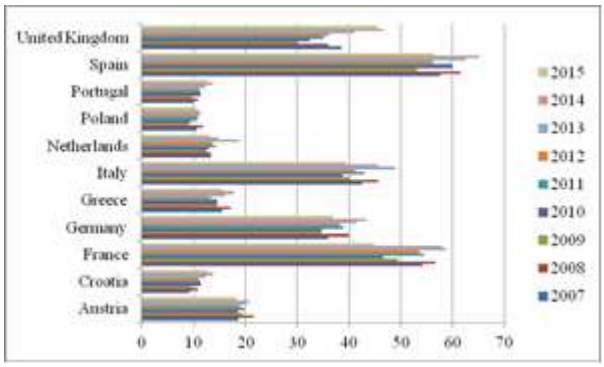

Fig.4.The evolution of the international tourism receipts in the top European countries, 2007-2015 (USD billion)
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

These 11 European countries totalized USD 306.4 billion international tourism receipts in 2007 representing 70.3 % in the total tourism receipts in Europe and 35.7 % in total receipts at the world level. In 2015, they totalized USD 306.1 billion, by 0.1 % less than in 2007.
In the same year, this figure represented 68.09 % of Europe's tourism receipts and 25.5 % of the tourism receipts at the world level. Therefore, the number of tourism receipts recorded a reduced share both at European and at globe level.
The market share of the top visited European countries in the number of tourist arrivals and tourism receipts recorded in the EU and at the world level is presented in Table 1.

Table 1.The market share of the top visited European countries in the number of tourist arrivals and tourism receipts in the EU and worldwide in the year 2015 (%)

Country	Market share in tourist arrivals (%)		Market share in tourism receipts (%)	
	In the EU	In the world	In the EU	In the world
Austria	5.5	2.2	4.8	1.5
Croatia	2.6	1.06	2.3	0.7
France	17.7	7.09	11.9	3.8
Germany	7.3	2.9	9.8	3.1
Greece	4.9	1.9	4.2	1.3
Italy	10.6	4.3	10.5	3.3
Netherlands	3.1	1.2	3.5	1.1
Poland	3.5	1.4	2.8	0.9
Portugal	2.1	0.8	3.4	1.06
Spain	14.3	5.8	15.0	4.7
United Kingdom	7.2	2.9	12.1	3.8
Total	78.8	31.55	80.3	25.26

Source: Own calculation based on the data provided by UNWTO Tourism Highlights [12].

The evolution of the total number of overnight stays in the top countries of the European tourism. Taking into account the total number of overnight stays (both resident and non-resident), the situation by top European country is presented in Fig.5.
In all the top European countries, the number of overnight stays increased in the analyzed period. In 2015, the number of overnight stays accounted for 422 million in Spain, 410 million in France, 392 million in Italy, 378 million in Germany, 114 million in Austria, 104 million in Netherlands, 99 million in Greece, 71 million in Poland and 71 million in Croatia, and 59 million in Portugal. In United Kingdom, because of the lack of data, the analysis concluded that in 2012 the number of overnight stays accounted for 303 million.
In 2015, these figures were higher than in 2007 by: 86.8 % in Croatia, 52.3 % in Greece, 35.7 % in France, 29 % in Poland, 22.9 % in Portugal, 19.2 % in Germany, 18.2 % in Netherlands, 12.8 % in Austria, 10.4 % in Spain, 3.9 % in Italy. In the year 2012, in United Kingdom, the overnight stays were by 15.6 % higher than in 2007.

These 11 European countries totalized 2,035 million overnight stays in 2007 representing 86.5 % of the total overnight stays in the EU-28 which accounted for 2,352 million. In 2012, the overnight stays totalized 2,262 million, being by 11.15 % higher than in 2007.

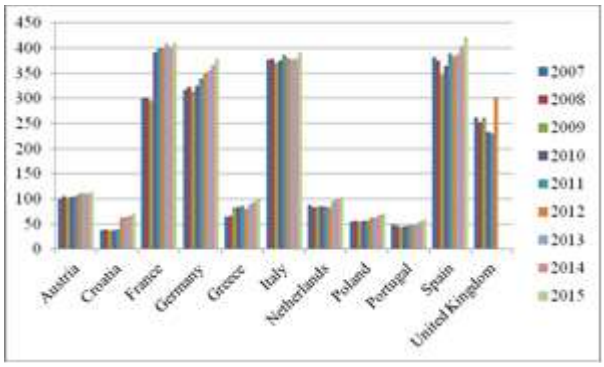

Fig.5.The evolution of the total overnight stays (resident and non-resident) in the top countries of the European tourism, 2007-2015 (Million)
Source: Own design based on the data provided by Tourism Statistics, Eurostat Tourism Statistics Explained [11].

The evolution of the number of overnight stays of the non-resident tourists in the top European countries.

In all the top European countries, the number of overnight stays belonging to the foreign tourists increased in the analyzed period. In 2015, the number of foreigners' overnight stays accounted for:

269.4 million in Spain, 192.6 million in Italy, 130.4 million in France, 80.3 million in Austria, 78.8 million in Germany, 78.2 million in Greece, 65.6 million in Croatia, 38.9 million in Portugal, 37.3 million in Netherlands, and 13.8 million in Poland. In 2012, in United Kingdom, the number of overnight stays belonging to the foreign tourists accounted for 105.4 million.

In 2015, these figures were higher than in 2007 by: 94.6 % in Croatia, 62.5 % in Greece, 44.8 % in Germany, 35.5 % in Portugal, 33.6 % in Netherlands, 26.6 % in Poland, 20.2 % in France, 19.5 % in Spain, 17.8 % in Italy, 12.3 % in Austria. In the year 2012, in United Kingdom, the foreigners' overnight stays were by 24.4 % higher than in 2007 (Fig.6.).

These 11 European countries totalized 857.2 million overnight stays in 2007 representing 85 % of the total foreigners' overnight stays in the EU-28 which accounted for 1,007.8 million. In 2012, they totalized 986.6 million, being by 15.1 % higher than in 2007.

The share of the overnight stays of the non-resident tourists in the total overnight stays (resident and non-resident) in these eleven countries taking into consideration was 42.12 % in 2007 and 43.61 % in 2012, reflecting the increasing interest of foreigners to visit these EU states.

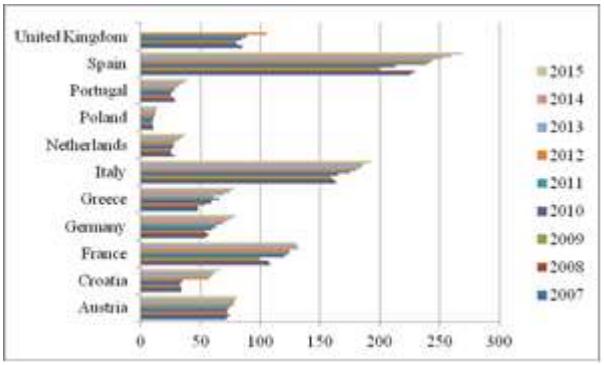

Fig.6.The evolution of the total overnight stays of the non-resident tourists in the top countries of the European tourism, 2007-2015 (Million)
Source: Own design based on the data provided by Tourism Statistics, Eurostat Tourism Statistics Explained [11].

The evolution of the tourism intensity varied from a country to another depending on the total number of overnight stays (resident and non-resident) and the permanent population.

In 2015, the tourism intensity was the following one: 16.9 overnight stays/capita in Croatia, 13.3 overnight stays/capita in Austria, 9.1 overnight stays/capita in Greece, 9.1 overnight stays/capita in Spain, 6.4 overnight stays/capita in Italy, 6.2 overnight stays/capita in France, 6.2 overnight stays/capita in Netherlands, 5.5 overnight stays/capita in Portugal, 4.7 overnight stays/capita in United Kingdom, 4.7 overnight stays/capita in Germany, and 1.9 overnight stays/capita in Poland.

The average of the EU-28 in 2015 accounted for 5.47 overnight stays/inhabitant. Therefore, the number of overnight stays/capita was higher than the EU-28 average in Austria, Netherlands, France, Italy, Spain, Greece Croatia and Portugal, and smaller in Germany and United Kingdom.

In 2015, the tourism intensity was higher than in 2007 by: 92 % in Croatia, 54.2 % in Greece 35.7 % in Poland, 31.9 % in France, 20.5 % in Germany, 19.5 % in Portugal, 14.8 % in Netherlands, 9.3 % in United Kingdom, 9 % in Austria, and 7% in Spain (Fig.7).

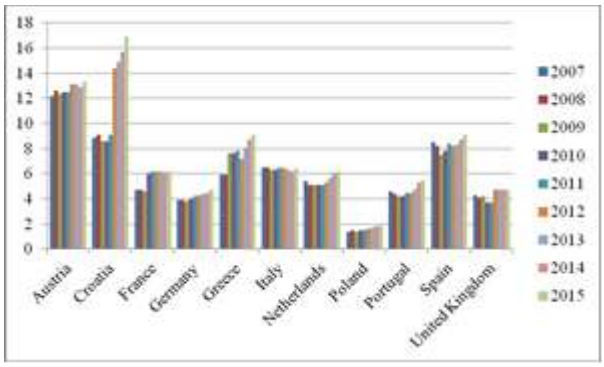

Fig.7.The evolution of tourism intensity in the top countries of the European tourism, 2007-2015 (Number of total overnight stays/inhabitant)
Source: Own design based on the data provided by Tourism Statistics, Eurostat Tourism Statistics Explained [11].

Receipts/international tourist arrival is one of the indicators which reflects the tourism efficiency. If at the world level, in 2015, it was registered USD 1,006/international tourist arrival, by 5.6 % more than in the year 2007, in Europe, the level of this indicator decreased by 17 % from USD 897 in the year 2007 to USD 745 in the year 2015. This happened because of the relative decline in tourist arrivals, the reduction of the length of stay and the tourists' amount of money spent during their visit in a destination country.

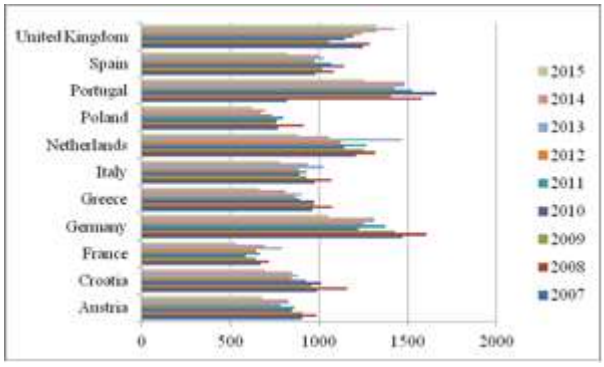

Fig.8.The evolution of receipts/international tourist arrival in the top countries of the European tourism, 2007-2015 (USD/tourist arrival)
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

In 2015, the receipts/international tourist arrival in the top countries of the European tourism accounted for: USD 1,323 in United Kingdom, USD 1,257 in Portugal, USD 1,054 in Germany, USD 880 in Netherlands, USD 823 in Spain, USD 777 in Italy, USD 693 in Croatia, USD 682 in Austria, USD 665 in Greece, USD 629 in Poland, and USD 532 in France.
In 2015, the level of this indicator was lower than in 2007 as follows: - 31 % in Greece, -30 % in Croatia, - 28.6 % in Germany, -27.2 % in Netherlands, -24.5 % in Austria, -20.8 % in France, -20.5 % in Italy, - 18.5 % in Poland, -16.2 % in Spain. But in only two countries, the receipts/international tourist arrival increased as follows: + 53 % in Portugal and + 5.9 % in United Kingdom (Fig.8).

Receipts/overnight stay and receipts/ inhabitant in the top countries of the European tourism.

The receipts/overnight stay varied between Euro 88/overnight stay in Germany and Euro 194/overnight stay in Portugal. In all these top countries, this indicator was higher than the EU-28 average, which accounted for Euro 42/overnight stay in the year 2015.

Table 2. Receipts/overnight stay and receipts/inhabitant in the top countries of the European tourism in the year 2015

	Receipts/overnight stay (Euro)	Receipts/inhabitant (Euro)
EU-28	42	228
Austria	144	1.909
Croatia	112	1,894
France	101	622
Germany	88	410
Greece	143	1,296
Italy	91	585
Netherlands	114	705
Poland	133	248
Portugal	194	1,070
Spain	121	1,094
United Kingdom	136	633

Source: Own calculation design based on the data provided by Tourism Statistics, Eurostat Tourism Statistics Explained [11].

The receipts coming from tourism/inhabitant accounted for Euro 228/capita at the EU-28 level in 2015. In the analyzed countries, this

indicator varied between Euro 248 in Poland and Euro 1,909/capita in Austria (Table 2).
These indicators reflect the efficiency of tourism activity at the EU-28 level as well as in each of the analyzed countries.

The regression of tourism receipts depending on the international tourist arrivals. At world level, it was found a strong positive correlation, r= 0.945 between tourism receipts and international tourist arrivals. The determination coefficient showed that 89.38 % of the variation of tourism receipts is determined by the variation in international tourist arrivals. The regression function confirmed that at the global level tourism receipts depend on the number of international arrivals (Fig.9).

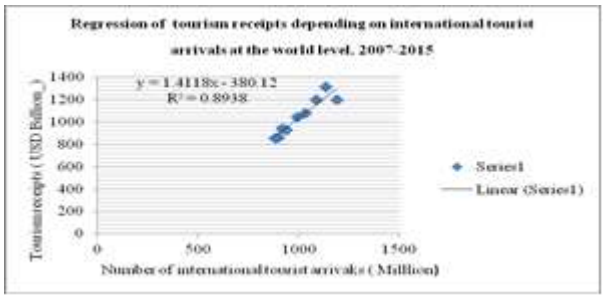

Fig.9. Regression of tourism receipts depending on the number of international tourist arrivals at the world level, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

For Europe, it was found a moderate positive correlation, r= 0.363 between tourism receipts and international tourist arrivals. The determination coefficient showed that only 13.20 % of the variation of tourism receipts is determined by the variation in international tourist arrivals, the difference being caused by other factors.
The regression equation reflects the same (Fig.10).
Between the number of tourist arrivals and tourism receipts it was noticed a positive strong correlation in case of United Kingdom and Croatia, a moderate positive correlation in case of Greece and Germany and a weak correlation in case of Austria, France, Italy, Netherlands, Poland, Portugal and Spain (Table 3).

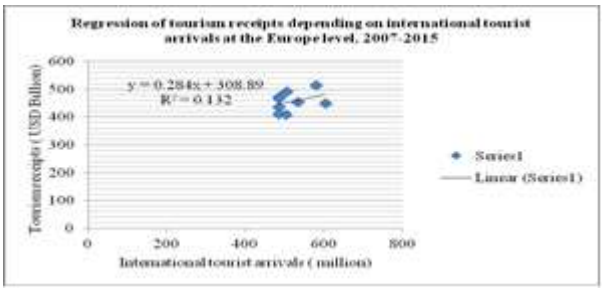

Fig.10. Regression of tourism receipts depending on the number of international tourist arrivals at the Europe level, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

The coefficients of determination reflected that only in case of United Kingdom and Croatia, more than 84.39 %, and respectively 62.86 % of the variation in tourism receipts is caused by the variation of the number of international tourist arrivals.

Table 3. Correlation, coefficient of determination and regression for tourism receipts depending on the international tourist arrivals in the top European countries, 2007-2015

Country	Correlation coefficient r_{xy}	Coefficient of determination R^2	Regression equation Y=bx + a
Austria	0.064	0.0041	Y= 0.0363x +20.421
Croatia	0.792	0.6286	Y= 0.9277x + 1.7997
France	0.213	0.0457	Y= 0.4164x +19.068
Germany	0.449	0.2018	Y= 0.343 x + 28.287
Greece	0.550	0.303	Y=0.240 x+ 11.283
Italy	0.1153	0.0133	Y= 0.1388x + 36.449
Netherlands	0.1086	0.01118	Y= 0.3737x + 9.6029
Poland	0.245	0.0601	Y= 0.1298X+ 8.8577
Portugal	0.2066	0.0427	Y= 0141x+10.266
Spain	0.3119	0.0973	Y=0.21318x + 46.618
United Kingdom	0.9186	0.8439	Y= 2.322x- 32.228

Source: Own calculations based on the data provided by UNWTO Tourism Highlights [12].

In all the other countries taken into consideration, the coefficient of determination had a low value, reflecting that the variation of tourism receipts is much more caused by other range of factors and only in a small measure by the number of international tourist arrivals (Table 3).

The same remarks are confirmed by the regression equations presented for each country of the top Europe tourism in Table 3.

The regression function of tourism receipts depending on tourist arrivals in each country taken into consideration is illustrated graphically in the Figures 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21.

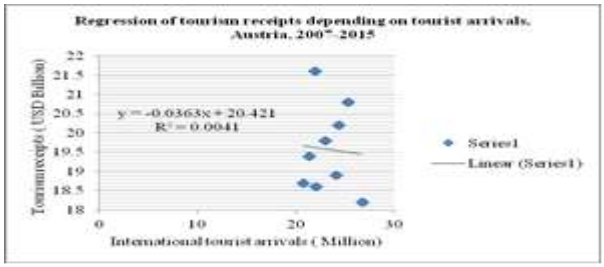

Fig.11. Regression function of tourism receipts depending on tourists arrivals in Austria, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

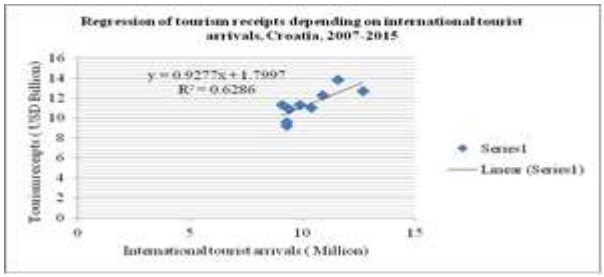

Fig.12. Regression function of tourism receipts depending on tourists arrivals in Croatia, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

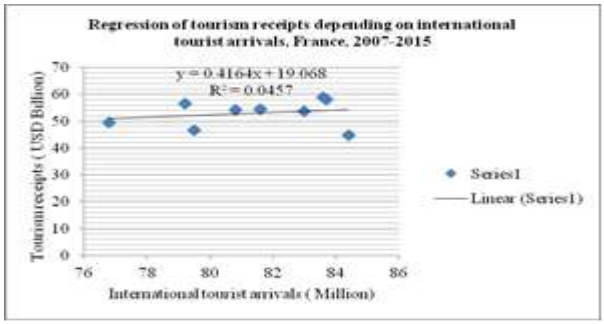

Fig.13. Regression function of tourism receipts depending on tourists arrivals in France, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

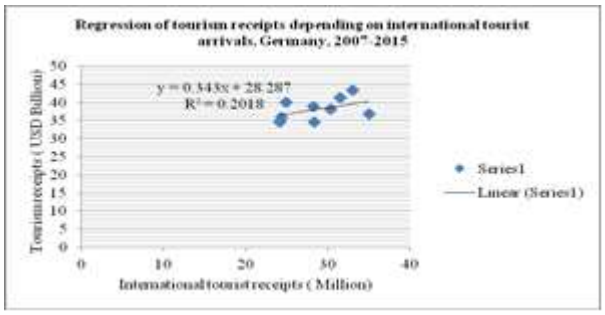

Fig.14. Regression function of tourism receipts depending on tourists arrivals in Germany, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

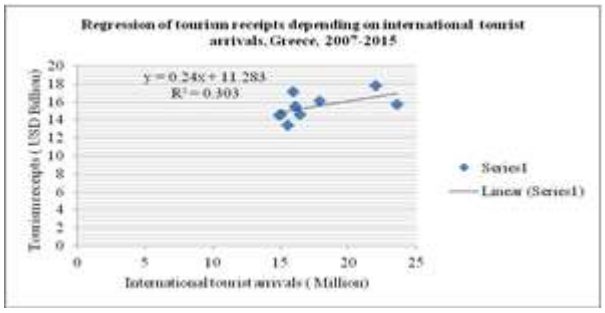

Fig.15. Regression function of tourism receipts depending on tourists arrivals in Greece, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

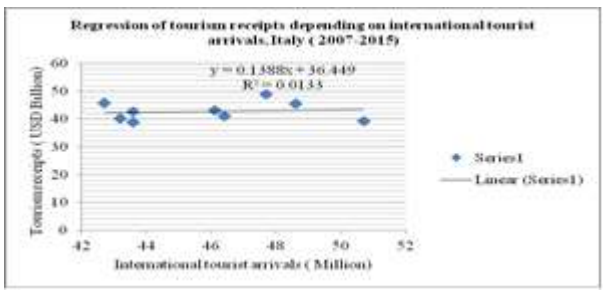

Fig.16. Regression function of tourism receipts depending on tourists arrivals in Italy, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

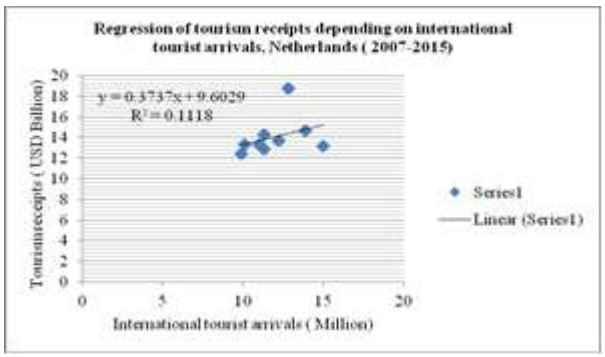

Fig.17. Regression function of tourism receipts depending on tourists arrivals in Netherlands, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

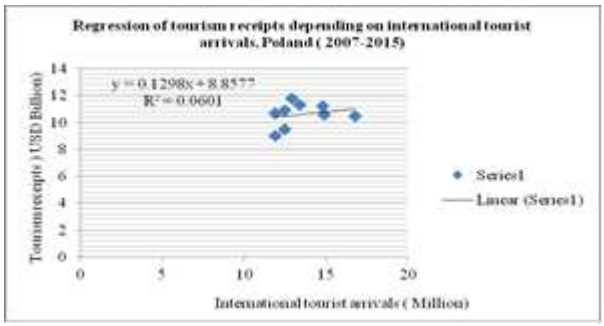

Fig.18. Regression function of tourism receipts depending on tourists arrivals in Poland, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

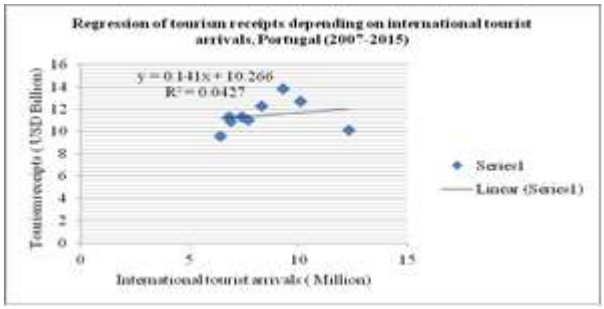

Fig.19. Regression function of tourism receipts depending on tourists arrivals in Portugal, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

Fig.20. Regression function of tourism receipts depending on tourists arrivals in Spain, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

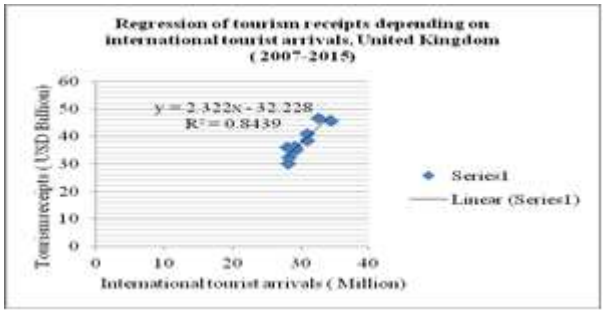

Fig.21. Regression function of tourism receipts depending on tourists arrivals in United Kingdom, 2007-2015
Source: Own design based on the data provided by UNWTO Tourism Highlights [12].

CONCLUSIONS

Europe is the most favored tourist destination, in the year 2015, absorbing 601 million visitors, representing 50.7 % of the international tourists arrivals.
About 479 million foreign tourists, meaning 79 % of the Europe visitors and 40.2 % of international tourist arrivals worldwide were attracted by the EU countries in the year 2015.
In the same year, Europe contributed by USD 450 Billion, meaning 37.5 % to the world tourism receipts. The EU registered USD 376 billion receipts from international tourism, representing 83.7 % of the Europe receipts and 31.5 % of the receipts at the world level.
The top visited countries in Europe belong to the EU. Their market share in the international tourist arrivals at the EU level was 78.8 % and at the world level 31.55 % in the year 2015, while their market share in the EU receipts from tourism was 80.3 % and in the world receipts 25.26 %.
In the decreasing order, in 2015, the most visited countries in the EU were: France (17.7 %), Spain (14.3 %), Italy (10.6 %), Germany (7.3 %), United Kingdom (7.2 %), Austria (5.5.%), Greece (4.9 %), Poland (3.5 %), Netherlands (3.1 %), Croatia (2.6%) and Portugal (2.1%).
Based on the number of overnight stays, the decreasing order of these countries was the following one: Spain 15.1 %, France 14.7 %, Italy 14.1 %, Germany 13.6 %, United Kingdom 10.9 %, Austria 4.11 %, Netherlands 3,7%, Greece 3.6 %, Croatia 2.6 %, Poland 2.5 %, and Portugal 2.1 %. All these 11 countries totalized 2,035 million overnight stays, representing 86.5 % of the total overnight stays registered in the EU.
While the number of international tourist arrivals registered a slight decline, the number of the total overnight stays increased in the analyzed period.
The share of the overnight stays of the non-resident tourists in the total overnight stays (resident and non-resident) in these eleven countries increased up to 43.61 % in 2015.

The highest tourism intensity varied between 16.9 overnight stays/inhabitant in Croatia and 1.9 overnight stays/inhabitant in Poland.

The receipts/tourist arrival varied between USD 1,323 in United Kingdom, and USD 532 in France. However, tourist receipts/arrival increased only in Portugal and United Kingdom, while in the other countries declined in various proportions ranging between -31 % in Greece and -16.2 % in Spain.

The receipts per overnight stay varied between Euro 88 in Germany and Euro 194 in Portugal, while the receipts/inhabitant varied between Euro 248 in Poland and Euro 1,909 in Austria.

At the world level it was noticed a strong correlation between the number of international tourist arrivals and the tourism receipts, but at the Europe level, the correlation was a moderate one.

The regression equations attested that between the number of international tourist arrivals and tourism receipts is a positive strong correlation in case of United Kingdom and Croatia, a moderate positive correlation in case of Greece and Germany and a weak correlation in case of Austria, France, Italy, Netherlands, Poland, Portugal and Spain. This indicates that besides tourist arrivals, there are other factors influencing tourism receipts in the EU top visited countries.

As a final conclusion, tourism demand in the top visited European countries is continuously increasing grace to their rich and diverse cultural heritage, beautiful landscapes, and high quality services. The number of tourist arrivals is a key indicator reflecting tourism demand, but not enough to explain the increase of tourism receipts, which are determined by many other factors which should be taken into consideration for a more comprehensive analysis.

REFERENCES

[1]Cooper, C., Fletcher, J., Gilbert, D. Wanhill, S., 1993, Tourism Principles and Practice, London: Pitman, Chapter 6 and 7, Dimension of Tourism, https://docslide.com.br/documents/tourism-principles-and-practice-c-cooper-j-fletcher-d-gilbert-and-s-wanhill.html, Accessed on Oct.28, 2017

[2]Crouch, G., 1994, The Study of International Tourism Demand: A Survey of Practice, Journal of Travel Research, 32, pp. 41-55

[3]Crouch, G., Shaw, R.,1992, International Tourism Demand: a Meta-Analytical Integration of Research Findings, pp. 175-207, Mansel Publishing, London, https://www.cabdirect.org/cabdirect/abstract/19921896613, Accessed on Oct 5, 2017

[4]Cunha, L., 2001, Introdução ao Turismo", Verbo, https://www.wook.pt/livro/introducao-ao-turismo-licinio-cunha/74180, Accessed on Oct.30, 2017

[5]Li, G., Song, H., Witt, S.F., 2005, Recent Developments in Econometric Modeling and Forecasting, Journal of Travel Research, 44, pp. 82-99.

[6]Lim, C., 1999, A Meta-Analytic Review of International Tourism Demand, Journal of Travel Research, 37, pp. 273-284

[7]Mervar, A., Payne, J.E., 2007, An analysis of foreign tourist demand destinations: Long-run elasticity for Croatian estimates, EIZ Working Paper no.0701, Ekonomski Institut Zagreb.

[8]Morris, A., Wilson, K., Bakalis, S.,1995, Modelling Tourism Flows from Europe to Australia, Tourism Economics, Vol. 1, nº 2, pp. 147-167, http://journals.sagepub.com/doi/abs/10.1177/135481669500100203, Accessed on Oct.10, 2017

[9]Proença, A.S., Soukiazis, E., 2005, Demand for Tourism in Portugal: A Panel Data Approach, Discussion Paper, No.29, Coimbra, http://www4.fe.uc.pt/ceue/working_papers/isaraelias29.pdf, Accessed on Oct. 30, 2017

[10]Qui, H., Zhang, J., 1995, Determinants of Tourist Arrivals and Expenditures in Canada, Journal of Travel Research, Vol. 34, nº 2, pp. 43-49, http://journals.sagepub.com/doi/abs/10.1177/004728759503400209, Accessed Oct20, 2017

[11]Tourism statistics, 2017, Eurostat, Statistics Explained, http://ec.europa.eu/eurostat/statistics explained/index.php/ Tourism_statistics, 2017, Accessed on Oct.28, 2017

[12]UNWTO Tourism Highlights, 2017, http://mkt.unwto.org/publication/unwto-tourism-highlights, Accessed on Oct.24, 2017

[13]Witt, S. F., Witt, C.A.,1995, Forecasting Tourism Demand: A Review of Empirical Research, International Journal of Forecasting, 11, pp. 447-475

[14]WTTC Travel and Tourism Economic Impact, World, 2017, https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2017/world2017.pdf, Accessed on Oct 26, 2017