

Travel and Tourism in the New Member States of the European Union

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Abstract: - Europe, in particular the European Union, brings together the most important tourism' destinations on the continent and is the most important travel and tourism market. The European continent consolidates its position as the most visited region in the world, as the 671 million tourists reported last year represents just over half of the total number of tourists worldwide. According to the latest report released by the World Tourism Organization, the total number of international tourists reached a record 1.322 billion in 2017, up 7% compared with 2016. In the given context, the present paper provides an assessment of travel and tourism sector in the eleven New Member States of the EU, located in the Central and Eastern Europe, in terms of well-established indicators of tourism industry, such as the competitiveness of the sector, the balance of payments in international tourism, or the impact of tourism in the economy. The research methods used will include empirical data analysis, testing correlations and cluster analysis. Thus, in the initial phase of the research process, a brief literature review will be conducted, followed by the latest statistical data collection, interpretation and aggregation for each of the eleven member countries. Then, in regards to the cluster analysis, this will be carried out through the STATISTICA software, using the k-means method, and starting from five main components: the tourism competitiveness index, the multiplier effect, the share of tourism exports, receipts from international tourism, direct impact of tourism in GDP.

Keywords: tourism competitiveness, New Member States of the EU, balance of payments, multiplier effect of tourism, cluster analysis

JEL Classification: Z32, L83, C38

Introduction

According to the latest Report of the UN World Tourism Organization (2018) tourism sector grew remarkably in Europe, an 8.5% increase being reported compared to the previous year, from 619 million to 671 million international tourists, of which EU-28 538.7 million international tourists. While in the Northern, Central and Eastern Europe the tourism sector rose by about 5%, Western Europe recorded a 7% boost, and the Southern Mediterranean region accrued a 13% upturn. Thus, the European continent consolidates its position as the most visited region in the world, the 671 million international tourists achieved last year, representing half of the total number of tourists worldwide (Bulin, 2018), and marking the eight year in a row of sustained growth in the tourism sector. As per the latest statistics, “five out of the top ten destinations in the world are located in the European Union: France, Spain, Italy, Germany, and the United Kingdom” (World Tourism Organization, 2018). However, the global trend to explore non-traditional destinations, unique, exclusive places, where tourists can interact with locals, observe traditional and live meaningful experiences (Nicolescu&Ana, 2018), together with the EU accession, lower prices than in other destinations, low-cost airlines expansion, global increasing mobility, increased preference for travel or geographical proximity (Chindris-Văşioiu & Tocan, 2014) come in favour of the New Member States’ tourism sector. Hence, Tourism is an important pillar for the New Member States’ economy, “accounting for roughly 12% of their GDP, total contribution, while the direct contribution of travel and tourism to the NMS is approximately 5% [...] in terms of tourist flows, 15% of the total number of incoming tourists reported at EU-28 level can be directly attributed to the NMS” (Ana, 2018, p. 826).

In the given context, our paper will encompass a quantitative approach of the tourism industry in the eleven New EU member states that joined after 2004 in three waves (2004 - Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia, 2007 – Romania and Bulgaria, 2013 - Croatia), all of them situated in Central and Eastern Europe in terms of some specific indicators

- Indicators of international tourist flows - receipts (exports), expenditures (imports), balance of payments in tourism;
- The share of exports of tourist services in total exports;
- Direct and total tourism contribution to gross domestic product;
- The Travel and Tourism Competitiveness Index (TTCI)
- Tourism multiplier (K)
- The revealed comparative advantage (RCA)

1. Research methodology

The research methodology incorporated two main points: (1) Empirical data analysis, and (2) testing correlations and cluster analysis

In the first stage, the latest statistical data were collected, interpreted and aggregated for each of the New Member States

- Tourism Competitiveness Index, calculated by the World Economic Forum, 2017 edition – this index “aims to measure the factors and policies that make it attractive to develop the Travel & Tourism sector in different countries” (Blanke & Chiesa, 2008), and it is composed of a number of pillars related to regulatory framework, business environment and infrastructure, as well as human, cultural, and natural resources related to tourism sector;
- Indicators of international tourist flows, provided by the World Tourism and Travel Council, 2017 data – receipts, expenditures;
- The share of tourism exports in total country exports, provided by the World Tourism and Travel Council, 2017 data;
- The share of tourism in GDP, direct and total, provided by the World Tourism and Travel Council, 2017 data

Aggregated data included (calculated by authors):

- Balance of Payments in 2017 (in billion dollars)
$$\text{Balance of payments} = \text{Receipts} - \text{Expenditures} \quad (1)$$
- Apparent comparative advantage index for tourism in 2017 – this index is used to calculate the relative advantage or disadvantage of a certain country in services or the industry for a certain good

as evidenced by trade flows (Balassa, 1965), in the given paper of tourism sector as evidenced by tourism flows.

$$App\ comp\ adv\ index\ in\ EU = \frac{\frac{Tourism\ Exports_x}{Total\ Exports_x} \times 100}{\frac{Tourism\ Exports_{EU}}{Total\ Exports_{EU}} \times 100} \quad (2)$$

- The multiplier effect for 2017 – put it simple, “the multiplier concept means that every unit of tourist expenditure goes through several rounds of income creation and expenditure before its effect is exhausted” (Leuterio, 2007, p. 94).

$$K = \frac{\% \text{ Total tourism contribution in GDP}}{\% \text{ Total tourism direct contributions in GDP}} \quad (3)$$

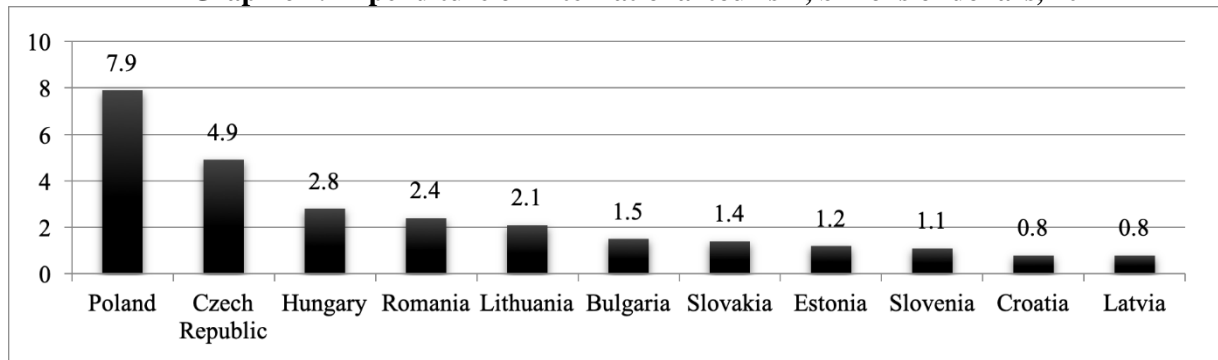
The second stage consisted of: a) testing correlations between tourism competitiveness index and some indicators (share of tourism exports, receipts, total and direct contribution in GDP); and b) a cluster analysis, carried out through the STATISTICA software, using the k-means technique (Ward method, Euclidian distances), based on five criteria - main components: the tourism competitiveness index, the multiplier effect, % of tourism exports, receipts from international tourism, direct impact of tourism in GDP.

2. Results and discussions

2.1. Analysis of international tourist flows and balance of payments in tourism

Regarding the tourist expenditure of the residents of the 11 New Member States, the major importers are Poland (7.9 billion dollars), Czech Republic (4.9 billion dollars), followed by Hungary (2.8 billion dollars) and Romania (2.4 billion dollars). The latest member state, Croatia, and one of the smallest countries, Latvia (population in 2016, according World Bank census, 1.96 million), scored the lowest in terms of import of tourist services, both under 1 billion dollars. The results are presented in Graphic 1.

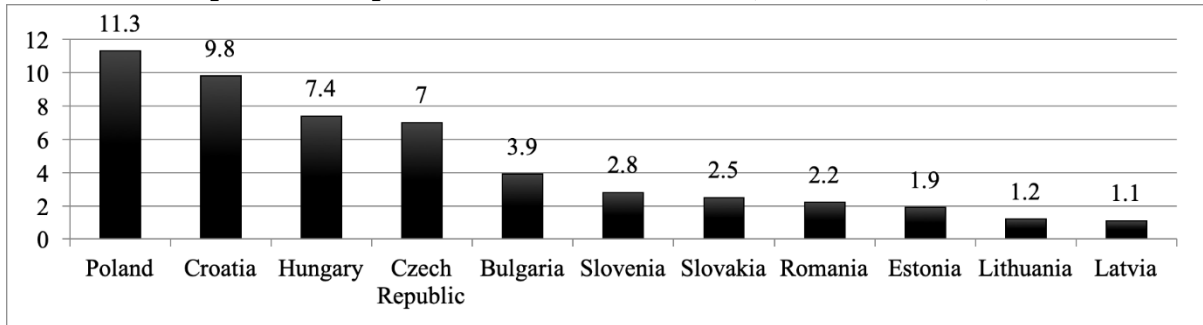
Graphic 1: Expenditure on international tourism, billions of dollars, 2017



Source: authors' work, based on statistical data provided by the World Tourism and Travel Council

On the other side of the tourist market, Poland confirms its international tourism leader position, with revenues of 11.3 billion dollars recorded in 2017. Other major tourism services exporting countries are Croatia (9.8 billion dollars), Hungary (7.4 billion dollars) and Czech Republic (7 billion dollars), the data being represented in Graphic 2.

Graphic 2: Receipts from international tourism, billions of dollars, 2017

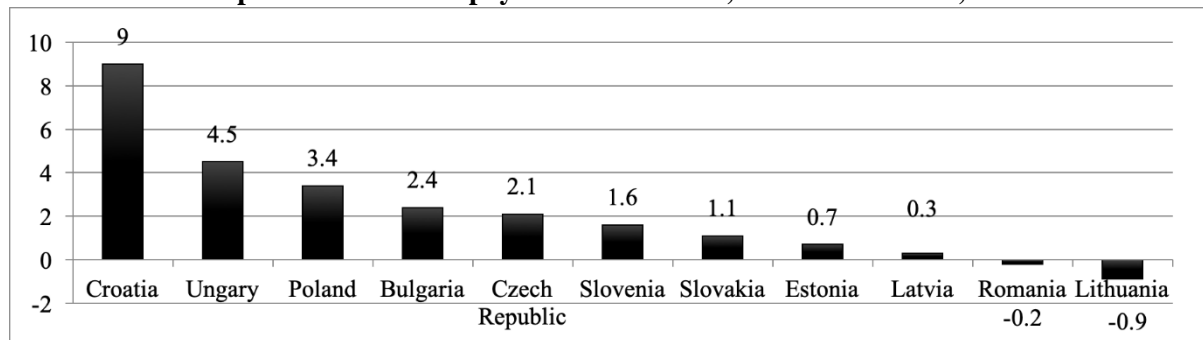


Source: authors' work, based on statistical data provided by the World Tourism and Travel Council

In terms of the balance of payments in tourism (See Graphic 3), the following points are worth mentioning

- 9 out of the 11 EU New Member States registered surplus;
- Lithuania and Romania are the only countries that registered deficit;
- Croatia's surplus of 9 billion dollars is way higher than the next ones in top 3, namely Hungary (4.5 billion dollars) and Poland (3.4 billion dollars).

Graphic 3: Balance of payments in tourism, billions of dollars, 2017



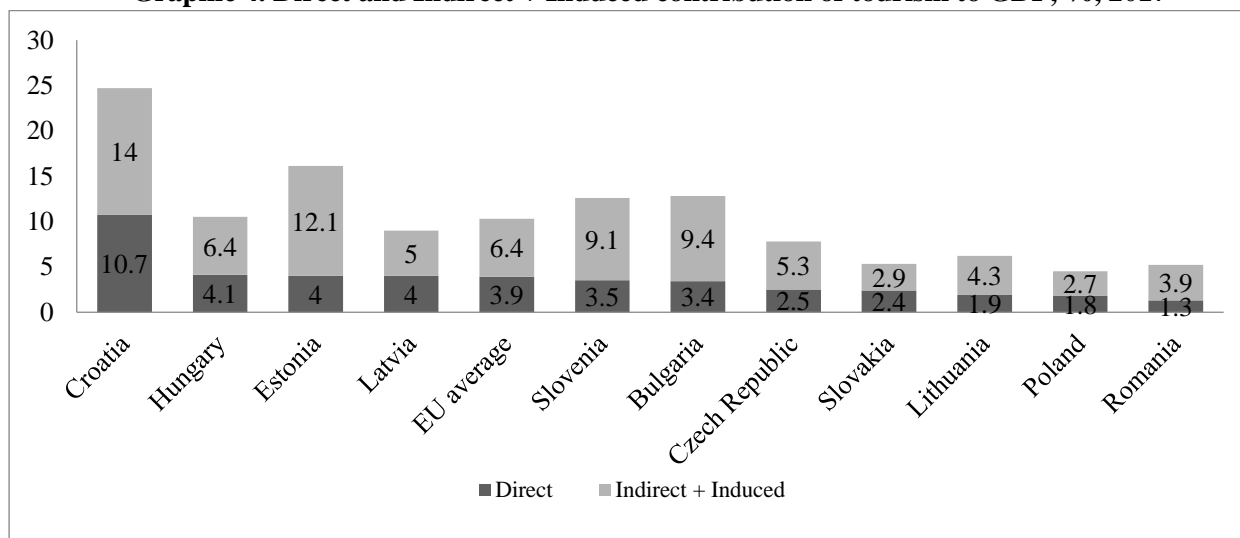
Source: authors' work, based on statistical data provided by the World Tourism and Travel Council

2.2. The impact of tourism in the economy

The total contribution of the tourism industry to the GDP of the New Member States is between 4.5% - Poland and 24.7% - Croatia, the second highest percentage registered at EU-level (after Malta). Low shares, below 7%, of tourism and complementary activities are recorded in Lithuania (6.2%), Slovakia (5.3%), and Romania (5.2%). On the other hand, Estonia (16.1%) and Bulgaria (12.8%), or Slovenia (12.6%) registered a significant share of the total tourism contribution to GDP.

The direct impact of tourism in the New Member States' economy ranges from a maximum of 10.7% achieved by Croatia, to a minimum of 1.3%, in Romania. Directly, the tourism sector generates over 3.9% of GDP, this also being the EU average, in Hungary, Estonia and Latvia. On the opposite side, weighs below 2% are also observed in Lithuania and Poland (1.8%). The data related to the total contribution of the tourism industry to the GDP and the direct impact of tourism to GDP is represented in Graphic 4.

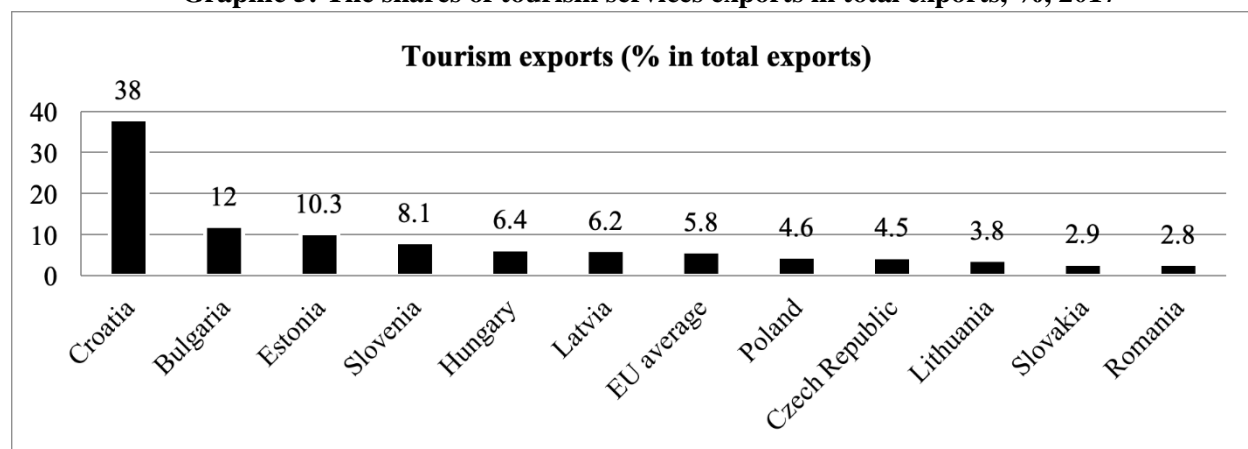
Graphic 4. Direct and Indirect + Induced contribution of tourism to GDP, %, 2017



Source: authors' work, based on statistical data provided by the World Tourism and Travel Council

An indicator showing the importance of tourism in the member countries' economy is the share of exports of this sector (tourism) in total exports. The highest share is recorded in Croatia (38%), followed by Bulgaria (12%) and Estonia (10.3%). The share of tourism services in total exports under the EU average – 5.8%, are recorded in Poland and Czech Republic, despite the absolute volume of receipts (see Graphic 5), Lithuania (3.8%), the lowest shares being recorded in Slovakia and Romania.

Graphic 5: The shares of tourism services exports in total exports, %, 2017



Source: authors' work, based on statistical data provided by the World Tourism and Travel Council

2.3. The comparative export advantage

In regards to the share of exports of tourism services to the entire EU, this turned out to be 5.8%, and, as per our calculations, 6 of the New Member States have a higher share – see Fig. 1 - “Revealed Comparative Advantage in tourism” for detailed data for all the New Member States.

Figure 1. Revealed comparative advantage in tourism

Comparative advantage in tourism	Comparative Disadvantage in tourism
<ul style="list-style-type: none"> • Croatia - 6.6 • Bulgaria - 2.2 • Estonia - 1.8 • Slovenia - 1.4 • Hungary - 1.1 • Latvia - 1.1 	<ul style="list-style-type: none"> • Poland - 0.8 • Czech Republic - 0.8 • Lithuania - 0.7 • Slovakia - 0.5 • Romania - 0.5

Source: authors' work, based on statistical data provided by the World Tourism and Travel Council

2.4. The tourism competitiveness index

According to the World Economic Forum report on tourism competitiveness, the New Member States cover a wide range, from 4.42 - Croatia, to 3.78, registered by Romania. By grouping the 11 countries into three categories, on equal intervals of TTCI, we easily notice the following division

- Competitive destinations: 4.42-4.21: Croatia, Estonia and Czech Republic;
- The group of countries with medium-competitiveness –Slovenia, Bulgaria, Poland, Hungary;
- Low competitiveness – Latvia, Lithuania, Slovakia, Romania.

Figure 2. The tourism competitiveness of New Member States, TTCI, 2017

Competitive (4.21-4.42)	Medium-competitiveness (4-4.2)	Low competitiveness (3.78-3.99)
<ul style="list-style-type: none"> •Croatia - 4.42 •Estonia - 4.23 •Czech Republic - 4.22 	<ul style="list-style-type: none"> •Slovenia - 4.18 •Bulgaria - 4.14 •Poland - 4.11 •Hungary - 4.06 	<ul style="list-style-type: none"> •Latvia - 3.97 •Lithuania - 3.91 •Slovakia - 3.9 •Romania - 3.78

Source: authors' work, based on statistical data provided by World Economic Forum, 2017

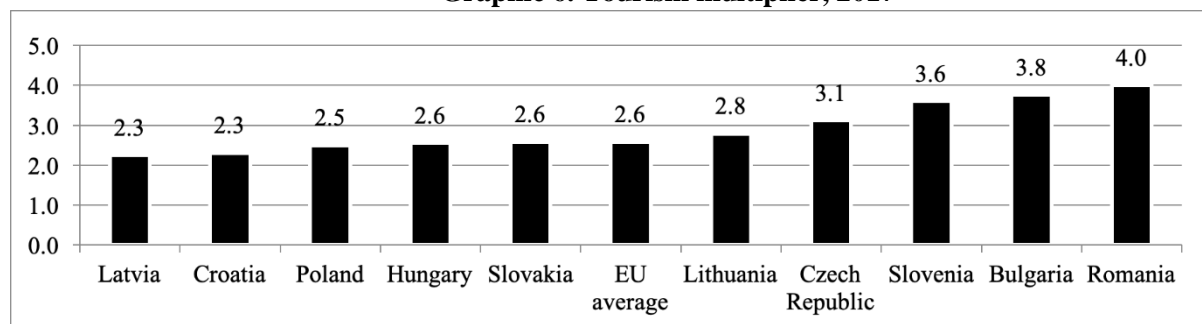
2.5. Multiplier Effect of tourism in the economy (GDP)

The reference value in the literature ($K = 3$) is exceeded or equaled by 4 of the 11 New EU Member States. Starting from the maximum level of the multiplier, recorded in Romania (4) and the minimum in Latvia (2.3) and taking into consideration the EU average (2,6), we can group the 11 New Member Countries as follows:

- Romania, Bulgaria and Slovenia - high value multiplier
- Czech Republic and Lithuania - medium multiplier
- Latvia, Croatia, Poland, Hungary, Slovakia – low multiplier

The results can be observed in Graphic 6.

Graphic 6. Tourism multiplier, 2017



Source: authors' work, based on statistical data provided by the World Tourism and Travel Council

2.6. Testing correlations

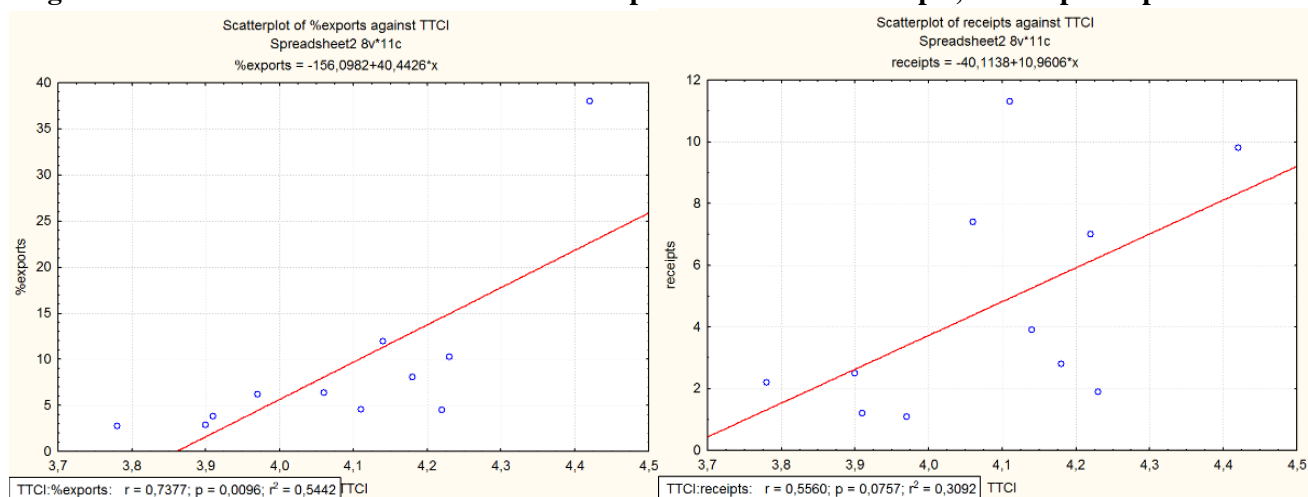
As stated in the methodology section, the next step in our research was to test some correlations between the variables used in the analysis.

In terms of testing the relationship between competitiveness (TTCI), on the one hand, and the share of tourism exports and the volume of international tourism receipts, on the other hand, the following results were obtained:

- r value for TTCI - % exports (0.7377) shows a direct and strong relation between tourism competitiveness and the role of tourism in the international trade of the countries analysed;
- r value for TTCI – receipts (0.5560) suggests a closer dependence between competitiveness and the share of exports in total exports than between the competitiveness and the absolute value of exports

Looking at Fig. 3, it can be stated that there is a concentration to the trend line in the first situation, confirming the calculated r values. In the first case, extreme positions are noticed for Romania (3.78 TTCI, 2.8 % exports) and Croatia (4.42 TTCI, 38% exports).

Figure 3. Correlation between TTCI - share of exports and TTCI – receipts, Scatterplot representation



Source: authors' work, according to the results of research; STATISTICA software representation

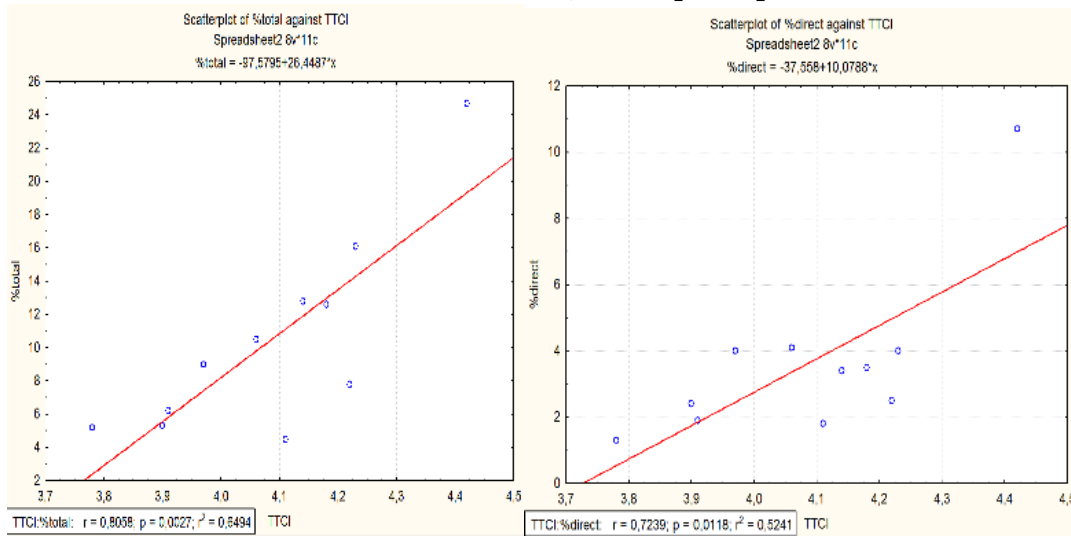
The next set of tests focused on the dependence between competitiveness (TTCI) and the impact of tourism in the economy, measured by direct and total contribution to GDP formation.

The results and graphical representations revealed the followings

- r value for TTCI – total contribution in GDP (0.8058) shows a direct and strong relationship between tourism competitiveness and the role of tourism in the economies of the countries analysed; moreover, the value of r for TTCI – total contribution in GDP is superior to the TTCI - % exports r value, suggesting an even stronger impact of tourism on GDP by its multiplier effect;
- r value for TTCI – direct contribution in GDP (0.7239) confirmed the strong relationship between competitiveness and the sector's contribution to GDP;

- Distribution on the scatterplot diagrams showed a higher concentration of cases for the TTCI-total contribution relation, except for Croatia (24.7%, 10.7%) in both situations

Figure 4: Correlation between TTCI – total contribution of tourism in GDP and TTCI – direct contribution of tourism in GDP, Scatterplot representation



Source: authors' work, according to the results of research; STATISTICA software representation

There is worth mentioning that the relationship between TTCI and the multiplier effect of tourism has also been tested, but the results did not show a significant correlation between the two indicators (see Appendix).

2.7. Cluster analysis

Starting from the literature and the results of testing the relation between the indicators, the 11 countries were grouped through a cluster analysis, as described in the section dedicated to the methodological specifications.

The results of the analysis, the cluster components and their characteristics are summarized in Table 1.

Table 1: Clusters components and characteristics

Cluster	Components	Average values			Characteristics		
		TTCI	% exports	% direct	K	Receipts	
1	Bulgaria Estonia Slovenia	4.183	10.1	3.63	3.8	2.867	Medium-high TTCI High share of tourism exports Average contribution of tourism to the economy High multiplier effect Low receipts High TTCI
2	Croatia	4.42	38	10.7	2.3	9.8	Extremely high share of tourism exports High contribution of tourism to the economy Low multiplier effect High receipts from international tourism Very Low TTCI
3	Romania	3.78	2.8	1.3	4	2.2	Low share of tourism exports Low contribution of tourism to the economy High multiplier effect Low receipts from international

Cluster	Components	Average values					Receipts	Characteristics
		TTCI	% exports	% direct	K			
4	Latvia	3.927	4.3	2.767	2.5	1.6	tourism Low TTCI Medium - low share of tourism exports Low contribution of tourism to the economy multiplier effect <3 Low receipts from international tourism Medium TTCI	
	Lithuania							
	Slovakia							
5	Czech Republic	4.13	5.2	2.8	2.7	8.567	Low contribution of tourism to the economy multiplier effect <3 High receipts from international tourism	
	Hungary							
	Poland							

Source: authors' work, according to the results of research;

Depending on which cluster each country belongs to, they are characterized by the following:

- Cluster 1 – Bulgaria, Estonia, Slovenia - characterized by an extremely medium-high level of tourist competitiveness, high level of multiplier effect, despite the medium contribution of tourism in GDP, and also high share of tourism in exports;
- Cluster 2 – Croatia – “one-country cluster”, extremely different from the group of 11 new member states – high tourism competitiveness (extremely high if we look on the other 10 countries index), extremely high tourism exports shares and contribution in country GDP and also an important position in international tourism, as the receipts shows. On the other hand, the multiplier effect is the lowest of entire CEE EU countries;
- Cluster 3 – Romania – the second “one-country cluster” revealed by analysis, characterized by very low competitiveness, tourism services share in exports, low contribution of tourism in GDP and an unfavourable position in the international tourist market;
- Clusters 4 – Latvia, Lithuania, Slovakia - brings together low competitive destinations, where the tourism industry is low represented in GDP formation, weak position in the international tourist flows, and low tourism multiplier effect;
- Clusters 5 - Czech Republic, Hungary, Poland – grouping important tourist destinations, with high receipts from international tourism, as a result of a medium competitiveness, but still with a low development of industry (tourism exports shares, impact of tourism in economy).

3. Conclusions

European tourism industry is on an ascending path and the new waves of European accession are increasingly contributing to the travel and tourism market on the continent. The main conclusions drawn based on the analyses conducted reflect the following:

a) As an overall trend, the New Member States register positive upturns, 9 out of the 11 EU New Member States having a surplus in terms of the balance of payments, except for Lithuania and Romania - Prague was actually the 5th most visited city in Europe in 2017, and the 18th in the world, followed by Budapest, which ranked 55th, Warsaw 74th, and Krakow 75th. In regards to the European countries with the largest number of international tourist arrivals in 2017, Poland is the leader among the New Member States, ranking the 9th in Europe, and the 8th in the European Union (Russia is 8th in Europe, the others being Old Member States of EU), followed by Hungary on the 10th place in the EU, Croatia the 11th, and Bulgaria the 14th. These positive evolutions reflect that the New Member States are catching up on the initial gap between them and the mature tourism markets in the Old Member States, benefiting of the EU support policies, opening of new markets, and also the individual and unique tourism products they can provide;

b) The development of the tourism industry is not equal within the group of the New Member States the ones that performed best from the tourism sector perspective last year were Croatia, Czech Republic, Poland,

Hungary, Bulgaria, and Estonia. Almost 25% of Croatia's GDP is attributed to tourism, so this country is highly dependent on the services sector, most specifically on travel and tourism. Thus, they should pay attention and try their best to avoid seasonality issues that might occur. On the other end lies Romania, where the direct impact of tourism to GDP is extremely low, only 1.3%. Furthermore, the share of exports in the total exports of the countries is highest in Croatia (38%), followed by Bulgaria (12%) and Estonia (10.3%), while Slovakia and Romania reported the lowest volume – 2.9% and 2.8% respectively;

c) Relative to the world average of 6%, the share of exports of tourism services in Croatia gives it a strong competitive advantage, particularly in the CEE region. The tourism industry in Croatia, but also in Bulgaria or Estonia, can benefit from the opportunity cost to produce and offer tourist services in the region, these countries have specialization premises in this plan. On the other hand, the low value of exports in Slovakia or Romania causes them an unfavourable position in international trade with tourist services.

d) In relation to how competitive the New Member States are in the Travel & Tourism sector, we obtained the following results: most competitive destinations among the New Member States are Croatia, Estonia and Czech Republic, while the least competitive are Latvia, Lithuania, Slovakia, and Romania. However, in what concerns the multiplier effect of tourism, Romania has the highest one, proving that there is huge potential of this sector for the country's economy, and the propensity to spend extra money income on domestic tourism rather than save is high, so there should be taken appropriate measures in order to help this industry grow, as tourism might not only create new jobs in the tertiary sector, but apparently it could also encourage growth in the primary and secondary sectors of Romania's economy;

e) Additionally, in regards to the competitiveness (TTCI) and the impact of tourism in the economy, measured by direct and total contribution to GDP formation, we found out that there is a direct and strong relation between tourism competitiveness and the role of tourism in the international trade of the countries analysed, but also a closer dependence between competitiveness and the share of exports in total exports than between the competitiveness and the absolute value of exports. Plus, we can also state that there is a direct and strong relationship between tourism competitiveness and the role of tourism in the economies of the countries analysed, total contribution in GDP is superior to the TTCI, meaning that there is an even stronger impact of tourism on GDP by its multiplier effect; Yet, the relationship between TTCI and the multiplier effect of tourism has also been tested, but no significant correlation between the two indicators was identified;

f) With reference to the clusters analysis, we have identified five clusters, Croatia and Romania being the extreme cases - Croatia can be characterized by very high tourism competitiveness, extremely high tourism exports shares and contribution in country GDP, representative position in international tourism, but the multiplier effect is the lowest among the New Member States, and on the other hand there is Romania, characterized by very low tourism competitiveness, tourism services share in exports, low contribution of tourism to GDP and an unfavourable position in the international tourist market;

To conclude, it can be stated that explicit tourism growth can be connected with European Union accession in the New Member States. However, as predicted, citizens of the richest countries among the New Member States (Poland and Czech Republic) travel abroad the most, they also being the countries that attract the most tourists, together with Croatia, that also offers seaside and sunshine. The most important factors influencing the evolution of tourism industry in the New Member States can be considered the EU integration, the diversification of tourism preferences worldwide, as well as the free movement of people, the increasing standard of living in the New Member States, or higher budgets allocated to travelling, supported by the low-cost airlines expansion and deregulations in air transport. The growing number of business activities between the New Member States and other countries also accounts for an important part of tourism in the region.

***Acknowledgement**

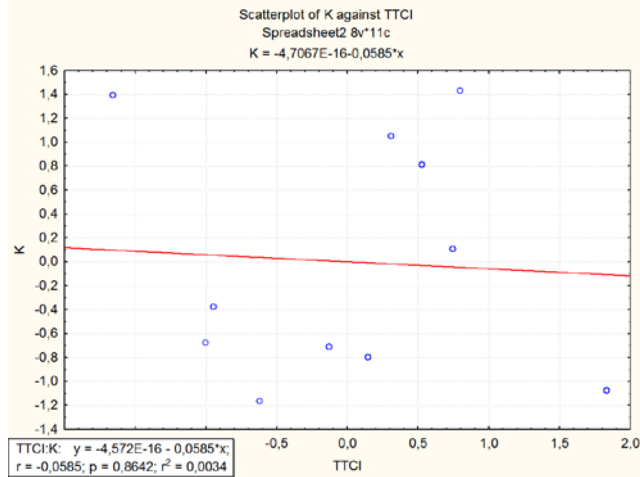
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Appendix 1: Scatterplot – K and TTCI correlation



Source: STATISTICA software output

Appendix 2: Member of Clusters and Distance from respective Cluster Center

Members of Cluster Number 1 (Spreadsheet2) and Distances from Respective Cluster Center Cluster contains 3 cases	
	Distance
Bulgaria	0,191195
Estonia	0,231806
Slovenia	0,159234

Members of Cluster Number 4 (Spreadsheet and Distances from Respective Cluster Center Cluster contains 3 cases	
	Distance
Latvia	0,324046
Lithuania	0,232439
Slovakia	0,159463

Members of Cluster Number 2 (Spreadsheet2) and Distances from Respective Cluster Center Cluster contains 1 cases	
	Distance
Croatia	0,00

Members of Cluster Number 5 (Spreadsheet and Distances from Respective Cluster Center Cluster contains 3 cases	
	Distance
Czech Republic	0,394187
Hungary	0,341657
Poland	0,412570

Members of Cluster Number 3 (Spreadsheet2) and Distances from Respective Cluster Center Cluster contains 1 cases	
	Distance
Romania	0,00

Appendix 3: Distances between Clusters

Cluster Number	Euclidean Distances between Clusters (Spreadsheet2) Distances below diagonal Squared distances above diagonal				
	No. 1	No. 2	No. 3	No. 4	No. 5
No. 1	0,000000	5,087827	1,267026	1,179951	1,073068
No. 2	2,255621	0,000000	9,714657	6,686683	4,652270
No. 3	1,125623	3,116834	0,000000	1,112308	2,122195
No. 4	1,086255	2,585862	1,054660	0,000000	1,006275
No. 5	1,035890	2,156912	1,456775	1,003133	0,000000

Source: STATISTICA software output