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Differences in tourism receipts between Mexico and other countries

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Abstract

Over the past six decades, tourism has become one of the largest and fastest-growing economic sectors in the world. It is considered to be a key driver of socio-economic progress through the creation of jobs and enterprises, and infrastructure development. The aim of the paper is to determine the influence of particular factors on the diversity of the selected countries in terms of the value of international tourism receipts. Two factors affecting the value of those receipts have been analysed in the paper: 1) the volume of international tourist arrivals and 2) the average spending made by one tourist. Logarithmic method was used to assess the influence of the deviations of the said factors on the deviation of the value of the total annual tourism receipts. Forty six countries – including Mexico – have been examined. Data for 2012, 2013 and 2014 have been used for calculations.

Keywords: international tourism; tourism receipts; inbound tourism; causal analysis; logarithmic method

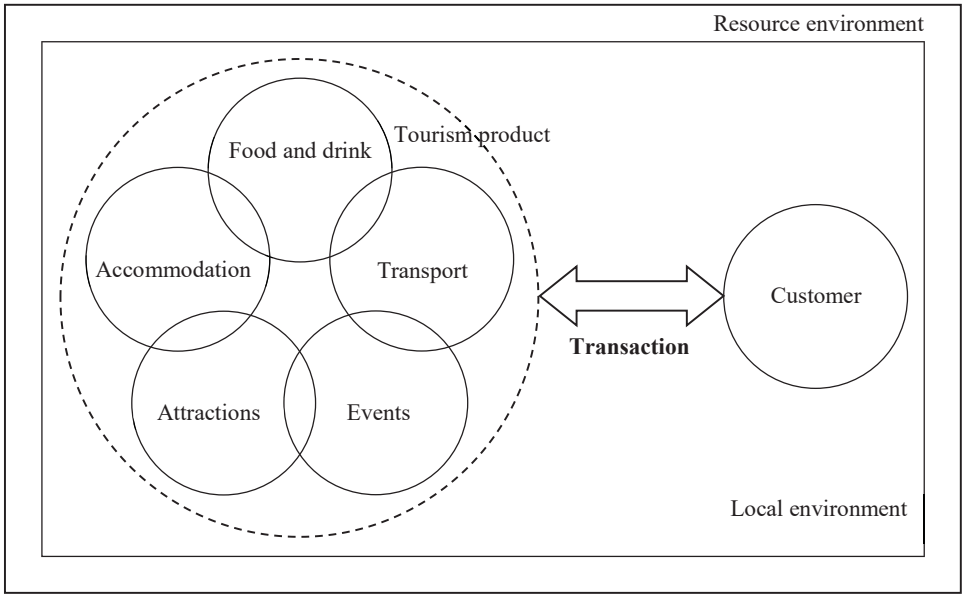
Differences in tourism receipts between Mexico and other countries

Turczak, A.

1. Introduction

Tourism is a massive sector that consists of a diverse range of purposes of travel, an extensive variety of suppliers and destinations, and numerous forms (Inkson & Minnaert, 2012, p. 43). Generally speaking, the tourism system involves suppliers, visitors and resource environment (see Fig. 1).

Figure 1. The elements of tourism system



Source: Cooper, Scott & Kester, 2006, p. 20.

Some countries are found to be more interesting for tourists, some less. Visitor attractions are possibly the most important element of the tourism system because they draw tourists to a destination, and stimulate demand for transport, accommodation and other suppliers. Undoubtedly, the determinants of destination attractiveness are (Ritchie & Crouch, 1993, pp. 53–56):

- natural features (e.g. general topography, scenery);
- climate (e.g. temperature, amount of sunshine, rain);
- culture and social characteristics (e.g. traditions, style of architecture, local foods);
- general infrastructure (e.g. roads, water, sewage, electricity);
- basic services infrastructure (e.g. shopping, car maintenance);
- tourism superstructure (e.g. lodging, information);

- access and transportation facilities (e.g. distance and time to get there, frequency, ease and quality of transportation);
- attitudes about tourists (e.g. warmth of welcome, ease of communication);
- cost/price levels (e.g. value for money, exchange rates);
- economic and social ties (e.g. international trade, common culture, language, religion);
- uniqueness (e.g. one-of-a-kind attractions or events).

However, there are also factors that discourage tourists to visit certain places. Some examples of deterrents to visitation of a destination are (Ritchie & Crouch, 1993, p. 57):

- security and safety (e.g. political instability, high crime rate);
- health and medical concerns (e.g. poor sanitation, lack of reliable medical services);
- laws and regulations (e.g. visa requirements, currency controls);
- cultural distance (e.g. inability to communicate, restrictions on behaviour).

Tourists travel for variety of different reasons. The purposes of international tourism can be, among others (Inkson & Minnaert, 2012, pp. 21–22):

- leisure, recreation, and holidays;
- visiting friends and relatives;
- education and training;
- business and professional reasons;
- health treatment;
- religion and pilgrimages;
- shopping.

Travel for holidays, recreation and other forms of leisure accounts for over half of all international tourist arrivals (52% in 2012, 53% in 2013, and 53% in 2014).

2. Tourism and Sustainable Development

Tourism is a dynamic activity that creates economic, social and environmental changes in destinations. Since the emergence of mass tourism in the twentieth century, many places have experienced rapid, dramatic and frequently undesirable changes as a result of tourism development (Inkson & Minnaert, 2012, p. 163).

Sustainable development in general can be described as a target triangle, balancing the three seemingly conflicting dimensions of the environment, society and economy. These three elements must be applied to tourism development to promote ecologically responsible, economically efficient and socially sensitive tourism. Thus, to contribute to sustainable development, it is important to interlink the often overriding economic goals of regional development with ecological and social concerns (Dredge & Jenkins, 2007, p. 282).

There is no doubt that the economic significance of international tourism in the twenty-first century is outstanding. It can provide a substantial stimulus to development for a number of reasons. First of all, it requires investment in infrastructure. Additionally, tourism expenditure increases an economy's level of aggregate demand. Furthermore, since it involves a variety of other

sectors, tourism activity is an excellent lead sector to act as a catalyst for growth – it can enhance the development of agricultural production, transportation, communications, financial services, and construction, as well as the many other services that either directly or indirectly support tourism (Fletcher, 2012, pp. 168, 174–175).

It should be emphasized that tourism at present is greater in size and scope than it has ever been. According to the World Tourism Organization (UNWTO), international arrivals have increased from 25 million globally in 1950, to 278 million in 1980, 674 million in 2000, and 1,133 million in 2014. Likewise, international tourism receipts earned by destinations worldwide have surged from US$ 2 billion in 1950 to US$ 104 billion in 1980, US$ 495 billion in 2000, and US$ 1,245 billion in 2014. International tourism – comprising travel and passenger transport – accounts for 6% of overall exports in goods and services. According to the World Travel & Tourism Council (WTTC), in 2014 tourism represented 9% of the world GDP (these were all the impacts together: direct, indirect, and induced). It is also worth mentioning that the sector supports 1 in every 11 people in employment.

The strong growth of international tourism is impressive, not only due to the absolute growth in the global number of tourists traveling and spending, but also with regard to the number of countries that are involved in tourism. In the 1950s, just 15 countries concentrated 97 per cent of all international tourist arrivals. By contrast, in 2014 the share of the first 15 destinations declined to 55 per cent.

The significance of tourism receipts to individual countries varies according to the level of diversification within their economies. Developing countries tend to find tourism economically very attractive. For some small islands, for instance, international tourism revenue can be the largest proportion of GDP attributable to a single activity.

Dependency on tourism can cause the economy to become very vulnerable. A high dependency on tourism is risky especially if any unexpected factor – such as a natural disaster or terrorism – suddenly jeopardises the country's tourism industry (Smith, Macleod & Robertson, 2010, p. 45). That is why diversification is desirable when and where possible.

While tourism may provide an incentive for friendly relations among countries, unpredictable events such as tsunamis, hurricanes, war, recession, and disease can always frustrate the tourism planning. Tourists will readily choose another destination if their safety, schedules, and comfort cannot be assured. Publicity of even infrequent riots, bloodless coups, small electoral demonstrations, or isolated labour strikes, is usually sufficient to see tourism arrivals plummet (Richter, 2012, pp. 192, 194).

3. Concept of the Conducted Study

The aim of this paper is to answer how the selected world's economies differ from the Mexican economy in terms of annual tourism receipts. Two factors affecting the value of these receipts, namely the number of visitors and the average spending of a tourist during their stay abroad, shall be analysed in this paper. Those two explanatory variables are directly proportional to the response variable, thus the bigger the number of visitors and the higher the average spending per visitor, the higher the total tourism earnings of the country of destination. The values relating to Mexico have been adopted as the basis for comparison between the countries.

The difference between the value of the analysed variable for a given country and the value of this variable for Mexico will be defined as a deviation for the purpose of this article. Such a deviation may be positive or negative. Thus, in each case the deviation is mentioned in this article, it shall be assumed as positive or negative deviation from the value characterizing Mexico.

Shall the number of visitors[4] and the average spending per tourist be adopted as the variables affecting the value of the total tourism revenue, it seems important to assess – for each of the discussed countries – the influence of the deviations of those two factors on the deviation of the annual tourism earnings. In order to do so, **causal analysis** shall be conducted, enabling the examination of the **structure of revenues deviations** in the economies of individual countries in relation to the Mexican economy.

The following research tasks shall be carried out in this paper:

- Assessment of the total annual tourism receipts in the analysed countries against the value of this variable characterizing Mexico.
- Comparison of the number of arrivals to individual countries with the arrivals to Mexico.
- Assessment of the average spending made by one visitor in the discussed countries in relation to the value of this measure regarding Mexico.
- Causal analysis of the differences in the revenue from inbound tourism in particular countries.

4. Logarithmic Method

The objective of the causal analysis is to determine how various factors affect a given economic variable, i.e. what the direction and degree of their impact is (Szczecińska, 2007, pp. 99–101). Therefore, the causal analysis can answer the question whether a particular factor causes an increase or a decrease of the studied variable and assess how big the impact of this factor is.

Logarithmic method will be used to carry out the causal analysis. Implementation of this method will include the following calculation steps:

a) Constructing ratio equality (i.e. presentation of the ratio calculated for the response variable as the product of the ratios calculated for variables affecting the response variable),
b) Taking logarithms of both sides of the constructed ratio equality,
c) Dividing both sides of the obtained equation by the logarithm of the ratio regarding the response variable.

In order to build adequate **ratio equality** it was assumed that the examined variable *R* (total annual tourism receipts) can be presented as a product of factors *N* (the number of visitors in a given year) and *r* (the average spending per visitor). The value of variable *R* for Mexico will be the basis of reference and shall be marked by R_{MEX}. In turn, the value of this variable calculated for the *i*-th economy will be denoted as R_i.

[4]The term "number of visitors" shall stand for the number of arrivals for the purpose of this article. That means if one person arrived to the particular county more than once during the analysed year, they will be counted repeatedly, i.e. in accordance with the number of arrivals

Ratio $I_{i;R}$ in the form of $\frac{R_i}{R_{\text{MEX}}}$ was constructed. Due to the fact that $R_i = N_i r_i$ and $R_{\text{MEX}} = N_{\text{MEX}} r_{\text{MEX}}$, when dividing R_i by R_{MEX}, the obtained result is:

$$\frac{R_i}{R_{\text{MEX}}} = \frac{N_i r_i}{N_{\text{MEX}} r_{\text{MEX}}}, \tag{1}$$

where:

$R_i,\ N_i,\ r_i$ – the values of variables *R*, *N*, and *r* referring to the *i*-th country;

$R_{\text{MEX}},\ N_{\text{MEX}},\ r_{\text{MEX}}$ – the values of variables *R*, *N*, and *r* referring to Mexico.

The same can be presented in a different way, namely:

$$\frac{R_i}{R_{\text{MEX}}} = \frac{N_i}{N_{\text{MEX}}} \cdot \frac{r_i}{r_{\text{MEX}}}, \tag{2}$$

and then:

$$I_{i;R} = I_{i;N} \cdot I_{i;r}, \tag{3}$$

where: $I_{i;R} = \frac{R_i}{R_{\text{MEX}}}$, $I_{i;N} = \frac{N_i}{N_{\text{MEX}}}$, $I_{i;r} = \frac{r_i}{r_{\text{MEX}}}$.

Thus, if the response variable *R* is a product of the variables *N* and *r* affecting the variable *R*, the ratio calculated for variable *R* is a product of ratios calculated for the respective factors: *N* and *r*.

From mathematical point of view, logarithms to any base can be taken of both sides of an equation, provided that the numbers that the logarithms have been taken of are positive. The values of ratios $I_{i;R}$, $I_{i;N}$ and $I_{i;r}$ are always greater than zero, hence the logarithms can be taken of both sides of the equation (3). The choice of the logarithm base has no effect on the final results of the causal analysis, but only on the partial results. The logarithm to the base 10 (i.e. the common logarithm) will be used in further calculations.

Taking the logarithms of both sides of the equation (3), the following expression can be obtained:

$$\lg(I_{i;R}) = \lg(I_{i;N} \cdot I_{i;r}). \tag{4}$$

Then, using the logarithm property stipulating that the logarithm of a product of two numbers is equal to the sum of the logarithms of these numbers, the equation presented below can be derived:

$$\lg(I_{i;R}) = \lg(I_{i;N}) + \lg(I_{i;r}). \tag{5}$$

The next step is to divide both sides of this equation by the term $\lg(I_{i;R})$. This results in the expression:

$$1 = \frac{\lg(I_{i;N})}{\lg(I_{i;R})} + \frac{\lg(I_{i;r})}{\lg(I_{i;R})}, \tag{6}$$

where:

$\frac{\lg(I_{i;N})}{\lg(I_{i;R})}$ – the impact of the deviation of *N* factor on the deviation of *R* variable;

$\frac{\lg(I_{i;r})}{\lg(I_{i;R})}$ – the impact of the deviation of *r* factor on the deviation of *R* variable.

The final step is to multiply both sides of the equation (6) by the value of deviation calculated for variable *R*. The result is:

$$R_i - R_{\text{MEX}} = (R_i - R_{\text{MEX}}) \cdot \frac{\lg(I_{i;N})}{\lg(I_{i;R})} + (R_i - R_{\text{MEX}}) \cdot \frac{\lg(I_{i;r})}{\lg(I_{i;R})}, \tag{7}$$

where:

$(R_i - R_{\text{MEX}}) \cdot \frac{\lg(I_{i;N})}{\lg(I_{i;R})}$ – the deviation of variable *R* caused by the change of factor *N*;

$(R_i - R_{\text{MEX}}) \cdot \frac{\lg(I_{i;r})}{\lg(I_{i;R})}$ – the deviation of variable *R* caused by the change of factor *r*.

The study has been conducted for forty six countries where the volume of tourist arrivals per year exceeded 5 million trips in 2014. The economies in total comprise approx. 83% of international tourist arrivals and 90% of international tourism receipts. These are the following countries:

- in the Americas (put in alphabetical order): Argentina, Brazil, Canada, the Dominican Republic, Mexico, the United States;

- in Europe: Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, the Russian Federation, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom;
- in Asia and the Pacific: Australia, China, Hong Kong (the Chinese Special Administrative Region – SAR), India, Indonesia, Japan, Macao (China, SAR), Malaysia, the Republic of Korea, Singapore, Taiwan (the province of China), Thailand, Vietnam;
- in Africa: Morocco, South Africa, Tunisia;
- in the Middle East: Egypt, Saudi Arabia.

In this paper, the causal analysis will allow to answer the question how the selected factors influence the deviations of the annual tourism revenues in these countries compared to the value characterizing Mexico. The analysis will be conducted based on data from 2012, 2013 and 2014.

5. Analysis of the Ratio Constructed for the Total Tourism Receipts

The first task carried out is the evaluation of the scale of inbound tourism receipts in each of the studied countries in relation to the value of these receipts in Mexico. Ratio $I_{i;R}$ was constructed by dividing the value R_i computed for the i-th country by the value R_{MEX} referring to Mexico. The obtained results have been presented in Table 1.

Table 1. The ratio referring to the total tourism receipts.[5]

2012		2013		2014	
Country	$I_{i;R}$	**Country**	$I_{i;R}$	**Country**	$I_{i;R}$
United States	12.688*	United States	12.724*	United States	11.804*
Spain	4.566	Spain	4.490	China	6.502
France	4.216	France	4.055	Spain	4.017
China	3.927	China	3.704	France	3.588
Macao	3.443	Italy	3.148	United Kingdom	2.871
Italy	3.233	Macao	3.084	Italy	2.807
Germany	2.994	Thailand	2.995	Germany	2.673
United Kingdom	2.874	United Kingdom	2.984	Macao	2.625
Thailand	2.658	Germany	2.959	Thailand	2.371
Hong Kong	2.596	Hong Kong	2.791	Hong Kong	2.368
Australia	2.504	Australia	2.241	Australia	1.970
Turkey	1.990	Turkey	2.007	Turkey	1.823
Malaysia	1.590	Malaysia	1.541	Malaysia	1.394
Singapore	1.487	Austria	1.451	Austria	1.285
Austria	1.483	Singapore	1.377	India	1.215
India	1.411	India	1.319	Singapore	1.181
Canada	1.366*	Canada	1.266*	Japan	1.163
Switzerland	1.264	Switzerland	1.203	Rep. of Korea	1.100
Japan	1.144	Greece	1.157	Greece	1.098
Rep. of Korea	1.054	Japan	1.085	Canada	1.076*

[5] It is worth to note that in the case of international tourism receipts, the ratios reflect not only relative performance, but also – to a considerable extent – exchange rate fluctuations between national currencies and the US dollar

Table 1. The ratio referring to the total tourism receipts (*cont.*)

2012		2013		2014	
Country	$I_{i;R}$	Country	$I_{i;R}$	Country	$I_{i;R}$
Greece	1.053	Rep. of Korea	1.049	Switzerland	1.076
Mexico	**1.000**	**Mexico**	**1.000**	**Mexico**	**1.000**
Belgium	0.994	Netherlands	0.985	Netherlands	0.907
Netherlands	0.967	Belgium	0.952	Taiwan	0.902
Taiwan	0.924	Taiwan	0.883	Belgium	0.859
Portugal	0.868	Portugal	0.881	Portugal	0.852
Poland	0.859	Russian Fed.	0.859	Sweden	0.793
Russian Fed.	0.845	Sweden	0.828	Russian Fed.	0.726
Sweden	0.833	Poland	0.813	Poland	0.693
South Africa	0.785	Croatia	0.683	Indonesia	0.633
Egypt	0.780	South Africa	0.662	Croatia	0.609
Croatia	0.681	Indonesia	0.654	South Africa	0.577
Indonesia	0.653	Saudi Arabia	0.548	Saudi Arabia	0.508
Saudi Arabia	0.583	Vietnam	0.520	Denmark	0.471
Czech Republic	0.552	Czech Republic	0.505	Vietnam	0.452
Vietnam	0.538	Denmark	0.504	Egypt	0.445
Morocco	0.526	Morocco	0.491	Morocco	0.435
Brazil	0.522*	Brazil	0.464*	Brazil	0.422*
Denmark	0.514	Egypt	0.434	Czech Republic	0.421
Hungary	0.397	Hungary	0.385	Hungary	0.362
Argentina	0.384*	Ukraine	0.364	Dominican Rep.	0.347*
Ukraine	0.380	Dominican Rep.	0.363*	Ireland	0.300
Dominican Rep.	0.368*	Ireland	0.321	Argentina	0.285*
Ireland	0.305	Argentina	0.309*	Bulgaria	0.241
Bulgaria	0.294	Bulgaria	0.275	Tunisia	0.146
Tunisia	0.175	Tunisia	0.157	Ukraine	0.099

** countries of the Americas*

Source: own computation based on UNWTO Tourism Highlights 2014 (2015, 2016) Edition.

The highest value of tourism receipts of all the studied countries has been observed in the United States. In 2012 and 2013 the value of tourism revenue in the US was over twelve – and in 2014 nearly twelve – times higher than in Mexico. The lowest value in 2014 was recorded in Ukraine – at that time tourism earnings in Ukraine equalled less than 10% of the value obtained by Mexico.

Two out of five examined countries of the Americas – i.e. the United States and Canada – registered higher revenue from tourism than Mexico, whereas Argentina, Brazil and the Dominican Republic recorded lower receipts than Mexico. It should also be added that in the period of 2012–2014 the difference declined between the US and Mexico, as well as between Canada and Mexico, whereas it increased between Mexico and the following countries: Argentina, Brazil and the Dominican Republic. Nevertheless, in the world's ranking by international tourism receipts, Mexico remained the twenty-second during the whole time period taken into consideration.

6. Analysis of the Ratio Constructed for the Number of Overnight Visitors

The second task is the evaluation of the volume of tourists arriving to the discussed countries against the volume of arrivals to Mexico. Ratio $I_{i;N}$ was constructed by dividing the value N_i computed for the i-th country by the value N_{MEX} referring to Mexico. Table 2 contains results of the relevant calculations.

Table 2. The ratio referring to the number of arrivals.

2012	
Country	$I_{i;N}$
France	3.503
United States	2.848*
China	2.467
Spain	2.455
Italy	1.981
Turkey	1.525
Germany	1.299
United Kingdom	1.251
Russian Fed.	1.099
Malaysia	1.070
Austria	1.032
Hong Kong	1.016
Mexico	**1.000**
Ukraine	0.983
Thailand	0.955
Canada	0.698*
Greece	0.663
Poland	0.634
Saudi Arabia	0.610
Macao	0.580
Sweden	0.529
Netherlands	0.522
Egypt	0.478
Rep. of Korea	0.476
Singapore	0.474
Croatia	0.443
Hungary	0.442
Czech Republic	0.433
Morocco	0.401
South Africa	0.393
Switzerland	0.366
Denmark	0.361
Japan	0.357
Indonesia	0.344
Portugal	0.328
Belgium	0.323
Ireland	0.323
Taiwan	0.312
Vietnam	0.293
India	0.281
Bulgaria	0.279
Australia	0.258

2013	
Country	$I_{i;N}$
France	3.463
United States	2.898*
Spain	2.512
China	2.306
Italy	1.975
Turkey	1.565
Germany	1.306
United Kingdom	1.286
Russian Fed.	1.174
Thailand	1.099
Malaysia	1.065
Hong Kong	1.063
Austria	1.027
Ukraine	1.022
Mexico	**1.000**
Greece	0.742
Canada	0.665*
Poland	0.654
Saudi Arabia	0.653
Macao	0.591
Netherlands	0.529
Rep. of Korea	0.504
Singapore	0.493
Sweden	0.455
Croatia	0.453
Hungary	0.440
Japan	0.429
Czech Republic	0.426
Morocco	0.416
South Africa	0.395
Egypt	0.380
Switzerland	0.371
Indonesia	0.364
Denmark	0.354
Portugal	0.344
Ireland	0.342
Taiwan	0.332
Belgium	0.318
Vietnam	0.314
Tunisia	0.304
India	0.289
Bulgaria	0.286

2014	
Country	$I_{i;N}$
France	2.852
United States	2.556*
Spain	2.213
China	1.895
Italy	1.655
Turkey	1.357
Germany	1.125
United Kingdom	1.111
Russian Fed.	1.017
Mexico	**1.000**
Hong Kong	0.946
Malaysia	0.935
Austria	0.862
Thailand	0.845
Greece	0.751
Saudi Arabia	0.622
Canada	0.564*
Poland	0.545
Macao	0.496
Rep. of Korea	0.484
Netherlands	0.475
Japan	0.457
Ukraine	0.433
Hungary	0.414
Singapore	0.404
Croatia	0.396
Czech Republic	0.362
Sweden	0.359
Morocco	0.350
Denmark	0.350
Taiwan	0.338
Egypt	0.328
South Africa	0,325
Indonesia	0.322
Portugal	0.316
Switzerland	0.312
Ireland	0.300
Belgium	0.269
Vietnam	0.268
India	0.262
Bulgaria	0.249
Tunisia	0.244

Table 2. The ratio referring to the number of arrivals *(cont.)*

2012		2013		2014	
Country	$I_{i;N}$	**Country**	$I_{i;N}$	**Country**	$I_{i;N}$
Tunisia	0.254	Australia	0.264	Australia	0.235
Brazil	0.243*	Brazil	0.241*	Brazil	0.219*
Argentina	0.239*	Argentina	0.217*	Argentina	0.202*
Dominican Rep.	0.195*	Dominican Rep.	0.194*	Dominican Rep.	0.175*

** countries of the Americas*

Source: as in Table 1.

7. Analysis of the Ratio Constructed for the Average Spending of Tourists

The third task is the comparison of tourism revenue per one visitor in the studied economies. Ratio $I_{i;r}$ was calculated by dividing r_i value computed for the i-th country by the value r_{MEX} referring to Mexico. The results of the calculations have been presented in Table 3.

Table 3. Tourism receipts in relation to the number of visitors.

2012		2013		2014	
Country	$I_{i;r}$	**Country**	$I_{i;r}$	**Country**	$I_{i;r}$
Australia	9.715	Australia	8.481	Australia	8.399
Macao	5.935	Macao	5.221	Macao	5.289
India	5.019	India	4.571	India	4.645
United States	4.455*	United States	4.390*	United States	4.617*
Switzerland	3.453	Switzerland	3.240	Switzerland	3.448
Japan	3.204	Belgium	2.991	China	3.430
Singapore	3.135	Singapore	2.795	Belgium	3.196
Belgium	3.077	Thailand	2.725	Singapore	2.920
Taiwan	2.958	Taiwan	2.662	Thailand	2.804
Thailand	2.782	Hong Kong	2.627	Portugal	2.695
Portugal	2.643	Portugal	2.562	Taiwan	2.670
Hong Kong	2.556	Japan	2.528	United Kingdom	2.584
Germany	2.304	United Kingdom	2.320	Japan	2.545
United Kingdom	2.297	Germany	2.266	Hong Kong	2.502
Rep. of Korea	2.215	Rep. of Korea	2.080	Germany	2.377
Brazil	2.150*	Brazil	1.928*	Rep. of Korea	2.274
South Africa	1.998	Canada	1.904*	Sweden	2.212
Canada	1.957*	Dominican Rep.	1.869*	Dominican Rep.	1.983*
Indonesia	1.901	Netherlands	1.861	Indonesia	1.969
Dominican Rep.	1.887*	Sweden	1.820	Brazil	1.927*
Spain	1.859	Indonesia	1.794	Netherlands	1.912
Netherlands	1.854	Spain	1.787	Canada	1.910*
Vietnam	1.838	South Africa	1.677	Spain	1.815
Italy	1.632	Vietnam	1.658	South Africa	1.772
Egypt	1.631	China	1.606	Italy	1.695
Argentina	1.607*	Italy	1.594	Vietnam	1.685
China	1.592	Greece	1.559	Croatia	1.537
Greece	1.588	Croatia	1.506	Malaysia	1.491
Sweden	1.576	Malaysia	1.447	Austria	1.491
Croatia	1.537	Argentina	1.423*	Greece	1.462
Malaysia	1.486	Denmark	1.422	Argentina	1.412*

Table 3. Tourism receipts in relation to the number of visitors (cont.)

2012	
Country	$I_{i;r}$
Austria	1.437
Denmark	1.423
Poland	1.354
Morocco	1.314
Turkey	1.304
Czech Republic	1.277
France	1.203
Bulgaria	1.053
Mexico	**1.000**
Saudi Arabia	0.956
Ireland	0.945
Hungary	0.898
Russian Fed.	0.768
Tunisia	0.688
Ukraine	0.387

2013	
Country	$I_{i;r}$
Austria	1.412
Turkey	1.283
Poland	1.243
Czech Republic	1.184
Morocco	1.180
France	1.171
Egypt	1.141
Mexico	**1.000**
Bulgaria	0.963
Ireland	0.938
Hungary	0.874
Saudi Arabia	0.840
Russian Fed.	0.732
Tunisia	0.516
Ukraine	0.357

2014	
Country	$I_{i;r}$
Egypt	1.355
Denmark	1.346
Turkey	1.344
Poland	1.271
France	1.258
Morocco	1.242
Czech Republic	1.163
Mexico	**1.000**
Ireland	0.998
Bulgaria	0.968
Hungary	0.876
Saudi Arabia	0.817
Russian Fed.	0.713
Tunisia	0.596
Ukraine	0.230

** countries of the Americas*

Source: as in Table 1.

In the examined period, the highest spending per one stay abroad was observed in the case of visitors arriving to Australia, however the difference in this regard between Australia and Mexico was decreasing year by year. In turn, the lowest value of the revenue from tourism in relation to the number of visitors was noted in Ukraine. In 2014 the quotient concerning this country equalled less than 1/4 of the value of the corresponding measure calculated for Mexico.

In case of all five analysed countries in the Americas (i.e. Argentina, Brazil, Canada, the Dominican Republic, the United States), the average spending per tourist per trip was in the period 2012–2014 higher than in Mexico.

In the ranking referring to the average tourist spending per trip, Mexico moved up one place to the thirty-ninth position in 2013 and remained the thirty-ninth in the following year.

8. Causal Analysis

The last task to be carried out is the evaluation of the influence of deviations of the selected factors on the deviation of the total tourism receipts.

It was established in the paper that the value of the response variable may be calculated by multiplication of 1) the number of arrivals per year and 2) the quotient of total annual tourism receipts and the number of arrivals. The said relationship is as follows:

$$R = N \cdot r\,. \tag{8}$$

The (3) ratio equality was derived from this relationship.

Table 4 presents the values of ratios calculated for each studied country. The top right section of Table 4 contains the countries where $I_{i;N}$ and $I_{i;r}$ values were higher than 1. The bottom right section of Table 4 contains the countries where ratio $I_{i;N}$ value was higher than 1, and ratio $I_{i;r}$ – lower than 1. The top left section of Table 4 contains the countries where ratio $I_{i;N}$ value was lower than 1, and ratio $I_{i;r}$ – higher than 1. The bottom left section of Table 4 includes the countries where the values of ratios $I_{i;N}$ and $I_{i;r}$ were lower than 1.

Table 4. Total tourism receipts and the factors affecting them (results for 2014).

Higher revenue from tourism in relation to the number of visitors ↑

Macao:	**2.625** = 0.496 · 5.289	United States:	**11.804** = 2.556 · 4.617
Thailand:	**2.371** = 0.845 · 2.804	China:	**6.502** = 1.895 · 3.430
Hong Kong:	**2.368** = 0.946 · 2.502	Spain:	**4.017** = 2.213 · 1.815
Australia:	**1.970** = 0.235 · 8.399	France:	**3.588** = 2.852 · 1.258
Malaysia:	**1.394** = 0.935 · 1.491	United Kingdom:	**2.871** = 1.111 · 2.584
Austria:	**1.285** = 0.862 · 1.491	Italy:	**2.807** = 1.655 · 1.695
India:	**1.215** = 0.262 · 4.645	Germany:	**2.673** = 1.125 · 2.377
Singapore:	**1.181** = 0.404 · 2.920	Turkey:	**1.823** = 1.357 · 1.344
Japan:	**1.163** = 0.457 · 2.545		
Rep. of Korea:	**1.100** = 0.484 · 2.274		
Greece:	**1.098** = 0.751 · 1.462		
Canada:	**1.076** = 0.564 · 1.910		
Switzerland:	**1.076** = 0.312 · 3.448		
Netherlands:	0.907 = 0.475 · 1.912		
Taiwan:	0.902 = 0.338 · 2.670		
Belgium:	0.859 = 0.269 · 3.196		
Portugal:	0.852 = 0.316 · 2.695		
Sweden:	0.793 = 0.359 · 2.212		
Poland:	0.693 = 0.545 · 1.271		
Indonesia:	0.633 = 0.322 · 1.969		
Croatia:	0.609 = 0.396 · 1.537		
South Africa:	0.577 = 0.325 · 1.772		
Denmark:	0.471 = 0.350 · 1.346		
Vietnam:	0.452 = 0.268 · 1.685		
Egypt:	0.445 = 0.328 · 1.355		
Morocco:	0.435 = 0.350 · 1.242		
Brazil:	0.422 = 0.219 · 1.927		
Czech Republic:	0.421 = 0.362 · 1.163		
Dominican Rep.:	0.347 = 0.175 · 1.983		
Argentina:	0.285 = 0.202 · 1.412		
	MEXICO $1.000 = 1.000 \cdot 1.000$		
Saudi Arabia:	0.508 = 0.622 · 0.817		

Table 4. Total tourism receipts and the factors affecting them (results for 2014) (cont.)

Lower revenue from tourism in relation to the number of visitors ↓		
	Ireland: 0.300 = 0.300 · 0.998 Bulgaria: 0.241 = 0.249 · 0.968 Tunisia: 0.146 = 0.244 · 0.596 Ukraine: 0.099 = 0.433 · 0.230	Russian Federation: 0.726 = 1.017 · 0.713
	← **Lower** number of visitors	**Higher** number of visitors →

Source: own compilation based in Tables 1, 2, and 3.

Five countries of the Americas were subject to a more detailed study. Further stages of the logarithmic method were performed in relation to them. This resulted in obtaining information regarding the impact of each of the factors. The results for three consecutive years of the 2012–2014 period were included in Table 5.

Table 5. The importance which can be assigned to each of the causes for the occurring deviations of the value of R variable for i-th country from the value of this variable for Mexico (US$ billion).

Country		2012	2013	2014
United States	*a*	148.9	163.5	175.1
	b	61.3	68.4	66.6
	c	87.6	95.1	108.5
Canada	*a*	4.7	3.7	1.2
	b	–5.4	–6.4	–9.7
	c	10.1	10.1	10.9
Brazil	*a*	–6.1	–7.5	–9.4
	b	–13.3	–13.9	–16.5
	c	7.2	6.4	7.1
Dominican Rep.	*a*	–8.1	–8.9	–10.5
	b	–13.2	–14.4	–17.4
	c	5.1	5.5	6.9
Argentina	*a*	–7.8	–9.6	–11.6
	b	–11.7	–12.5	–14.8
	c	3.9	2.9	3.2

a – the deviation of the total tourism receipts: $R_i - R_{\mathrm{MEX}}$;

b – the part of the deviation caused by the higher/lower number of visitors: $(R_i - R_{\mathrm{MEX}}) \cdot \frac{\lg(I_{i;N})}{\lg(I_{i;R})}$;

c – the part of the deviation caused by the higher/lower average spending per trip: $(R_i - R_{\text{MEX}}) \cdot \frac{\lg(I_{i;r})}{\lg(I_{i;R})}$.

Source: own computation based on UNWTO Tourism Highlights 2014 (2015, 2016) Edition and Table 4.

As an example, the values obtained for the United States and Brazil shall be interpreted. Tourism receipts in the US in 2014 were US$ 175.1 billion higher than in Mexico. In 38 p.p. it was due to the fact that more tourists visited the US (155.6% more), and in the remaining 62 p.p. the reason being the higher average spending per tourist per trip (361.7% higher). Had the same number of tourists arrived to the United States in 2014 as to Mexico, the annual tourism receipts in the United States would have been US$ 108.5 billion higher than it was in the case of Mexico, only due to the higher average tourist spending (by US$ 1,998 per trip). However, if the tourists had been spending per trip in the US as little as they had in Mexico, the annual receipts in the US would have been US $ 66.6 billion higher than in Mexico, what would have been a result solely of a greater number of visitors (by 45,676 trips per year).

Tourism earnings in Brazil in 2014 were US$ 9.4 billion lower than in Mexico. Had the same number of tourists arrived to Brazil as to Mexico, the annual tourism revenue in Brazil would have even exceeded the numbers for Mexico by US$ 7,1 billion, which would have been caused by higher average tourist spending (by US$ 512 per trip). If, however, the average level of spending per tourist in Brazil had been as low as it was in Mexico, the total revenue from tourism in Brazil would have been lower than in Mexico by as much as US $ 16.5 billion and this could have been attributed solely to a lower number of arrivals (by 22,916 trips per year).

9. Conclusions

Tourists travel because they want to view beautiful scenery, to learn about other cultures, to visit friends and relatives, etc. Tourism is an activity that takes place in all continents and its economic significance and impacts are far reaching.

Tourism affects destination areas in many ways. That is why it is so important to emphasise that the proper objectives of sustainable tourism are: to improve the quality of life of host communities, to provide a high quality experience for visitors, and – at the same time – to take care of the environment (Mill & Morrison, 2009, p. 61).

Since the mid-twentieth century the expansion of tourism has been immense. World travel and tourism in 1950 was an emerging industry. From the 25 million international arrivals registered in 1950, tourism had climbed to the impressive figure of 1,133 million international travellers in 2014. There were many drivers of this strong development performance, including the economic growth of industrialized countries and the accompanying increase in paid leisure time, together with the technological progress in transportation and information systems (Fletcher, 2012, p. 167).

For many countries inbound tourism is a vital source of foreign exchange earnings and an important contributor to the economy, creating much-needed employment and further opportunities for growth. The fact is that tourism plays an incomparably greater role in economies of developing destinations – especially some islands – than in large developed countries (Telfer, 2012,

p. 148). However, the majority of tourism activity takes place between the most industrialized countries of the world, where tourism revenues represent only a small percentage of GDP.

The aim of the article was to compare forty six selected economies according to the three key inbound tourism indicators: international tourism receipts, international tourist arrivals, and the average spending on one trip abroad. The research was conducted on the basis of data from three consecutive years: 2012, 2013, and 2014.

In 2012–2014, the top four places in the ranking concerning annual receipts and in the ranking concerning the number of arrivals were taken by the same countries, albeit in a different order. In 2014, the first position in the tourism earnings ranking belonged to the United States (it received US$ 191.3 billion in receipts). From 2012 to 2014 China climbed two places to the second position (US$ 105.4 billion in 2014). In turn, Spain and France moved down one place to the third and fourth position – US$ 65.1 billion and US$ 58.2 billion respectively.

France was the country that attracted the most tourists in all these three years taken into consideration (83.7 million overnight visitors in 2014). The United States ranked the second in arrivals with 75.0 million tourists in 2014. The third and fourth position belonged to Spain (64.9 million) and China (55.6 million travellers in 2014).

In the ranking by the average tourist spending, Australia ranked the first with US$ 4,639 per trip in 2014. Macao, India, and the United States held on to the second, third and fourth position with the average spending in 2014 amounting to US$ 2,921, US$ 2,565, and US$ 2,550 per one visit, respectively.

It has to be admitted that Mexico is situated very well in the ranking related to tourist arrivals, but worse in the ranking by total tourism earnings, and quite poorly in the ranking by the average amount of money earned from one visitor. The volume of international tourist arrivals to Mexico was 23.4 million in 2012, 24.2 million in 2013, and 29.3 million in 2014. International tourism revenue in this country accounted for US$ 12.7 billion in 2012, US$ 13.9 billion in 2013, and US$ 16.2 billion in 2014. Tourists visiting Mexico spent on average US$ 544 in 2012, US$ 578 in 2013, and US$ 552 per one stay.

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