# **ANALYSIS OF TOURISM DEVELOPMENT DISPARITIES IN ROMANIA**

Delia Popescu The Bucharest University of Economic Studies Bucharest, Romania deliapopescu2@yahoo.com Ana-Maria Nica The Bucharest University of Economic Studies Bucharest, Romania ana.nica@hotmail.com Daniel Bulin Institute for World Economy – Romanian Academy Bucharest, Romania daniel.bulin@yahoo.com

#### Abstract

In 1998 eight development regions were set up in Romania (North-West, North-East, South-West, South-East, South, West, Center, Bucharest and Ilfov), with a view to efficiently absorb the EU funds, in order to reduce the socio-economic development disparities. Tourism is an important sector of the world economy and also of the development regions, contributing to economic growth in less developed areas, which yet have a high tourism potential. The main aim of the present paper is the analysis of development disparities of tourism in Romania, by tracking the changes that have taken place since the moment of creation of the development regions, in the periods of pre-accession and post-accession of Romania to the EU. The research comprises a cluster analysis based on tourism supply and demand indicators in the regions and counties of Romania; the main hypothesis of the study is that the development differences of Romanian tourism have diminished after the accession, as within the regions there are counties with greater tourism activity, that may turn into engines of regional economic growth.

#### Keywords

Regional development, tourism indicators, cluster analysis, disparities, Romania's development regions

#### **JEL Classification**

L81, O11, R10

#### 1. Introduction

In recent years, tourism has walked the path from leisure activity to leisure industry, and nowadays it constitutes an essential component of the world economy. In Romania, a country with a strong tourism background, the overall contribution of the industry to GDP was 5.2% in 2016 and was expected to grow to 4.6% in 2017, and by 2.7% annually in the next decade, according to the report of the World Tourism and Travel Council. However, for an emerging country with high tourism potential, the present situation is not satisfactory. To status of EU member gives Romania, among other benefits, the opportunity to access European grants bound for tourism development. Moreover, in the pre-accession years, Romania could access funds PHARE, ISPA and SAPARD, financial instruments with an important component of regional and rural development, including tourism development. Also, in Romania in 1998, eight development regions were created, lacking legal personality and administrative status, but with a view to absorb in an effective and balanced way the pre-accession funds. After Romania joined the EU in 2007, these regions have become members of the Committee of Regions, keeping the function for which they were created. As the problem of uneven development of regions and especially of Romania's counties is one of current interest, the authors propose in this paper to analyze the existing discrepancies in terms of tourism development. Thus, we start from the premise that accessing funds has had a major effect on tourism development in Romania, and the result was the initial bridging. Therefore, we propose an evaluation of supply and tourism demand through an analysis of specific indicators and aggregates, in the three key moments of the process of regional development: 1998 – the time of the establishment of regions, 2007 - EU accession 2016 - end of the post-accession payment period. In order to highlight differences in tourism development and evolution of these during 1998-2016, a cluster analysis has been performed, using k-means method, considering the 5 aggregate indicators: average stay, the coefficient of accommodation capacity use, occupancy rate, tourism density and tourist accommodation units' density. The paper is structured as follows: literature review, research methodology, results and discussion, conclusions.

## 2. Literature review

The theme of regional development through tourism has been widely debated since before the European Union has increased significantly the number of members. Among the promoters of studies in this regard there are Pearce (1980, 1988) or Loukissas (1982). In one of the earliest studies Pearce (1980) noticed that "research on tourism and regional development should include a temporal perspective, for studies of contemporary and economic impact are, by themselves, insufficient to explain tourism's contribution to regional development". Loukissas (1982) explores the conditions that determine tourism development and concludes that "factors such as the local institutional capacity to absorb development and the potential interaction of locals and tourists should be considered in the making of tourism policy". Pearce (1988) have analyzed the relationship between tourism and regional development, his study focuses on the ERDF (European Regional Development Fund), an EU community regional policy tool launched in 1975.

Recent studies (Deller,2010; Dimitrovsky et al. 2012; Yang and Fik, 2014) approached, in different ways, the complexity of implications of tourism in regional development. Dimitrovsky et al. (2012) have studied the role of rural tourism in relation with regional development. *"The rural areas have a unique opportunity to attract tourists by the means of establishing a connection between rural areas and their cultural, historic, ethnic and geographical roots […] Well-developed and focused rural tourism can become a new source of money and jobs and at the same time it can eliminate social isolation and be an important factor in resettling the country" (Dimitrovsky et al., 2012). Yang and Fik (2014) examine two types of spatial effects in regional tourism growth: spatial spill-over and spatial heterogeneity. Their analysis identifies several important factors, including <i>"local economic growth, localization economies, tourism resource endowments, and hotel infrastructure, as well as spatial spill-over effects and cross-city competition effects associated with tourism resource endowments and hotel infrastructure"*. Deller (2010) explores poverty rates in rural areas of US during the period 1990 to 2000, focusing on the role of tourism in changing poverty rates and there is limited spatial variation"

Regional development and the relationship with the tourism industry in the context of Romania's accession to the EU were also themes for Romanian's authors in their recent years' studies (Balogh et al., 2010; Profiroiu et al, 2008; Mortan, 2006; Nicula et al., 2013). Balogh et al. (2010) analyzed the impact of European funds in Macroregion One for tourism development. They concluded "that Romanian tourism, and especially the one carried out in Macroregion One, have known a favorable development from the point of view of the increase in number of tourist arrivals (Balogh et al., 2010). A broader approach had Profiroiu et al (2008), who studied the evolution of the service sector, including tourism, in Romania between 1993 and 2006. They concluded that "on medium term, the development of the service market will represent an important source of economic growth for countries from Central and Eastern Europe" (Profiroiu et al, 2008). Mortan (2006) called attention to the risk that rural development would be exclusively oriented towards agriculture. "In Romania, during the first years of the transition period, the rural development policy was wrongly equated with the agrarian policy, putting the sign of equality between supporting agriculture and rural development, which was wrong" (Mortan, 2006). In a recent study, Nicula et al. (2013) analyzed a series of indicators of tourist movement in the eight development regions of Romania.

## 3. Research methodology

The research was conducted in three stages:

- ♦ First stage the empirical analysis of statistical data level and evolution for the three points in time 1998, 2007, 2016 for the following indicators measured for the overall development regions tourism supply indicators number of accommodation units, the existing accommodation capacity, accommodation capacity in operation; indicators of tourism demand the number of arrivals, the number of overnight stays.
- Second stage the empirical analysis of the aggregate indicators average stay, coefficient of accommodation capacity use, occupancy rate, tourist density, density of tourist accommodation units.

Third stage – cluster analysis, by the k-means method, of the development regions of Romania for the years 1998, 2007 and 2016, for which the main components were the aggregated indicators evaluated in the previous step, calculated using the formulas below.

(1) 
$$erage stay = \frac{overnight stays}{number of tourists}$$
, in number of days

- (2) Coefficient of tourism accomodation capacity use =  $\frac{overnight stays}{accomodation capacity in use} x 100$ , in percentage (%)
- (3) upancy rate of the accomodation capacity =  $\frac{\text{existing accomodation capacityx360}}{\text{accomodation capacity in use}}$ , in percentage (%)

(4) Tourism density = 
$$\frac{number \ of \ tourist \ arrivals}{population \ of \ the \ region} x \ 100$$
, in number of tourists per 100 inhabitants.

(5) Accomodation units density =  $\frac{tourism accomodation structures}{surface of the region} x 100$ , in number of accommodation units per 100 km<sup>2</sup>.

The software STATISTICA was used for the cluster analysis, using the k-means method, initially choosing 3 clusters, and the Euclidian distance was used to determine the distance between the components of the cluster, established by:

$$d(x,y) = \sqrt{\sum_{i} (x_i - y_i)^2}$$

and the distance between the clusters was maximal. The obtained results were afterwards interpreted.

In order to be comparable and used in the cluster analysis, the values of the aggregated indicators were standardized. Standardization aims to transform the set of values in one with mean 0 and variance 1, transforming values using the formula:

Standardized value = (normal-average) / standard deviation

### 4. Results and discussion

### 4.1. Empirical analysis of the tourism demand and supply

In the analysis of tourism supply, the authors have considered the absolute number of accommodation structures, the existing accommodation capacity, expressed in number of places and the accommodation capacity in operation, expressed in number of places-day for three years – 1998, 2007 and 2016.

Region	Structures			Existing	Existing capacity			Capacity in operation (thousands)		
	1998	2007	2016	1998	2007	2016	1998	2007	2016	
NORTH-WEST	339	554	831	27231	26805	33848	6720,3	7486,7	10353,1	
CENTER	722	1209	2094	36915	35380	67496	8837,9	10477,3	20572,8	
NORTH-EAST	254	459	858	19131	18414	28763	4941,9	5583,5	8371,2	
SOUTH-EAST	938	1247	1129	133006	132922	98769	13929,9	12679,1	13650	
SOUTH-	314	426	734	23139	20767	30347	6023,4	6390,1	8583	
MUNTENIA										
<b>BUCHAREST-</b>	119	151	185	8668	13747	22242	3065,5	4769,8	8100	
ILFOV										
SOUTH-WEST	186	259	453	16890	15219	19190	4082,3	4107,4	6100	
OLTENIA										
WEST	255	389	662	22288	20447	28233	5562,4	5643,9	7593,9	

Table 1. Tourism supply in the development regions: 1998, 2007, 2016

Source: by authors, insse.ro

The number of tourist accommodation structures increased in the analyzed period, in this sense we highlight the Center Region, where the absolute number of accommodation units increased by 1372 from 1998 to 2013, and the North East, South West and West regions. A different pattern was followed by the South-East region, where the number of accommodation units increased between 1998 and 2007, then decreased, reaching 1129 in 2016. A similar trend was followed by the indicator of existing accommodation capacity, in the Bucharest-Ilfov region, which experienced a boom in the period 1998-2016, from 8668 beds in 1998 to 13747 in 2007 to 22242 in 2016. The South-East region is again different from the rest of the regions, as the number of existing beds decreased slightly during the period 1998-2007 and in a more pronounced way by 2016. The evolution of accommodation capacity in operation, which effectively shows the quantitative level of tourist supply, follows the same trend, with increases in seven of the eight regions. The Center region, due to the increasing number of accommodation units, and the Bucharest-Ilfov region experienced the highest rates of increase for accommodation capacity in operation, while in the South East region, despite the unfavorable evolution of the quantitative indicators analyzed above, the number of places-days remained at similar values, showing a more efficient use of the accommodation capacity.

In terms of tourism demand, for the three years (1998, 2007 and 2016), the number of tourist arrivals and the number of overnight stays (or number of days-tourist) were analyzed.

Region	Arrivals			Overnight stays		
	1998	2007	2016	1998	2007	2016
NORTH-WEST Region	605860	889707	1316363	1920489	2549490	3088566
CENTER Region	927512	1329992	2585938	2831246	3177434	5386220
NORTH-EAST Region	635850	717592	1084045	1642095	1691905	2205775
SOUTH-EAST Region	1171452	1231058	1506616	6205537	5294207	5313781
SOUTH-MUNTENIA Region	641588	729221	914141	1961059	2175482	1996392
BUCHAREST-ILFOV Region	675204	996740	2065012	1253908	2024483	3355893
SOUTH-WEST OLTENIA Region	374281	403071	630446	1618975	1673496	1810428
WEST Region	520346	674544	899961	1749905	2006852	2283902

Table 2. Tourism demand in the development regions: 1998, 2007, 2016

Source: by authors, insse.ro

The tourist arrivals indicator had a positive evolution in 7 out of the 8 regions, the tourist flow experienced a higher increase in the Center region (doubling the number of tourists) and in the Bucharest-Ilfov region. A clearer picture of the tourist flow is given by the number of overnight stays, as their growth rate is much lower than that of arrivals. Between 1998 and 2007 in seven of the eight regions the number of overnight stays increased, except for the South East region, and between 2007 and 2016 the trend remained in all regions. So it is found that positive evolution of the pre-accession period was not matched by the post-accession period, moreover, the negative impact is felt against stronger.

## 4.2. Analysis of the aggregate indicators of tourism supply and demand

*The analysis of the indicators' evolution in the period 1998-2016.* For a full analysis of the Romanian tourism market by development region in 1998, 2007 and 2016 the following indicators were calculated:

- Two aggregate indicators of tourism demand: average stay, tourist density
- Two aggregate indicators of tourist supply: occupancy rate, density of accommodation units.
- An aggregate indicator of tourism demand and supply: the coefficient of tourism accommodation capacity use.

The average stay, the main indicator in assessing demand and real tourism consumption, had a profound negative trend during 1998-2016, the decreasing number of days per tourist being a clear sign of a decline on the Romanian tourism market. The Bucharest-Ilfov region is the only exception, with an increase in average stay from 1.86 days to 2.03 days, but the subsequent evolution until 2016 does not change the general rule. The explanation is given by the increase at a slower rate of the number of overnight stays, compared to one of tourist arrivals. The coefficient of accommodation capacity use, a defining indicator for the relationship between supply and demand on the one hand, and the one between the level of micro-economic performance of tourism operators and the tourism market macroeconomic results, on the other hand, also had a negative trend. In all regions the occupancy rate experienced a decrease in the overall period 1998-2016, noticing sharp deterioration in the region South East with over 7 percentage points, evolution which was mainly driven by the decrease trend of the post-accession period (more than 10 percentage points), North East and South West Oltenia. However, there are noted for the period 1998-2007 increases in the occupancy rate in 5 out of 8 regions: North-West, South-Muntenia, Bucharest-Ilfov, South West Oltenia and West. In this case, the determining factor was the evolution of the number of overnights.

Region	AVERAGE STAY			COEFFICIENT OF CAPACITY USE		
			(%)			
	1998	2007	2016	1998	2007	2016
NORTH-WEST Region	3.17	2.87	2.35	28.58	34.05	29.83
CENTER Region	3.05	2.39	2.08	32.04	30.33	26.18
NORTH-EAST Region	2.58	2.36	2.03	33.23	30.30	26.35
SOUTH-EAST Region	5.30	4.30	3.53	44.55	41.76	38.93
SOUTH-MUNTENIA Region	3.06	2.98	2.18	32.56	34.04	23.26
BUCHAREST-ILFOV Region	1.86	2.03	1.63	40.90	42.44	41.43
SOUTH-WEST OLTENIA Region	4.33	4.15	2.87	39.66	40.74	29.68
WEST Region	3.36	2.98	2.54	31.46	35.56	30.08

**Tabel 3.1. Aggregate indicators** 

Source: by authors, based on tables 2 and 3

The occupancy rate shows a relative efficiency of the tourism supply and includes the seasonality component. Moreover, the latter also determines the extremes results: the South-East and Bucharest-Ilfov regions. Across regions, the analysis reveals a positive trend in accommodation capacity use, as there were successive increases in North West, Center and South West Oltenia regions. Pointing out that in none of the regions did the occupancy rate decrease, it is a fact that the regions had different periods of accommodation efficiency. Therefore, increases in the period 1998-2007 were recorded in the North-West, Center, North-East, South-Muntenia, South West Oltenia and West, while 2007-2013 was especially beneficial to the South East and Bucharest-Ilfov regions, and also for North-West, Center, South WestOltenia and West.

Tourism density in the development regions of Romania also experienced an overall positive trend, especially in the case of Center and Bucharest-Ilfov regions, which had an almost 100% increase rate in the number of tourists compared to the number of inhabitants. In addition, the tourism density of the tourist accommodation structures has had a quasi-similar evolution and in this case the highest values were recorded in the Center and Bucharest-Ilfov regions.

Region		USE (%)			Tourism density tourists/100 inhabitants			DENSITY units/ 100km2		
	1998	2007	2016	1998	2007	2016	1998	2007	2016	
NORTH-WEST	68.55	77.58	84.96	21.18	32.60	51.09	0.99	1.62	2.43	
CENTER	66.50	82.26		34.88	52.69	110.43	2.12	3.55		
			84.67						6.14	
NORTH-EAST	71.76	84.23		16.76	19.25	33.29	0.69	1.25		
			80.84						2.33	
SOUTH-EAST	29.09	26.50	38.39	39.80	43.43	61.00	2.62	3.49	3.16	
SOUTH- MUNTENIA	72.31	85.47	78.56	18.37	22.07	30.16	0.91	1.24	2.12	
BUCHAREST- ILFOV	98.24	96.38		29.38	44.65	90.23	6.53	8.29	2.13	
	(7.1.4	74.07	100*	15.45	17.62	21.62	0.64	0.00	10.22	
SOUTH-WEST OLTENIA	67.14	74.97		15.47	17.63	31.62	0.64	0.89		
WEST	69.32	76.67	88.29	25.27	35.01	49.94	0.80	1.21	1.55	
WEST	09.32	/0.0/		25.27	55.01	49.94	0.80	1.21		
			74.71	<u> </u>					2.07	

 Table 3.2. Aggregate indicators

Source: by author, based on tables no. 1 and no. 2. Note: \*Inconsistency of the INSSE data

*Comparative analysis of the aggregate indicators.* The highest values for the average stay were recorded in the South East region, while in the Bucharest-Ilfov region the situation is reversed, getting milder differences from about three days and a half to almost two days, this evolution being confirmed by the mean values also.

The highest rate of occupancy was recorded in the South East region for 1998 and 2016, respectively Bucharest-Ilfov region in 2007, the lowest weights were reported in the North West in 1998, and the Center in 2007 and 2016. Similarly, it can also be noted that for this indicator the discrepancies have diminished, the differences of about 16 percent from 1998 being reduced to less than 8 percent in 2016. The inter-region average value of the coefficient of accommodation capacity use, although it increased slightly in 2007, it collapsed by 9 percentage points by 2016 and this is a warning especially for tourism operators.

Major differences among regions are recorded in the case of occupancy rate, of tourism density and of tourism accommodation units' density. The occupancy rate records weights from a minimum of 29-37% for the South-East region, to the maximum value of 100% in 2016 in Bucharest-Ilfov region (noting that there is an imbalance in the INSSE statistics). However, there is a positive trend and an approximation of the mean values among regions. Similarly, tourist density is between 15 to 20 tourists per 100 inhabitants, the minimum value was recorded in South East Oltenia region in 1998 and 2007, respectively North-East in 2016, in the South East region in 1998 and Center region in 2007 and 2016. The number of accommodation units per 100 km2 is also situated at different levels among regions. Just as in the case of the occupancy rate, both measuring indicators for densities experienced increasing average values in 2007 compared to 1998, and in 2016 compared to 2007.

Indicators	Minim	mum Maximum			um Average				
	1998	2007	2016	1998	2007	2016	1998	2007	2016
Average stay	1,86	2,03	1,63	5,30	4,30	1,63	3,34	3,01	2,40
Coef. capacity use	28,58	30,30	23,26	44,55	42,44	23,26	35,37	36,15	30,72
Occupancy	29,09	26,50	38,39	98,24	96,38	38,39	67,86	75,51	78,80
Density	15,47	17,63	30,16	39,80	52,69	30,16	25,14	33,42	57,22
Density units	0,64	0,89	1,55	6,53	8,29	1,55	1,91	2,69	3,75

Table 4. Comparative analysis of the aggregate indic
--

Source: calculated by the authors based on tables no. 3.1 and no. 3.2

Taking into consideration the signaled differences, a grouping of the Romanian development regions was performed, from the point of view of the tourism activity.

## 4.3. Cluster analysis

As a result of the cluster analysis for the 3 moments of time (1998, 2007 and 2016), the Romanian development regions were grouped in 3 clusters.

CLUSTERS / YEAR	1998	2007	2016
CLUSTER 1	SOUTH - EAST	SOUTH - EAST	SOUTH - EAST
CLUSTER 2	BUCHAREST-ILFOV	BUCHAREST-ILFOV	BUCHAREST-ILFOV
		<u>CENTER</u>	<u>CENTER</u>
CLUSTER 3	NORTH-WEST	NORTH-WEST	NORTH-WEST
	<u>CENTER</u>	SOUTH-EAST	SOUTH-EAST
	SOUTH-EAST	SOUTH-MUNTENIA	SOUTH-MUNTENIA
	SOUTH-MUNTENIA	SOUTH-WEST	SOUTH-WEST OLTENIA
	SOUTH-WEST OLTENIA	OLTENIA	WEST
	WEST	WEST	

#### Table 5. Clusters components

Source: by authors based on the cluster analysis, performed using the STATISTICA software

Referring to the clusters component, thus it is found that the Centre region has migrated since 2007 from cluster no. 3 to cluster no. 2 as a result of the evolution of the aggregate indicators in the analysis, this being the only component change in the groups.

To answer the evolutions registered it is necessary to analyze the **cluster characteristics** through the aggregate indicators in the analysis. Given the tables 4.1 and 4.2 the characteristics of the three cluster can be comparatively determined.

Indicator	CLUSTER 1	CLUSTER 2	CLUSTER 3
STAY	HIGH	LOW	MEDIUM
COEFF. CAPAC. USE	HIGH	MEDIUM	LOW
USE	LOW	HIGH	MEDIU
DENSITY	MEDIUM	HIGH	LOW
DENSITY KM	MEDIUM	HIGH	LOW

### Table 8. Cluster characteristics

Source: elaborated by the authors

Therefore, **Cluster 1** is characterized by relatively higher values for average stay and the coefficient for accommodation capacity use, medium density, for both tourism and in the case of accommodation units relative to the surface, and a low one for the occupancy rate of existing accommodation. It can be noted therefore that this cluster is defined by high demand and average-low supply, so we call it the **demand cluster**.

**Cluster 2** contains regions where the coefficient for accommodation capacity use is high, the density also, however the occupancy rate is average, as a result of the low average stay. In other words, this is a **cluster of tourism supply**, characterized by high supply and average-low demand.

Regions of **cluster 3** are characterized by a medium-low supply and demand, highlighting here the discrepancies at tourism development level. Thus, although the average stay is medium and the coefficient for accommodation capacity use likewise, the occupancy rate and densities are low.

## Conclusions

In Romania there are three groups of regions, as they emerge from the cluster analysis of tourism development. We have a pool of demand, the South-East region, which contains Constanta county and, therefore, is defined by coastal tourism. Otherwise, the high average stay on the one hand, and the low use of accommodation capacity and, as a direct result, a higher coefficient for accommodation capacity use, are the characteristics of this form of tourism, defined by high seasonality and holiday travel.

Cluster 2, which has as main exponent the Bucharest-Ilfov region is defined by business tourism: low average stay and high densities. Most developing regions are different from first discussed, being characterized by medium and low indicators. The Center Region migrated from cluster 3 to cluster 2 in the period 1998-2007 and the reasons are:

- The average stay fell by 20%, because of increases at a higher rate of the tourist arrivals (43%) compared to the of the number of overnight stays (12%)

- the following have increased: the use of accommodation capacity by 23%, tourism density by 51% and tourism accommodation units density by 67%, as a result in the growth of tourism supply – the number of accommodation units increased by 67.5% and the tourist capacity in operation by 18.5%, even if the number of available beds decreased slightly (4.2%).

Based on the previously reported aspect, a future research direction could be regrouping regions into 4 clusters. Also, for an in-depth analysis, the cluster analysis could be extended to the Romanian counties. Given the deeply quantitative analysis, a limit and also an option for further research is the introduction of qualitative variables (quality of accommodation infrastructure, volume of tourism expenditure, etc.). An objective limit of this research is that the lack of information and data made it impossible to correlate the evolution of tourism development in the Romanian regions with specific amount of funds absorbed in tourism specific and tourism related sectors.

NOTE: this paper was presented at The International Conference Global Economics and Governance GEG 2014

#### Acknowledgement

This paper has been financially supported within the project entitled "Horizon 2020 – Doctoral and Postdoctoral Studies: Promoting the National Interest through Excellence, Competitiveness and Responsibility in the Field of Romanian Fundamental and Applied Scientific Research", contract number POSDRU/159/1.5/S/140106. This project is co-financed by European Social Fund through Sectoral Operational Programme for Human Resources Development 2007-2013. Investing in people!

#### References

- Balogh, M.; Coros, M.M.; Negrea, N.; Coros, M.E.(2010); The impact of european funds upon the tourism development in Macroregion One from Romania; Transylvanian Review of Administrative Sciences, No. 31E/2010 pp. 5-27
- Deller, S. (2010); Rural poverty, tourism and spatial heterogeneity; Annals of Tourism Research, Volume 37, Issue 1, Pp. 180–205
- Dimitrovski, D.D.; Todorović, A.T.; Valjarevi, A.D. (2012); Rural Tourism and Regional Development: Case Study of Development of Rural Tourism in the Region of Gruța, Serbia; 2011 International Conference of Environment-Landscape-European Identity, Procedia Environmental Sciences, Volume 14, Pp. 288–297
- Loukissas, P.J. (1982); Tourism's regional development impacts: A comparative analysis of the Greek islands; Annals of Tourism Research, Volume 9, Issue 4, Pp. 523–541
- Morten, M. (2006); Agriturism rural development public administration; Transylvanian Review of Administrative Sciences, 16 E/2006, pp. 101-105
- Nicula, V; Spânu, S.; Neagu, R.E. (2013); Regional Tourism Development in Romania Consistency with Policies and Strategies Developed at EU Level; International Economic Conference of Sibiu 2013 Post Crisis Economy: Challenges and Opportunities, IECS 2013, Procedia Economics and Finance, Volume 6, pp. 530– 541
- Pearce, D.G. (1988); Tourism and regional development in the European community; Tourism Management, Volume 9, Issue 1, Pp. 13–22
- Pearce, D.G. (1980); Tourism and regional development a genetic approach, Annals of Tourism Research, Volume 7, Issue 1, Pp. 69–82
- Profiroiu, M. ; Andrei, T.; Profiroiu, A.; Stancu, S (2008); The evolution of the service sector in the context of Romania's accession to the European Union; Transylvanian Review of Administrative Sciences, 24E/2008 pp. 98-110
- Rosentraub, M.; Joo, M. (2009); Tourism and economic development: Which investments produce gains for regions?; Tourism Management, Volume 30, Issue 5, Pp 759–770
- Yang, Y.; Fik, T. (2014); Spatial effects in regional tourism growth; Annals of Tourism Research, Volume 46, Pp. 144–162
- \*\*\* (2014); Travel & Tourism Economic Impact 2014 Romania Country Report, The Authority on World Travel & Tourism, World Travel and Tourism Council
- \*\*\* (2017); Travel & Tourism Economic Impact 2014 Romania Country Report, The Authority on World Travel & Tourism, World Travel and Tourism Council

```
***, insse.ro
```