

STATISTIC STUDY REGARDING THE EVOLUTION TENDENCY OF TOURIST ACCOMMODATION STRUCTURES IN ROMANIA

LOB CHRIS¹, NEGHINĂ MIHAELA¹, ȚÎRLEA CRISTINA IOANA¹,
MILIN ANDA¹, RUJESCU CIPRIAN IOAN*¹

¹ *Banat University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Faculty of Management and Rural Tourism*

*Corresponding author's e-mail: rujescu@usab-tm.ro

Abstract: The number of tourist accommodation units respectively their capacity utilization are indicators which can bring multiple information with the purpose of making an evaluation of the actual state of tourism in Romania. This paper proposes an analysis of the evolution tendency of these indicators, starting with the actual statistic data obtained in the period of time 1991-2017.

Key words: *tourism statistics, index of used accommodation places*

INTRODUCTION

The units having accommodation function also have as goal to welcome tourists, their occupation degree being the element indicating directly the state of tourism from the quantitative and qualitative point of view. These indicators also represent a definite subject of study of the multiple institutions which have as goal to obtain and disseminate the statistic data [10,11]. Moreover, besides other indicators, they may deliver information regarding the contribution of tourism to the economy, a detail that may lead to comparative studies [6]. There can also be obtained information about the accommodation places to be found in the studied area [1,2,3] or the indicators may be useful to elaborate some mathematic models, which should describe as accurate as possible details regarding the performances of this field of activity [8,9].

The aim of this study is to analyse the evolution tendency of these indicators by using accurate statistic data from Romania for the years 1991-2017.

MATERIALS AND METHODS

The statistic data were obtained after consulting the Tempo data base of the National Institute of Statistics of Romania [11] and refer to the number of touristic welcoming structures that have accommodation functions, the number of tourists coming to the accommodation structures, respectively the index of touristic accommodation capacity use, details delivered on types of structures, respectively on forms of property [11]. To mention is the fact that some data /time intervals are absent in the mentioned informational sources. The value N represents the number of years of the studied interval which are to be found in the statistic sources.

The statistic summary has been obtained by using the Paste3 application [12]. Some position respectively variation parameters are calculated for that respective statistic data series. The graphics but also some tabular calculations have been done by using Microsoft Excel.

RESEARCH RESULTS

The statistic data referring to the number of structures having touristic accommodation functions (agrotourist hostels, tourist guesthouses, hotels, tourist cottages etc.) [11] have been statistically processed, that is there have been determined the statistic indexes in table 1.

The highest in share are the agrotourist hostels, the tourist guesthouses and the hotels. These have actually undergone a significant numeric development over the studies time interval 1991-2017.

Table 1.
Summary statistics for the number of locations with tourist accommodation functions

	N	Min	Max	Max. Min.	Std. dev.	Median	Q ₁ (75%)	Q ₃ (75%)	Coeff.of variation
Agrotourist hostels	17	536	2556	4.8	517.0	1348	924	1631.5	38.1
Tourist guesthouses	17	244	1666	6.8	461.1	878	529	1329	50.1
Hotels	28	798	1577	2.0	273.8	906.5	813.5	1289.25	26.2
Tourist villas	28	548	1828	3.3	344.6	744	661.5	1018	39.0
Bungalows	17	205	434	2.1	47.0	266	254	284	17.0
Hostels	17	7	300	42.9	98.7	97	27	194.5	85.8
Tourist cottages	28	108	226	2.1	31.5	161.5	135	178	19.7
Motels	17	137	222	1.6	33.3	154	147.5	213.5	19.1
Touristic houses	17	27	70	2.6	10.0	53	47.5	59.5	19.3
Campgrounds	28	44	217	4.9	41.7	72	57.5	93.5	49.7
Camps for pupils	27	57	192	3.4	50.5	157	70	180	37.6
Tourist stops	17	10	41	4.1	9.4	31	27	36.5	31.9
Apartment hotels	14	1	23	23.0	6.7	12	6.75	17.75	54.7
Accommodation	17	5	13	2.6	2.1	9	6.5	10	26.0
Holiday villages	17	1	9	9.0	2.5	4	2	6.5	59.6
Inns	17	3	18	6.0	5.4	5	3	13	71.5

Source: own calculations based on NIS statistical data [11], 2018

A graphical representation of these statistic series is given in Figure 1.

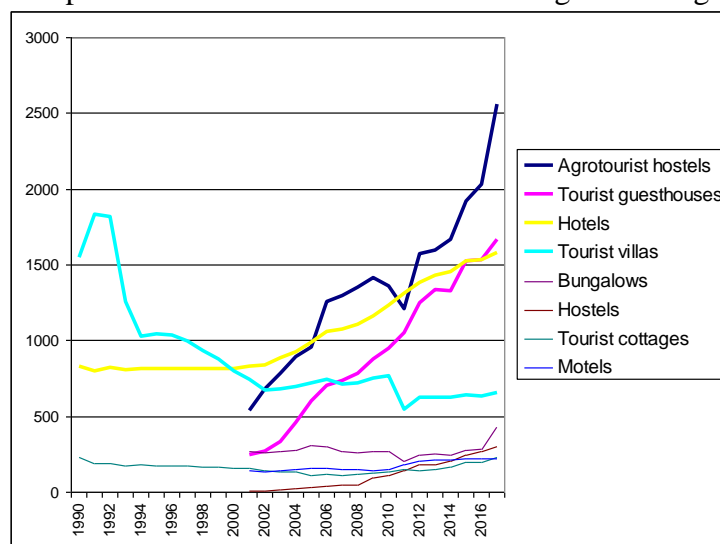


Figure 1. Graphical representation for the number of locations with tourist accommodation functions

Source: based on NIS statistical data [11], 2018

Although their share is not very high s number, the hostels show a very high rhythm of growing, the numeric series being not homogenous, consistent with the highest value of the variation coefficient. This growth may show an increasing interest for this type of accommodation places, an explainable phenomenon, probably as a result of the increasing number of artistic events, concerts or other urban events at which organized groups participate for a short time.

To be noticed is also that the number of student camps considerably decreased in the same time interval.

As regards tourists arrivals at the tourist accommodation units, the table below shows a statistic summary of those units by categories of owners (table 2, figure 2), starting with the national statistic data [11].

Table 2.**Summary statistics for number of tourists arrivals by categories of owners**

	N	Minimum	Maximum	Mean	Std. dev	Median	25 percentil	75 percentil
Total	28	4847496	12296550	7228729	2103446	6988312	5660723	7997039
State-owned property	19	113177	1401627	302717.2	338250.1	164128	123175	255524
Majority State Property	19	37467	921542	275278.2	258753.4	235298	60032	404270
Most privately owned property	19	158058	548760	337053.4	143759.5	336254	190429	480772
Fully private property	19	2062372	10486580	5478507	2302540	5207391	3609180	6627261
Cooperative property	19	75409	166531	111694.3	25675.1	111172	88398	131568
Public property	19	41440	244599	133906.2	77904	139727	50272	225333
Fully foreign property	19	366	603616	188425.1	220153.2	99328	5962	397051
Public property of national and local interest	19	48685	271614	171067.4	56385	158399	149687	225553

Source: own calculations (using Paste3) based on NIS statistical data [11]

During the period 1990-2001 the total number of tourists has an increasing tendency. This is a result we expected, as we refer to a big number of inland tourists at the end of the '80s-'90s. In those years the foreign tourists choosing to visit Romania were only a few, even exceptions. Inland tourism was almost the only option of the population in Romania.

To notice is the growing tendency of the number of tourists after the year 2000, but also the growing tendency of the number of accommodation places in Romania. The phenomenon can be explained by a tendency to correlate the demand with the offer in this field of activity. Moreover it is also the period in which the number of foreign tourists also grows, this being the time in which major tourism development projects started in Romania

[13,14,15]. At present, the number of tourists in Romania returned to values similar to those of the year 1990.

Regarding the form of ownership, the fully private companies attract the most tourists. The state-owned companies witness a decrease tendency in the number of tourists coming, the difference between the number of tourists visiting the fully private companies and that of the tourists choosing the state-owned companies continues to increase. Moreover, the number of tourists choosing the fully private companies is much higher than the number of tourists choosing the other accommodation units having other forms of property.

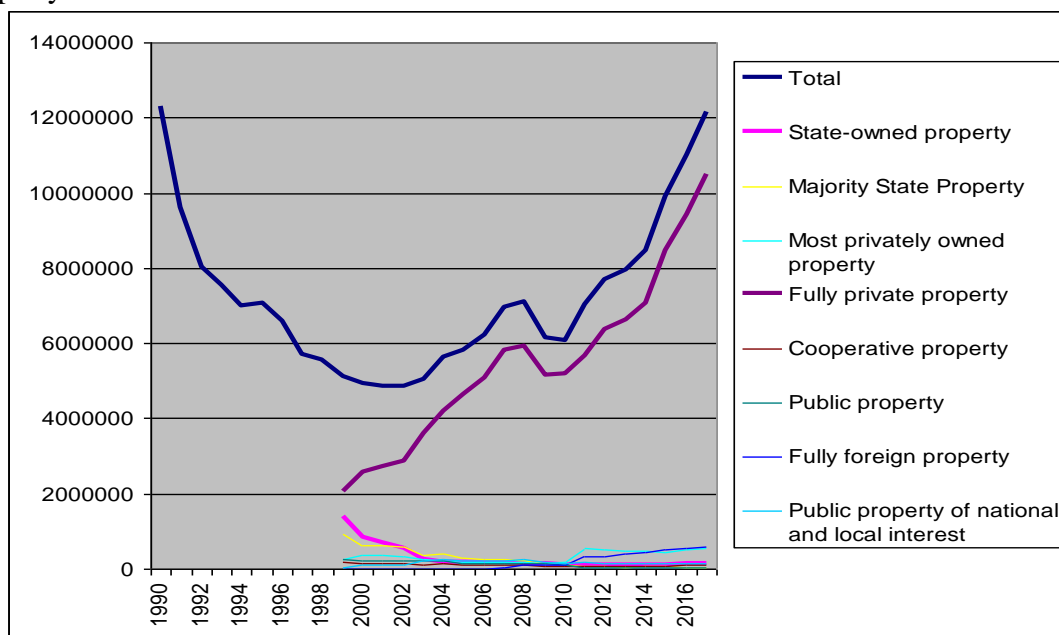


Figure 2. Graphical representation for the number of tourists arrivals

Source: based on NIS statistical data [11], 2018

The statistic data [11] regarding the index of touristic accommodation space use lead to the statistic summary in table 3, respectively to the graphic representation in Figure 3.

Table 3.

Summary statistics for the occupy space index

N	26
Minimum	25.1
Maximum	46.7
Average	34.06154
Std. deviation	6.183273
Median	34.4
25 percentil	28.625
75 percentil	36.5
Skewness	0.362346
Kurtosis	-0.47
Coeff. of variation	18.15324

Source: calculations (using Paste3) based on NIS statistical data [11], 2018

The occupation index also presents a decreasing tendency as compared to the '90s. This is explainable, as the high values of the occupation index at the end of the time period '80-'90 were due to the reduced number of accommodation spaces in that period of time and, at the same time, to a concentration of tourists towards the inland market. So, even if

the occupation degree is of more than 45% in the year 1992, it is much higher than the today's values of the same indicator of the successful touristic systems [10]. But that high value related to the observation regarding the number of tourist made above, is given by the lack of options the tourists had, not by their interest for the accommodation places that existed those days.

In the period of time 1992-1999 we notice an accentuated decrease of the degree of occupation, the number of hotels remaining relatively constant in Romania. It is the period in which many persons meet the international touristic market.

The period of time 2000-2008 indicates an almost constant tendency of the occupation index, which is of about 30%.

Between 2008-2013, the period that overlaps the economic crisis period, the effect of the economic crisis can be seen in the decreasing tendency of the occupation index. It is the clear result of the decrease in the number of tourists (Figure 2), as the number of accommodation spaces did not have major changes in this period of time. This negatively and directly affects the investments and the investment amortisation period in the tourism industry.

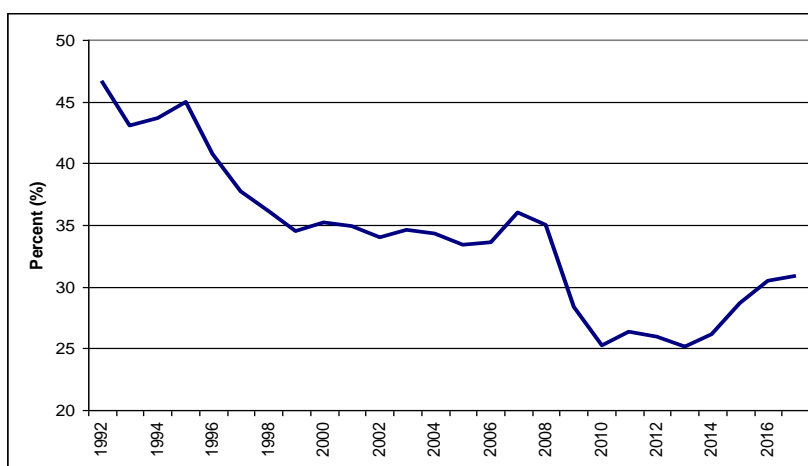


Figure 3. Graphical representation for the occupy space index

Source: own calculations (using Paste3) based on NIS statistical data [11], 2018

Anyway, there must be noticed the fact that, after 2013, a growing tendency of this index can be noticed and the values are similar to those of other European countries [10].

Analysis of this type may be a basis for elaborating optimal development politics, starting from the existing budget fir investments / subventions in the field of tourism [4,5,7,15].

CONCLUSIONS

From the numeric point of view the agrotourist hostels occupy the first place regarding the spaces having accommodation function in Romania, exceeding even the number of tourist guesthouses. The highest growth ratio noticed between the nominal value and the maximal one has been registered for the hostel category. The total amount of tourists has a decreasing tendency, from about 12000000 to 5000000 in Romania during the period of time 1990-2002. Today we notice a return to the total number of tourists, their number being of about 12000000 again in the year 2017. Most of the tourists in Romania prefer the spaces having accommodation function and belonging to private companies. The accommodation places occupation index has generally a decreasing tendency, from about 46% in the year 1990, to about 31% in the year 2017.

In most of the situations the series of statistic data analyzed show a high variability. This indicates a high correlation / sensibility of the studied parameters as referred to the economic and social conditions – it is known that these conditions were very instable in the studies period of time.

By periodically performing such studies, having as starting point the updated statistic data, there can be obtained multiple and up-to-date information regarding the condition of the tourism sector at national level.

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