

SHIPPING TOURISM ON THE TOURIST MARKET FROM ROMANIA

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Abstract

A manifestation of tourism, rather than observed, in Romania, is the navigation tourism. The place and role in tourism can be revealed by means of indicators that reflect, both the specific navigation supply, and tourist traffic, as part of navigation tourism demand. Specific activities for tourism, in the accommodation spaces on river and sea ships, in Romania, led to results that are played through the statistical data provided by the National Institute for Statistics. The processing of the information on the navigation tourism, in Romania, included on the one hand a structural analysis of such indicators to reflect developments in tourism naval by categories of tourists in relation to their area of residence, and on the other hand studying the dependence between supply and demand for places on fluvial and maritime ships. The conclusions represent both an outline of an overall picture of ship of tourism in Romania, and framework required course of future naval tourism services, quality which may lead to a significant impact on Romanian tourism.

Key words: *Navigation tourism; Accommodation spaces on marine and river ships; Naval tourist supply; Naval tourist traffic.*

JEL Classification: *C19; D12; H39; O52*

INTRODUCTION

Navigation tourism began to take a place and a role increasingly important on global, regional and local level. Referring to tourism cruise ships, Dowling highlight “the growth of cruise is phenomenal. The revival of cruising has taken place in the last four decades, and today it forms a small but growing part in the global tourism industry.” (Dowling R.K, 2006, p.3). Also, recent studies estimate significant development of this type of tourism in the future. Using econometric methods (M. Parker, Ph., 2013) makes a prediction of the development of cruise tourism in 2013-2018 in 200 countries, including Romania. Significant developments are registered also in tourism inland- waterway.

In Romania, unfortunately, although sea-river potential is rich enough to practice navigation tourism, it was not given due consideration to become a "pillar" of tourism in general. Tourist traffic, to the desired destinations through naval tourism routes, considering transport services in the "blue tourism", are consisting of: racing line, cruises and mini cruises and individual travel with pleasure craft, for consumption of touristic products (Zaharia M. and Gogonea RM, 2013). The accommodation spaces on the ship are defined by the National Institute for Statistics as the tourist accommodation on maritime ships and inland

waterways, including floating pontoons or anchored floating hotels, which are used to accommodate tourists during the trip" (INSSE - Tempo-one line).

Danube Delta offers also great potential. This has always been an important economic role, with natural wealth, and, politically and strategically, by its geographical position. Sea and river roads have allowed the development of the trade, and in new times, of the tourism, so during 2001-2009, a series of indicators of tourism activity in the area almost doubling (Bucurescu I., 2012). In this context, in September 2013 for practicing of this type of tourism, in Danube Delta were provided accommodations spaces in 22 pontoons of which 12 by 3-star and 5 by 4-stars, in the floating hotels which travels on channels and arms of the River Danube, between the fishing locations and the tourist's points of interest, and in the motorboats with all the utilities for a real comfort on touristic routes, for periods between 1 and 15 days, it is a good offer.

In inland waterway tourism, the tonnage of ships which can travel is a constraint, given the fact that tourist ships that would be included in tourism waterway must be made so as to offer more diversified services and meeting the requirements of a higher level, more demanding and sophisticated of the tourists. Quality and competitiveness of naval touristic products contribute to developing and maintaining a

sustainable naval tourism. (Gogonea R.M. and Zaharia M, 2013).

In this context the analysis of indicators of supply ships and tourist traffic as part highlighting the marine tourism demand, drawn from the database of the National Institute for Statistics (Tempo-one line) was carried out using statistical methods (Hapenciuc CV, et. al. 2008) and econometric (Gogonea R.M. and Zaharia M, 2008), based on interactive analysis of data series (Oprea C. and Zaharia M. 2011).

ANALYSIS OF THE EVOLUTION OF EXISTING ACCOMMODATION CAPACITY OF NAVIGATION TOURISM

One aspect that characterizes the evolution of the existing accommodation capacity of touristic ships in Romania is the number of naval ships engaged in marine and river naval tourism. To naval tourism it was given a little attention in analyzed period, a fact noted by the small number of ships participating in the practice of this type of tourism activities. Evolution of the number of touristic ships in the period 2000-2012 has been experiencing oscillating phenomenon with a year average trend by a 5.95%, the most ships involved in the tourism activities being recorded in 2004 (Figure 1) when the cruise services have the largest growth.

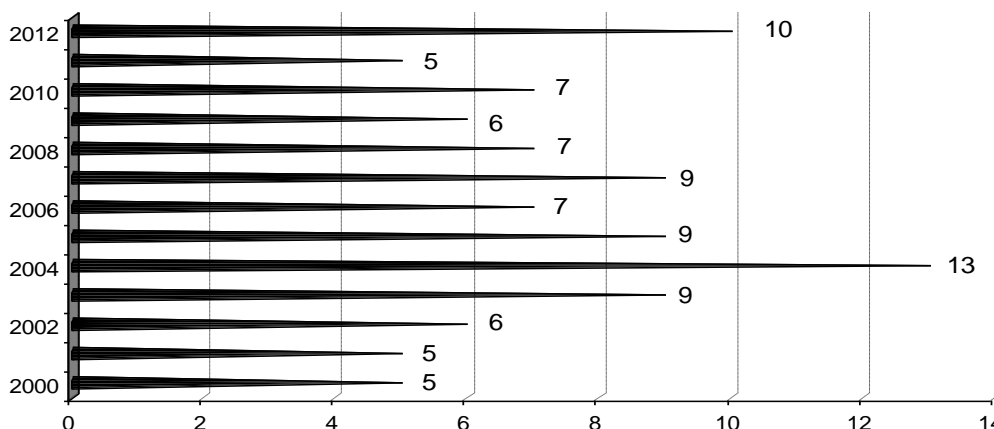


Figure 1 - Evolution of the number of touristic ships in the period 2000-2012

The decrease since 2004 (from 13 ships) until 2011, when in the touristic activity remained registered only 5 ships, was stopped in 2012 when there is an attempt to return to a total of 10 vessels, allowing an increase in naval tourism services as a way to revive tourism activities. Note that in 2012 the

number of ships engaged in touristic activities was still below the level in 2004

A second indicator is the capacity of existing tourist accommodation on maritime and inland waterways ships, whose evolution follows the evolution of the number of ships as shown in Figure 2.

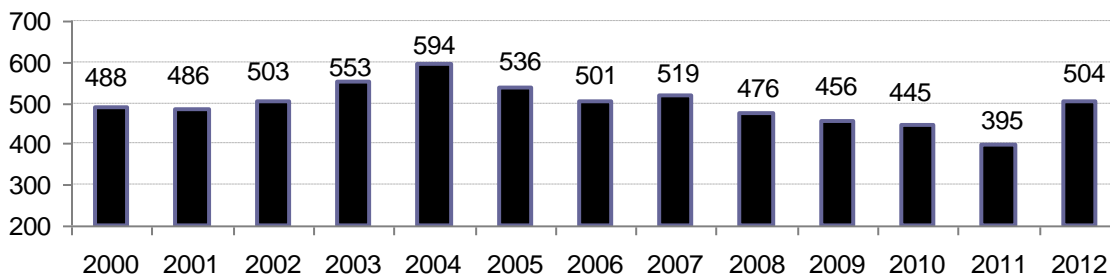


Figure 2 - Evolution of accommodation places on ships in the period 2000-2012

Amid an a average growth rate of only 0.27% per year, was registered an increase of 106 accommodation places in 2004 compared to 2000, followed by a significant decline with 199

accommodation places registered until 2011, when was registered a rebound in the supply of accommodation places on ships, with 109 places, in

2013 being recorded 504 accommodation places on ships.

Compared to the number of the accommodation places offered, in Romania, made available to tourists by the maritime and inland waterways ships, are very little, fact marked by very low percentages, almost insignificant, recorded in the period 2000-2013 and which fluctuates from a minimum of 0.142% (2011) to a maximum of 0,215% in 2004. It is also worth mentioning that the weights following the same oscillating developments trend recorded of the two indicators examined before, leading to the conclusion that during 2000-2013, the importance and contribution of tourism in the whole tourism at national level is the same, and therefore impact remains rather insignificant, which does not yet provide revealing insights for this type of tourism.

THE EVOLUTIONS OF ARRIVALS AND OVERNIGHTS STAYS ON SHIPS IN THE PERIOD 2000-2013

The naval tourism market, together with the naval tourist supply, includes the naval tourism demand, expressed through tourist traffic (arrivals and overnight stays recorded in accommodation spaces on marine and inland waterways ships).

The number of tourist arrivals in accommodation spaces naval, between 2000-2013, faced with fluctuations which, overall, lead to an average increase of 137.4 tourist per year, although compared to the base year 2000, when there were 7432 tourists, in 2008 reached a maximum of 9676 tourists (figure 3) followed by a decrease of 2399 places till 2012 when were registered 7277 tourists, with 155 tourists to the base year 2000.

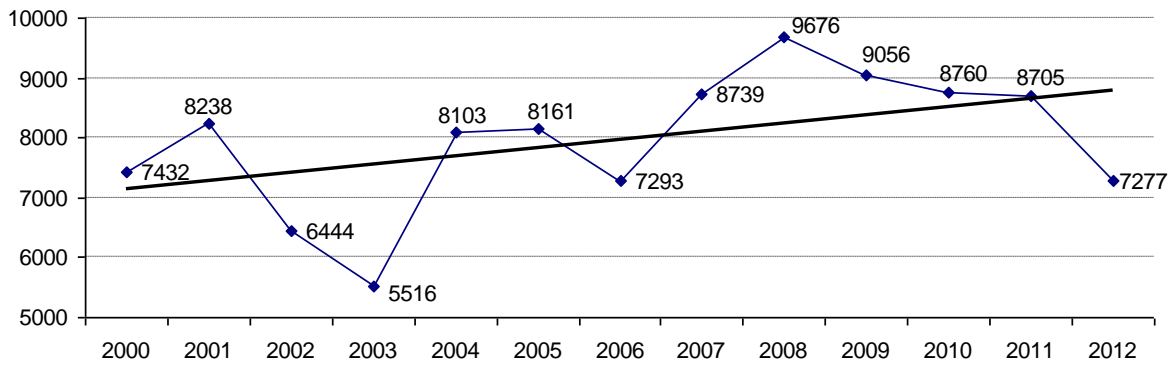


Figure 3 - Evolution of the arrivals on ships, in the period 2000-2012

Extremely low number of tourists arrivals on ships, compared to those in Romania, is found in low percentages of tourists arrivals on ships in the tourist arrivals in all accommodation structures in Romania. Ranging between a minimum of 0.095% in 2012, and a maximum of 0.169% in 2001, the number of tourists

arriving on maritime and inland waterways ships, were changed in addition or in minus, so little that underscore the reduced place which is occupied by this type of tourism in the tourism activities developed in Romania.

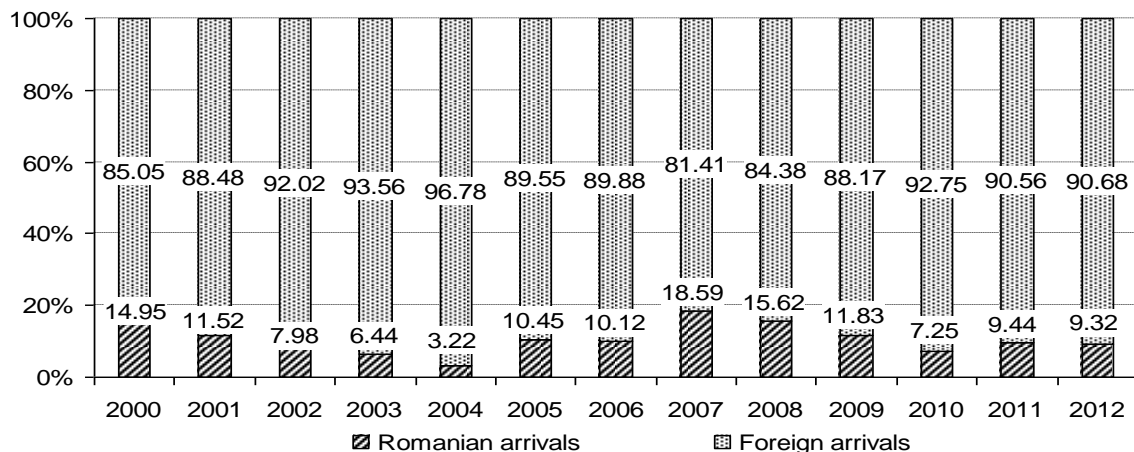


Figure 4 - Evolution of tourist arrives on ships in Romania by category of residence

A clearer evidence of the characteristics tourist arrivals is given by the number of arrivals of the two categories of tourists accommodated on ships, by country of origin (residence). Their evolution is presented in the graphical representation of Figure 4. The evolution of tourist arrivals, structured on two categories by country of origin (Romanian, foreign) from 2000 to 2012 highlights the primacy of foreign tourists in the total number of tourists practicing naval tourism, structural changes from year to year ranging from 81.41% in 2008 and 96.78 in 2004.

The biggest share of tourist arrivals in ships was recorded in 2007 (18.59%, to 4.38 times less than foreigners), the smallest share being registered in 2004 (3.22% to 30.04 times less than foreigners). In 2012 the ratio between the number of foreign tourists arriving in ships and that of Roman was 9.73 (ten times less Roman than foreigners). High levels of civilization, high purchasing power of foreign tourists are only two elements that justify the high percentage of foreign tourists arriving on ships for practicing of such tourism.

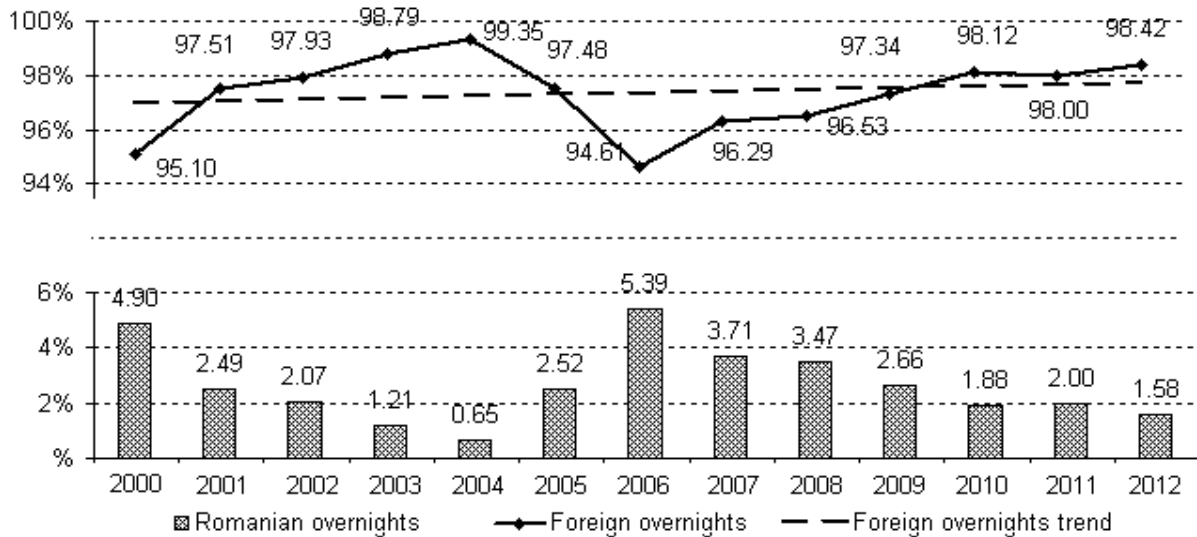


Figure 5 - Evolution of tourist overnights on ships in Romania by category of residence

The same reasoning underpin the analysis of the second indicator of naval tourism traffic: overnight stays in accommodation spaces on marine and inland waterways ships. Structurally, most overnight stays are those of the foreign tourists, at the expense of Romanian tourists (Figure 5), their weights ranging from 95.10% in 2000 and 99.35% in 2004, year in who are registered the most tourists foreigners accommodated.

Given the developments of the two indicators of tourist traffic on naval practice of tourism in Romania, we conclude that it can be considered luxury tourism.

ANALYSIS OF THE CORRELATION BETWEEN EXISTING ACCOMMODATION CAPACITY, THE NUMBER OF TOURISTIC ARRIVALS AND THE NUMBER OF OVERNIGHT STAYS ON TOURISTIC SHIPS

Normally, in tourism, as in other sectors, there is a correlation, more or less strong, between supply and demand of products (goods or services).

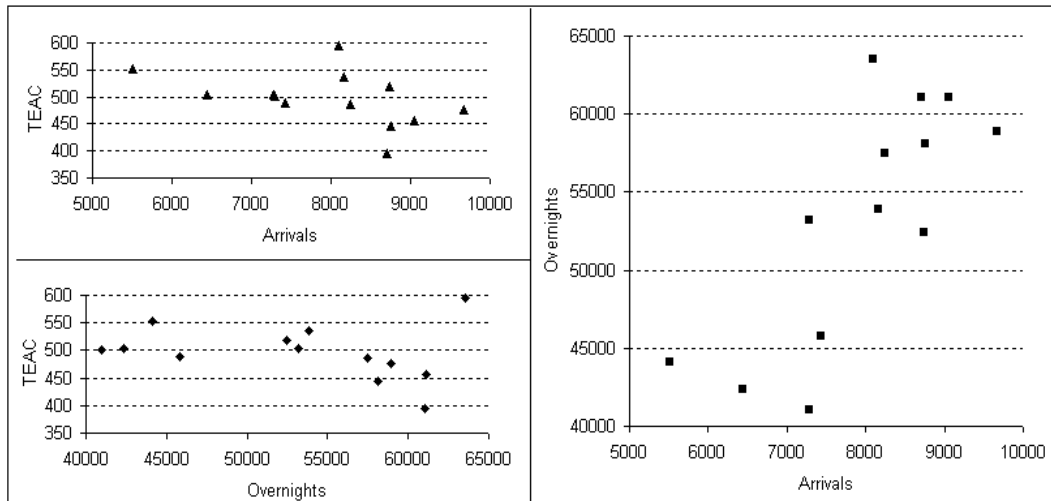


Figure 6 - The correlogram between TEAC and NTAS, between TEAC and NOSAS and between NOSAS and NTAS

Starting from this assertion, below are presented the results obtained regarding supply and demand for naval tourism in Romania. For this, they were considered indicators: tourist existing accommodation capacity on marine and river ships (TEAC), the number of touristic arrivals on ships (NTAS) and the number of overnight stays in accommodation spaces on ships (NOSAS).

The correlogram between TEAC and NTAS, between TEAC and NOSAS and between NOSAS and NTAS registered during 2000-2012 are presented in Figure 6. At first glance, from the three graphs, it seems that there is some correlation between these variables.

To highlight the existence or not of the correlations, in a first phase we use one-factor linear correlation coefficient (r). Has been tested the existence of correlations between the variables

A1: Correlation between TEAC and NTAS

H_0 :Between TEAC and NTAS there are no correlations

H_1 :Between TEAC and NTAS there is a significant correlation

A2: Correlation between TEAC and NOSAS

H_0 : Between TEAC and NOSAS there are no correlations

H_1 :Between TEAC and NOSAS there is a significant correlation

A3: Correlation between NOSAS and NTAS

H_0 :Between NOSAS and NTAS there are no correlations

H_1 :Between NOSAS and NTAS there is a significant correlation

Above hypothesis testing was performed using the Student test (t) and Fisher test (F) for the thresholds of significance $\alpha = 0.05$ and $\alpha = 0.1$. The results are shown in Table 1.

Table 1- Results of statistical hypothesis testingon the linear correlation between TEAC and NTAS, TEAC and NOSAS and of NOSAS and NTAS

| Correlation | r | tc | Fc | t 0.1 | t-0.05 | F 0.1 | F 0.05 |
|----------------|----------|----------|----------|-------|--------|-------|--------|
| TEAC and NTAS | -0.45544 | -1.69672 | 2.878852 | 1.796 | 2.201 | 3.225 | 4.84 |
| TEAC and NOSAS | -0.23518 | -0.80252 | 0.644035 | 1.796 | 2.201 | 3.225 | 4.84 |
| NOSAS and NTAS | 0.771781 | 4.025407 | 16.2039 | 1.796 | 2.201 | 3.225 | 4.84 |

As can be seen in the case of A1 (testing the correlation between TEAC and NTAS) since $|t_{calculated}| = 0.45544 < t_{0.05;11} = 2.201$, and since $F_{calculated} = 2.878852 < F_{0.05;1;11} = 4.84$, the hypothesis H_0 is accepted and, therefore, the correlation coefficient $r = -0.45544$ is not statistically significant. Between TEAC and NTAS there is no linear correlation.

The same situation is in the case A2 (testing the correlation between TEAC and NOSAS). Since both $|t_{calculated}| = 0.23518 < t_{0.05;11} = 2.201$ and $F_{calculated} = 0.80252 < F_{0.05;1;11} = 4.84$, the hypothesis H_0 is accepted. The correlation coefficient $r = -0.23518$ is not statistically significant. Between TEAC and NOSAS there is no linear correlation.

Regarding testing correlation between NOSAS and NTAS, as expected, since $|t_{calculated}| = 4.025407 > t_{0.05;11} = 2.201$, the hypothesis H_0 is rejected and the hypothesis H_1 is accepted, and consequently between NOSAS and

NTAS is a strong correlation ($r = 0.771781$) The same conclusion is reached and using the F test ($F_{calculated} = 16.2039 > F_{0.05;1;11} = 4.84$).

Table 2 - Results of statistical hypothesis testing on the nonlinear correlation between TEAC and NTAS, and between TEAC and NOSAS

| Function | $TEAC = f(NTAS)$ | | $TEAC = f(NOSAS)$ | | F_0.05 |
|--------------|------------------|------------------|-------------------|------------------|--------|
| | <i>MultipleR</i> | $F_{calculated}$ | <i>MultipleR</i> | $F_{calculated}$ | |
| Linear | 0.455412 | 2.878375 | 0.235160 | 0.643908 | 4.84 |
| Logarithmic | 0.449889 | 2.791374 | 0.237487 | 0.657482 | 4.84 |
| Power | 0.454973 | 2.871375 | 0.270924 | 0.871358 | 4.84 |
| Exponential | 0.460869 | 2.966480 | 0.270370 | 0.867515 | 4.84 |
| Polynomial 2 | 0.458585 | 2.663037 | 0.250400 | 0.668943 | 4.10 |

Also were tested the existence of nonlinear correlations both between TEAC and NTAS and between TEAC and NOSAS. Were used functions: power, logarithmic, exponential and polynomial which were determined, the values of *MultipleR*. Considering the number of empirical data, for the polynomial function, the maximum degree chosen was 2. To test the statistical significance of *MultipleR* was used Fisher test for a significance level $\alpha = 0.05$. The results are shown in Table 2.

As can be observed for any of the types of functions used to test correlations between variables analyzed, the values of $F_{calculated}$ were lower than the corresponding critical values of the F test and, therefore, there is no correlation between supply and demand for accommodation places on marine and inland waterways ships in Romania, no linear or nonlinear. At least in the period under review, the decision of entrepreneurs to invest in naval tourism is influenced by other factors.

CONCLUSION

The economic progress, during the progress of the process of transition to market economy as well as the openness that has Romania to the countries of the world and in particular to the European ones, in recent decades have created the necessary prerequisites to practicing naval tourism, both maritime and on the

Danube. This process is characterized on the one hand, by the indicators naval tourism supply (number of ships and existing accommodation capacity on ships), and on the other hand, by the tourism demand indicators (number of arrivals and the number of overnight stays on ships).

The analyzed period is characterized by fluctuating developments both in terms of demand and supply of accommodation places, on river and maritime ships from Romania. An important characteristic of this period is the particularly high percentage of foreign tourists compared to the percentage of Romanian tourists who practiced naval tourism in Romania. Relatively low living standards and low knowledge of the practice of this type of tourism justify the significant percentage of foreign tourists at the expense of the autochthon tourists. For the autochthon tourists, the naval tourism seems to be luxury tourism.

The analysis of the relationship between the supply of accommodation places on river and marine ships in relation to the demand for accommodation places, expressed both by the number of arrivals and by the number of overnight stays on the river and sea ships, has revealed that between them there is no linear or nonlinear correlation. Therefore the supply of accommodation places on the ships is determined by other factors. Their identification will be one of our future research directions.

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