

DYNAMICS OF FOREIGN TOURISTS' TRAVELS IN ROMANIA. A QUANTITATIVE ANALYSE OF SEASONALITY

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ABSTRACT

Since the tourism sector engages a real challenge for the economy it is always useful to have the picture of the elements that lead to the growth of the sector. In this paper, first it was presented a tourism' overview at the international level, in line with a special approach on the European area. The aim of the study was to shape the seasonality effects in the tourism sector. The analysis was made on the number of nights of the residents and non-residents breakdown by type of comfort, type of the accommodation establishments, at regional level. Further, it was addressed an analyze on the type of expenditures per trip and per nights made for four European countries: Bulgaria, Greece, Spain and Romania, by length of stay. The methodology consisted in a descriptive analyze of the time series, then a seasonality analysis based on two methods, during a quarterly five years period (2000-2014). The results have been reported on the base of the averages of gross seasonal deviations, for seasonality, and growth rate for the expenditures. The conclusion consisted in a high variability of findings, depending on the different analyzed categories. It was noted a volatile and with a powerful influence on the season for the number of nights by macro-region among the residents and non- residents, especially among the different categories of tourist establishments and category of comfort.

Key words: *tourism, seasonality, Romania, foreign tourists, accommodation*

JEL categories: *L83, M21, O11, C22*

INTRODUCTION

International tourism is an area that required many specifics. For certain sectors, seasonality issue has a particular importance on both internal and external industry. In Romania, the tourism sector counts for about 5% of the GDP and therefore should be interesting to discover the tools that have resulted in an increase in the sector' share. In the present paper it was analyzed the seasonality of the Romanian international tourism based on a quarterly five years' time series, 2010-2014 with an additional examination on the number of foreign visitors coming to Romania, according to the type of transport used. The indicators that relied in this research have been classified according to the type of accommodation establishment and to the category of comfort. There was also conducted an analysis on the volume of expenditure by trip and by night, made by the domestic Romanians and foreign; for these latter indicators, the data set has covered four European countries (Bulgaria, Greece, Spain and Romania). Since the tourism sector engages a real challenge for the economy it is always useful to have the picture with elements that lead to growth or decrease. The tourism' overview at the international level was made in line with a special approach on the European area, of which five countries of the 2013 world top ten ranking are European countries.

Obviously, since the EU is a major tourist destination, the challenges were generated at the economic level by the employment potential, but also at the social level and by the potential development in rural areas. Playing a major role in the regions' development, the infrastructure created for tourism, involved environment sustainability and preservation and jobs creation. Looking further to underline the general frame, there has resumed the following figures on international tourism. Thus, in 2013, there were 1.08 billion international

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tourist arrivals worldwide (over 563.4 million international tourist arrivals to Europe) , with a growth of 5.0% as compared to 2012; this have come from the regions that showed the strongest demand for international tourism: Asia and the Pacific (+6%), Africa (+6%) and Europe (+5%) (UNWTO Report, 2015). Remaining closer to this part, we have recall that the world's tourism destinations in the ranking by international tourist arrivals and tourism receipts in 2013 showed that there are five European countries among the first ten places. Thus, France continues to top the ranking of international tourist arrivals with 84 million visitors in 2013, and is the 3rd in international tourism receipts (US\$ 56 billion in 2013). Spain was on the second place as the largest earner worldwide (first place in Europe with US\$ 60 billion), and regained the 3rd place in arrivals with 61 million visitors. Italy has consolidated its 5th place in arrivals with 48 million visitors and the 6th place in receipts with US\$ 44 billion. The two other European countries on this ranking are Germany, the 7th place with 31.5 million visitors followed by United Kingdom with 31.2 million visitors. (UNWTO, May 2014). Meanwhile, the same organization stated that by 2030, the majority of all international tourist arrivals (57%) will be in the emerging economy destinations. Remaining closer to this part, we have recall that the world's tourism destinations in the ranking by international tourist arrivals and tourism receipts in 2013 showed that there are five European countries among the first ten places. Thus, France continues to top the ranking of international tourist arrivals with 84 million visitors in 2013, and is the 3rd in international tourism receipts (US\$ 56 billion in 2013). Spain was on the second place as the largest earner worldwide (first place in Europe with US\$ 60 billion), and regained the 3rd place in arrivals with 61 million visitors. Italy has consolidated its 5th place in arrivals with 48 million visitors and the 6th place in receipts with US\$ 44 billion. The two other European countries on this ranking are Germany, the 7th place with 31.5 million visitors followed by United Kingdom with 31.2 million visitors. (UNWTO, 2013). The same organization has reported the top ten biggest spenders on international tourism. For that topic, the ranking of 2013 showed that among the first ten places there were countries as Germany (the third place) with \$85.9 billion and 7.4% market share, the United Kingdom (the 5th place) with \$52.6 billion and 4.5% market share.

SCIENTIFIC LITTERATURE ON THE SUBJECT

A multidimensional picture of the tourism phenomenon ask to be shape here by the different authors who have studied this field. In the literature review, among the main causes of seasonality there were identified weather, climate and geographic location, holydays and public or religious events, changing travel habits, proximity to capital cities or other institutional causes. For sure, each author has tried to emphasize a picture that fits on its own subject. In our study, we have pointed out the following citations. Goulding et al., (2005) who stated that „Seasonal trading decisions are subject to a number of influences. The article argues that for some operators, especially located in rural and peripheral destination areas, lifestyle enterprise can confer a range of benefits”. Other authors, Kilipiris and Dermetzopoulos (2014), mentioned as main purpose of the paper “investigate all the crucial factors that play important role to the implementation of the specified target, factors varying from a multiple tourism resource base to infrastructures and marketing strategies”. Earlier, Chung (2009) has explained that the objectives of the study “were to discuss negative effects of seasonality on tourism, and to offer suggestions on ways to overcome the negative effects; in addition, positive effects of seasonality were examined from sociological and ecological perspectives.” There was another study focused on seasonality (Cantallops, 2012), in which it was mentioned that the aim was to “to point out what kind of problems are attributable to seasonality and how they would be diminished by reducing tourism seasonality”. A different way of approach was given by Lee et al. (2008) who mentioned in their study that “institutionalized seasonality is more complex as it is based on human behavior and consumer decision-making. With regard to the spatial issue, the generating area various changes in natural phenomena influence visitors' travel decisions”. Another point of view, was noted by Kopaneli (2014) who emphasize an accent on “the fact that international tourism, grew above expectations confirms that travelling is part of consumer patterns for an increasing number of people in both emerging and advanced economies”. A special dimension of the tourism was given by Padurean et al. (2014) in their study in which the focus was made on the entrepreneurship in tourism as follow “stimulation of entrepreneurship in tourism by allocating structural funds involves not only creating a favorable conjuncture of new economic entities, but also support steps to increase innovation and competitiveness of existing companies.” (our translation). The demand modelling and forecasting overview has studied by the authors Song and Gang (2008), who stated that “considering the enormous consequences of variouscrises and disasters, events' impact evaluation has attractedmuch interest in tourism demand forecasting research”. A statistical approach was made by Kim et al. (2007) where they have identified that „the result showed, in particular, there was more difference betweenmen and women in the number of business trips than forvacation trips”. An approach regarding the travel agency was describe by Cheung and Lam (2009) saing that „traditional travel agencies need to sustain their positions in the market by reintermediating and reinvigorating their business strategies in the emerging market place”. The authors Guizzard and Mazzocchi (2010), have found out that „if a relationship between the

tourism cycle and the overall business cycle can be shown, then tourism policy could take advantage of the delay between the two cycles by adopting counter cyclical measures to soften the impact of adverse economic conditions". A special link with our study, related to an analysis at the Romania's macro-region level, it was argued by Toma (2014) when she said that „the touristic offer is much higher in Centre, North-West and North-East regions and that demand is higher in Centre, Bucharest-Ilfov and South-East regions.”

METHODOLOGY

Seasonality is a major issue for the tourism industry. In the literature this approach was explained from a variety of perspectives and was generally defined by depending on the context of which it was studied. Accepted that the tourism sector is fully influenced by the seasonality, this concept has become a real challenge in the literature. Seasonality, means fluctuation in tourist's numbers, destinations and accommodations of touristic receptions and thus, there are special strategies addressed to limit its effects. These may focus on the pricing strategy, services diversification and temporary staff with higher education. Other policies, have to take into considerations addition factors such as: social, economic and environmental. Following the impact, this could be measured in line with the seasonal frame and by eliminating the effect imposed by the seasonality. In order to detect the seasonality, there are methods which deal with the specific records, called Seasonal index; this is used to compare data with what it would happen if there was not seasonal adjustment. In this paper we have analyzed seasonality by means of two methods, depending on the way in which the elements might act: additively or multiplicatively. Several steps are needed to perform this analysis. First, it has to compute the moving averages, seasonal adjustments and seasonal coefficients. At this stage, the calculations depend on the above mentioned methods. At the additive method, must subtract the trend from the real values ($Y_t - \bar{Y}_t$) (1). Based on these differences it was calculated gross (S'_j) and adjusted (S_j) seasonal deviations (j, is the consequent quarter);

average gross seasonal deviation has been displayed as
$$\bar{S}' = \frac{S'_1 + S'_2 + S'_3 + S'_4}{4} \quad (2);$$
 the corrected seasonal

deviations are obtained from: $S_j = S'_j - \bar{S}'$ (3). Then, calculate the corrected time series terms, eliminating from the values of the real terms, the corrected seasonal deviations: ($Y_t - S_1$) (4). Random component (ϵ_t), is determined by subtracting from the values of the real terms, the trend and seasonality. Concerning the

Multiplicative method, it has divided the real terms (Y_t) to the trend (\bar{Y}_t): ($\frac{Y_t}{\bar{Y}_t}$) (5). Next, it is calculated the gross seasonal index: (S^*_j), then the average of the gross seasonal index: \bar{S}^* . It follows calculation of the corrected

index: $S^*_j = S'_j / \bar{S}^*$ (6), afterwards the terms of the corrected time series, by dividing the real terms at the gross seasonal index. The random component is determined by dividing the real terms at the product of the trend multiplied by the seasonality indices; then, it was obtained the trend of the adjusted series.

Concerning the tourism data as part of the system of tourism statistics in the EU, it has to be mentioned here the following Statements. The Annex I of the Regulation (EU) 692/2011 of the European Parliament and the Council which deals with accommodation statistics, tourism occupancy. A system of tourism statistics was established in Council Directive 95/57/EC of 23 November 1995 on the collection of statistical information in the field of tourism. In July 2011, the European Parliament and the Council of the European Union adopted a new Regulation 692/2011 concerning European statistics on tourism and repealing Council Directive 95/57/EC; this came into force for reference year 2012. In the data series, there was recorded a night spent as each night a tourist (resident or non-resident) spends in a tourist accommodation establishment. The Overnight stays are calculated by country of residence of the guest and by month. Tourism accommodation establishments are classified and described in groups according to NACE Rev. 2 classification (<http://ec.europa.eu/eurostat/statistics-explained/index.php/Tourism>). Seasonality is a major issue for the tourism industry. In literature this approach was explained from a range of views and was generally defined depending on the context from which it was elaborated. Accepting the fact that the tourism sector is deep influenced by the seasonality, this concept set out a challenge in the literature. Seasonality means fluctuation in tourist's numbers, destinations, accommodation and thus there are special strategies limiting the effects of the phenomena. These may be focused on the pricing strategy, diversification of the services and staff with higher qualifications. Other policies have to take into considerations more factors such as: social, economic and environmental factors.

RESULTS AND DISCUSSIONS

The main results of this analysis have concerned the indicators and the countries numbered above in the research' introduction. In what concern the results on seasonality, these have been reported by means of the seasonality index and the averages of gross seasonal deviations as following. Still, the issues of seasonality that have been studied and presented in this paper showed developments and features that could not be appreciated each time like being general rules to explain all the indicators. The first findings presented here concern the seasonality analyzed by means of the additive method, on the nights spent at tourist accommodation establishments for residents and non-residents, in the four European countries: Romania, Bulgaria, Greece and Spain (Fig no.1). In that sense, it was pointed out that, for the residents of all countries, the seasonal factors has imposed the biggest adjustments, reported to the trend line, in the third quarter of each year; all these adjustments are negative. The highest level was registered for the Spanish residents.

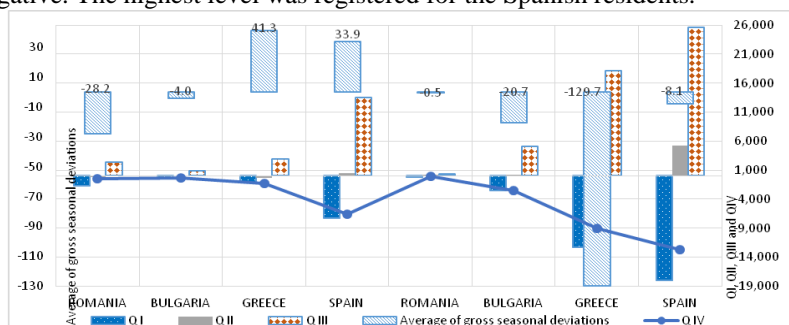


Fig. nr. 1 Nights spent at tourist accommodation establishments, Residents and Non-residents, Additive method, own computation. Source: Eurostat database, extracted on March 2015

The seasonal analysis on the non-residents category indicates almost the same figures. The third quarter have implied the most important adjustments reported to the trend line. The first quarter, especially for Spain and Greece, shows also major adjustments related to the seasonal factor. In the next figure (Fig no.2), there have been presented the seasonal average changes for the same indicator as presented above, calculated with the additive and multiplicative method.

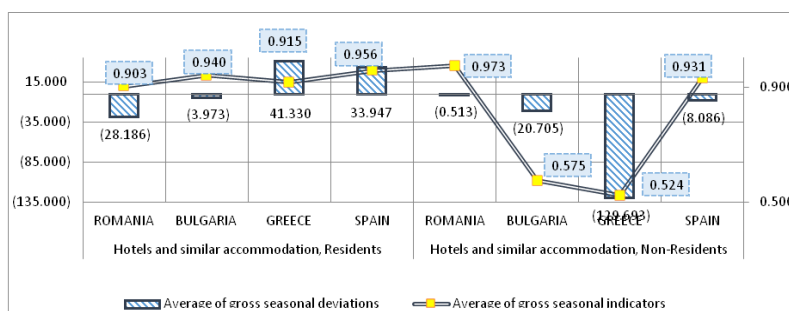


Fig. nr. 2 Nights spent at tourist accommodation establishments, Residents and Non-residents, Average of gross seasonal deviations and Average of gross indicators. Seasonality Index (AM and MM), Source: Eurostat database, extracted on March 2015

It has been stated that, according to this figure, the highest level for the averages of gross seasonal changes have been occurred for the Greeks. The residents have registered obviously positive adjustment, about + 8.5% reported to the trend line, while the non-residents shows the highest level, but on the negative scale, about -48% reported to the trend line. The next figure (Fig no.3) outlines the dynamics of the changes that occurred in the number of the nights spent in the agro-touristic boarding houses due to the seasonality phenomenon. Classification has been made by category of comfort and by Romanian and foreign tourists. In that sense, we mentioned here that the biggest adjustment reported to the trend line, has been taken place for Romanian tourists in the agro-tourist boarding houses, 3-flowers comfort category. The lowest deviations there were emphasized for 5-flowers comfort category, for both Romanian and foreign tourists.

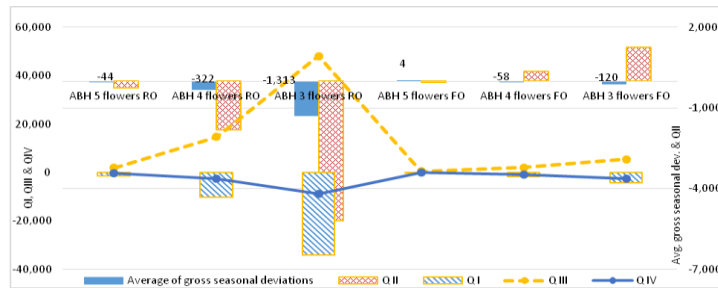


Fig. nr. 3 Nights spend in agro-touristic boarding houses, by comfort categories and type of tourists, Source: National Institute of Statistics, 2015

The averages modifications of the reported time series, were pointed out breakdown on the additive and multiplicative methods. Thus, in average, the highest modifications are on the negative scale and concern the nights spent in the agro-touristic boarding houses, 3- flowers comfort category. For the Romanian tourist, the average adjustments count for -1.312 under the trend line and for the foreign tourist, the modifications are on the same negative scale, but about ten times upper.

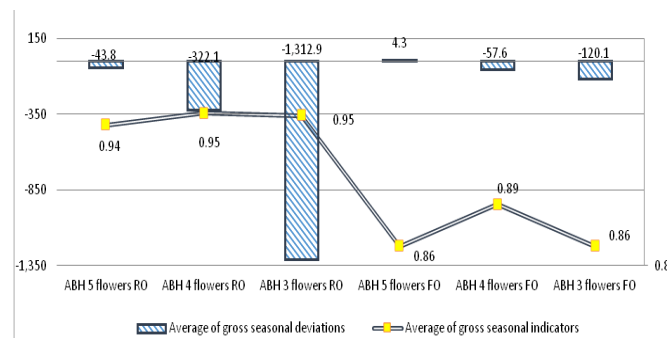


Fig. nr. 4 Seasonality Index (AM and MM) Number of nights spend in the tourist accommodation establishments, 2010-2014. Source: National Institute of Statistics, 2015

It follows the same structure of the same indicator, but this time, the tourist establishments are the hotels, with their own classification, by number of stars. Thus, in 3-stars hotels for Romanian, but also for the foreign tourists, have been took place highest deviations reported to the trend line. Still, as the time series showed, the Romanians are from far the most concern about these figures, for the first and the third quarter. There have been registered also important adjustments for the 5-stars hotels during the third quarter.

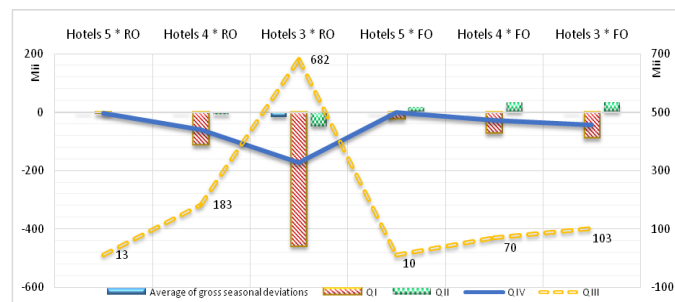


Fig. nr. 5 Nights spend in Hotels, by comfort categories and type of tourists, Source: National Institute of Statistics, 2015

In next figure it was resumed the information concerning the averages of the gross seasonal deviations registered for the same indicators as above. So, it is pointed out the highest adjustment of about 91% compared to the trend line, in what concern the 3-stars hotels.

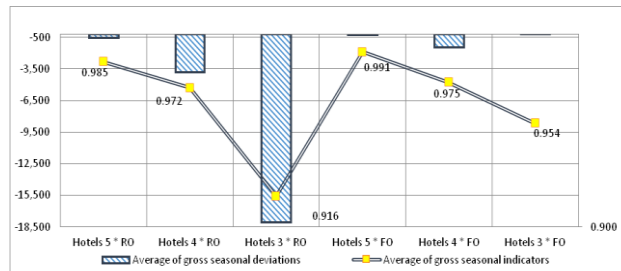


Fig. nr. 6 Nights spend in Hotels, by comfort categories and type of tourists Seasonality Index (AM and MM)

Our analysis will next focus on the Nights spent by the Romanian and Foreign tourists in agro-tourist boarding houses, at the macro-regional level. Thus, for Romanian tourists, the seasonality analysis pointed out major adjustments reported to the trend line, in macro-region 1 and macro-region 2. Meanwhile, it seems that the smallest changes reported to the trend line, have been registered for the foreign tourists, in macro-regions 3 and 4.

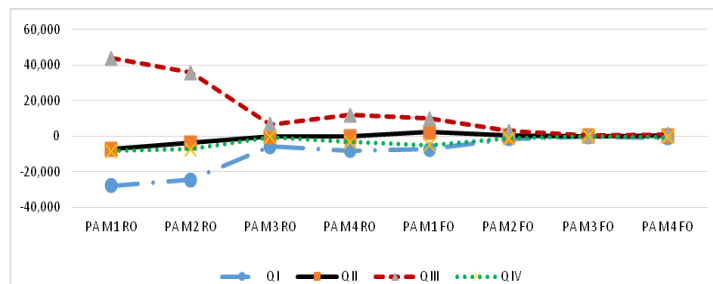


Fig. nr. 7 Nights spent in agro-tourist boarding houses accommodation establishments, Corrected seasonal changes (AM), macro-regional level, Romania, 2010-2014 - Romanians and Foreign, own computations

In the following, there are presented the results of the seasonality analysis at the macro-regional level, in hotels, for the Romanian and the foreign tourists. In this context, we have pointed out the majors deviations which have made the differences among the categories. So, we have took note about the second quarter, as the pick, which balanced the results on the negative scale for the Romanians tourists in the macro-region 2 and on the positive scale for the foreign tourists in the macro-region 3. There was also the first quarter which determined negative seasonal adjustments for all categories of the night spent series.

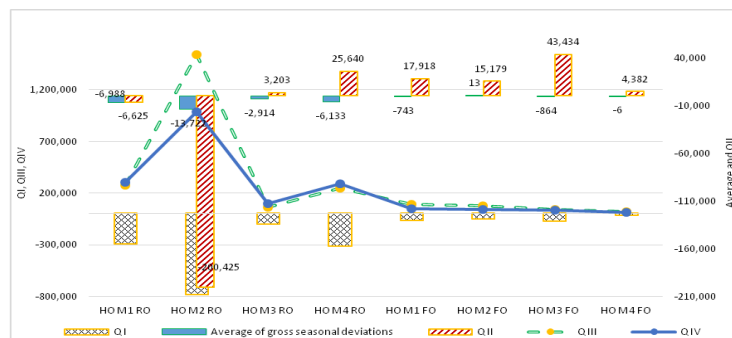


Fig. nr. 8 Average of gross seasonal deviations, Corrected seasonal changes (AM), HO, macro-regional level, Romanian and Foreigner tourists, 2010-2014

The average results for the two analysed methods are presented in the figure below. The splitted picture by macro-region showed that between 2010-2014, in Hotels, for both categories of the analysed tourists, the seasonal adjustment reported to the time series trend line, are negatives.

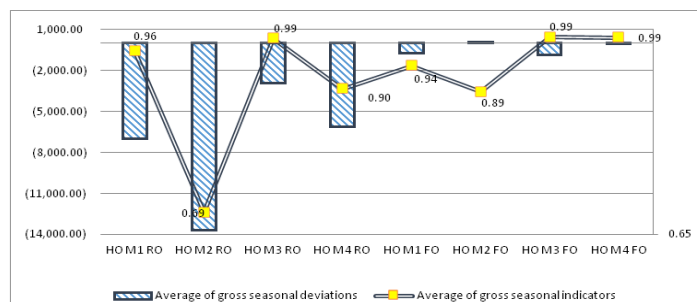


Fig. nr. 9 Seasonality Index, Averages for both Additive and Multiplicative methods, Hotels, Romanians and foreign tourists, by macro-regional level, 2010-2014

In the next part of this research, it was dressed an analyse on the expenditures in 2013, breakdown on several categories. The expenditures divided by type of trip and per nights, among the same four European countries, have reported, on euro, the average expenditure in the figure below. Therefore, it is suggested that in 1 night domestic trip, the higher averages expenditures were in restaurants and cafes for the Bulgarians and for the Greeks, the accomodation for the Spanish, and the transport for the Romanians. In 2013, for 1 night outbound trip, in all four European countries, the highest average expenditures were for transport, followed by the expenditures on accommodation for all the countries, except for the Greeks, who paid the most in restaurants and cafes.

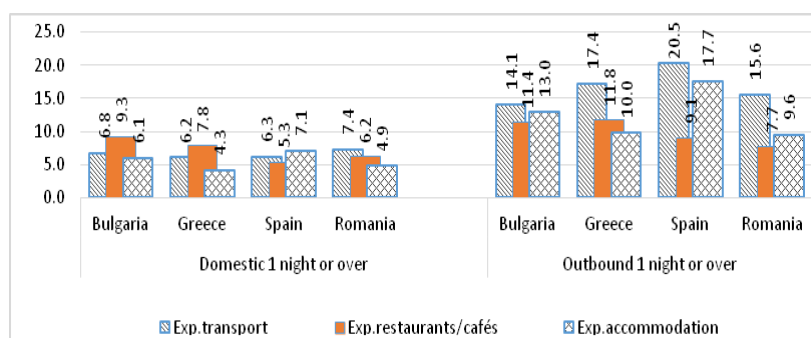


Fig. nr. 10 Average expenditure per night by expenditure categories, Total, Euro, 2013, Eurostat, extracted on March 2015

It follows the same categories of data, but the length of trip is 4 nights. The situation is quite different in the sense that, for the domestic trip, all the countries engaged the highest expenditures on restaurants, except for Spain, where on top it was accommodation. For the outbound trip, in 2013, the tourist residents have spent the most, as for the previous categories, on transport.

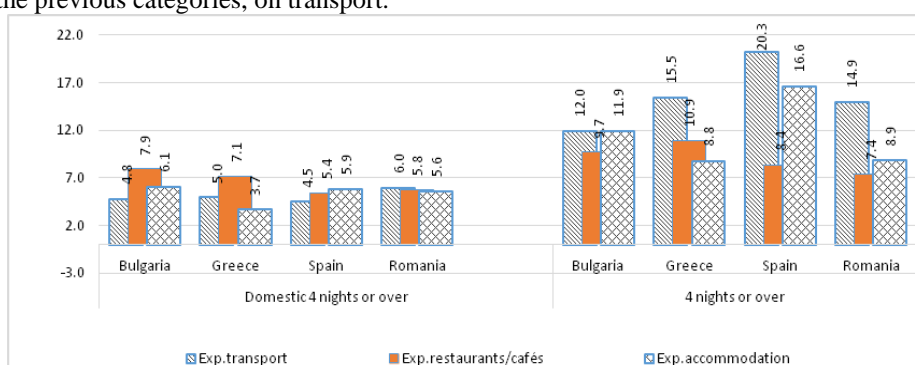


Fig. nr. 11 Average expenditure per night by expenditure categories, Total, Euro, 2013, Eurostat, extracted on March 2015

CONCLUSION

The seasonal figures in tourism appear to be, obviously influenced by both, the size of the country and their geographical location and therefore should it be considered when interpreting these data. Firstly, finding refer to the number of nights spent by the tourist in four European countries. In that sense, there have been conclusion concern the number of nights spent by residents and non-residents. Both categories of the European tourists have

choose to spend their stay in the third quarterly in the different types of tourist accommodation. Concerning the comfort category, basically the highest adjustments reported to the trend line have been taken place for Romanian tourists in the agro-tourist boarding houses, 3-flowers comfort category; the lowest deviations have noted for 5-flowers comfort category, for both Romanian and foreign tourists. Regarding the 3-stars hotels, we have determined that the highest deviations to the trend line have been reported for both Romanian and foreign tourists, in the third quarter. There have been noted also major adjustments for the 5-stars comfort category. Other main findings of the present study helped us to identify whether there is a preference linked to the season in the choices of foreign tourists, on length of stay and type of accommodation at macro regional level. For Romania, we noted the following conclusions: the least common visits were in agro-touristic boarding houses for foreign visitors, but highly accepted by the Romanian residents; the number of nights spending by the foreign are important, but on a decreasing trend. The data that have made major differences among the considered categories, was the expenditures on tourism. Further, it was an evidence that the second quarter is the highest level on the negative scale for the Romanian tourists in the macro-region 2 and on the positive for the foreign tourists coming in the macro-region 3. The analysis on the expenditure give an idea on what the tourists spent the most, by length of stay and by type of tourism. Thus, for short stays we have noted higher amount for Restaurants (domestic trip) and transport (outbound trip). For 4 nights stays in domestic trips, the tourists spend always the most in Restaurants and in outbound trips for transport and accommodation. Finally, the foreign tourist arrivals in Romania, by type of transport, are by road, followed in the recent years by the air transport.

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