# INBOUND TOURISM IN ROMANIA: A PROFILE AT REGIONAL LEVEL BASED ON ACCOMMODATION STATISTICS

Cristi FRENŢ

National Institute of Research Development in Tourism, 050741, Romania cristi.frent@incdt.ro

### Abstract

In a practical manner, inbound tourism refers to the foreign visitors undertaking a trip in a reference country. Accommodation statistics provide an evidence of tourists registered in the place where they are spending at least one night in an accommodation establishment. For the time being, accommodation statistics are the only statistics officially produced in Romania characterizing inbound tourism. Using both published and unpublished data (received upon request) from the National Institute of Statistics, the purpose of this paper is to outline the profile of foreign tourists registered in accommodation establishments in each of Romania's development regions (defined at NUTS II level). It has been revealed that there are some differences between regions in terms of dynamics and of some characteristics (i.e. nationality, typology of accommodation units, seasonality) when there is comparison with the national level. These are important features that have to be considered by tourism stakeholders at regional level.

Key words: inbound tourism, development regions, accommodation statistics, overnight stays, Romania

# JEL Classification: Z30, L83

#### I. INTRODUCTION

The registration of tourists in accommodation establishments for the purpose of obtaining statistical information is considered a method that is both efficient and easy to apply (Minciu, 2004). This is a well established method in the statistical practice, which allows obtaining information on both inbound and domestic tourism (Frent, 2009). However, it should be noted that the data obtained from the statistical records of the accommodation establishments should be used with great caution, as long as they account solely for "specific subpopulations of the universe, which should not necessarily correspond to the average, neither in terms of the level nor – maybe – even in terms of trend" (Libreros, 2009, p. 4).

Obviously, there are other sources of information that allows the production of tourism statistics, such as "records and statistics of arrivals and departures at/from the border, surveys on the behaviours of foreign and national tourists at the destination, specific surveys on tourist expenditures, and surveys on tourism companies (Cristureanu, 2006, p. 36).

Currently, the data regarding the records of tourists in the accommodation establishments are the only data available for Romania in relation to the flows of inbound tourism (the tourism undertaken by the foreign tourists coming to Romania). Our country does not have a border survey aiming to effectively identify the number of foreign tourists. Although there are administrative records carried out by the Romanian

Border Police, these cannot provide acceptable statistical data for tourism: only the arrivals and the departures of foreign citizens are recorded here, without considering clearly whether they are coming in our country for a tourist purpose or for other reasons. In this regard, we can mention the significant differences that exist between the number of arrivals of foreign nationals registered at the border and the number of arrivals of tourists in accommodation establishments in Romania: for example, in 2018, according to INS (2019), there were recorded 11.7 million arrivals at the border, as compared to 2.8 million arrivals recorded in accommodation establishments.

The purpose of this paper is to create a profile of foreign tourists at the regional level based on statistics provided by the accommodation establishments. It should be stressed also the fact that the territory of Romania is divided into eight development regions from an administrative point of view, since 1998, respectively: the Centre Region, the North-East Region, the South-East Region, the South-Muntenia Region, the South-West Oltenia Region, the West Region, the North - West Region, and the Bucharest-Ilfov Region. These regions correspond to the NUTS II divisions used by the European Union in the field of territorial division according to the requirements of the EC Regulation no. 1059/2003 of the Parliament and of the European Council regarding the establishment of a common nomenclature of the territorial units of statistics - NUTS. In this paper, the regional level corresponds to the eight development regions of Romania, as they hold data related to tourism provided

by the accommodation establishments (i.e. accommodation statistics).

#### II. METHODOLGY

In analyzing the profile of inbound tourism in Romania broken down by development regions we will use the existing data published by the National Institute of Statistics (INS). These refer to the following statistical indicators: arrivals, overnight stays, length of stay —calculated for foreign (non-resident) tourists staying in the accommodation establishments. In addition to the published data, following a special request to INS, annual data were obtained regarding the breakdown by country of residence in terms of the number of overnight stays and arrivals for each development region in Romania.

It should be mentioned that in this paper preference was given to using strictly the indicator represented by overnight stays as this is considered more relevant in tourism analyzes due to its capacity to avoid double registration. For example, a tourist undertaking a tour of a certain region is counted each time as a new arrival in each accommodation establishment where he or she spends the night. Thus, should the 'arrivals' indicator be taken for reference, there would be a distortion of the statistical reality (an overvaluation of the actual number of tourists in the region), and in these conditions the use of the 'overnight stays' indicator is more relevant. Similarly, using the indicator 'average length of stay' does not offer great accuracy, given the overestimation of the number of arrivals, which ultimately determines a shorter length of stay than the actual one (the length of the stay is determined as a ratio between the number of overnight stays and the number of arrivals). It is generally considered that the impact of this phenomenon depends on the mobility of tourists between destinations and within destinations and on the geographical level considered in the analysis as long as the effect of double counting is directly proportional to the size of the territory considered (de Cantis et al, 2015). However, in the case of Romania, the development regions are quite extended and double-counting might be possible.

The first part of the analysis will consider the calculation of an average annual growth rate compared to the previous year and the index of dynamics with a fixed base, the year 2011 being considered the baseline year. There will also be presented a structural analysis of the weight held by each development region (market share) in the total number of overnight stays of foreign tourists in Romania. At the same time, the analysis also considers the identification of the main countries of origin of foreign tourists visiting each region of Romania ('top five'), and for this purpose, data were specifically requested from INS, given that such data are not published. And ultimately, it was also

performed an analysis of the typology of the accommodation units where overnight stays of foreign tourists were registered.

# III. RESULTS

Evolution of Inbound Tourism at Regional Level In absolute terms, in 2018, there were recorded over 5.3 million overnight stays of foreign tourists in Romania, this situation bearing proof of an increasing trend manifested year by year. Higher average annual growth rates were registered by the North-West Region (+10.6%) and by the Centre Region (+10.2%) but also by the Bucharest-Ilfov Region (+9.4%). At the opposite pole, we have regions with much lower average annual growth rates: the South-Muntenia Region (+2.9%) and the South-East Region (+3.1%) – far below the national average (+8.2%), see Table 1).

Table 1. Number of overnight stays of foreign tourists in the development regions of Romania (thousands), 2011-2018

(mousands), 2011-2016								
Region->	North- West	Centre	North- East	South- East				
Year	· · · CSC		Lust	Lust				
2011	288.0	541.7	175.1	265.8				
2012	292.1	612.9	186.9	302.0				
2013	299.7	680.7	199.0	336.8				
2014	326.8	754.1	211.3	324.6				
2015	443.6	919.6	234.7	371.1				
2016	481.5	1,013.0	270.7	339.6				
2017	555.7	1,103.0	293.1	344.4				
2018	582.5	1,070.3	283.4	329.4				
y-to-y average annual growth	+10.6%	+10.2%	+7.1%	+3.1%				

Region -> Year	South- Mun- tenia	Bucha- rest- Ilfov	South- West Oltenia	West	Romania
2011	292.5	1,153.7	72.3	277.9	3,066.9
2012	287.4	1,223.5	103.2	289.4	3,297.4
2013	261.5	1,313.5	100.8	285.9	3,477.9
2014	226.4	1,537.4	85.3	302.0	3,768.1
2015	248.8	1,780.5	111.9	361.6	4,471.6
2016	286.7	1,953.2	118.0	369.2	4,831.8
2017	316.0	2,132.9	121.0	424.9	5,291.0
2018	356.1	2,169.7	105.3	432.9	5,329.6
y-to-y	+2.9%	+9.4%	+5.5%	+6.5%	+8.2%
average					
annual					
growth					

Source: National Institute of Statistics (2019) and own calculations

In absolute terms, there is practically a doubling of the number of overnight stays of foreign tourists in the Centre Region and the North-West Region in 2018 compared to 2011 i.e. within eight years. These two regions are followed by the region dominated by the capital city of Bucharest. However, some oscillatory tendencies are noted especially in the case of the South-East, South-Muntenia and South-West Oltenia regions (see Figure 1).

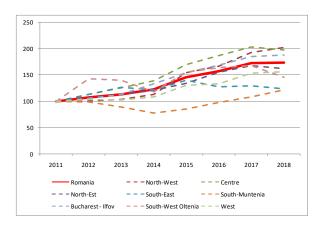


Figure 1 – Evolution of the overnight stays of foreign tourists in Romania and its development regions, 2011-2018 (index year 2011 = 100)

Source: own calculations based on data from the National Institute of Statistics (2019)

It is also important to track down the evolution (broken down by development regions) in the structure of the total overnight stays of foreign tourists in Romania (see figure 2). Thus, the analysis of the distribution of overnight stays of foreign tourists in the tourist accommodation establishments indicates that in 2018 slightly over 40% of the overnight stays were registered in Bucharest-Ilfov Region, followed by the Centre Region (20.1%), and the North-West Region (10.9%); at the opposite pole, there are the South-West Oltenia Region and the North-East Region, which accounted for 2.0% and, 5.3%, respectively, of the total number of overnight stays of foreign tourists. In addition, we notice a slight increase in the share held by the Bucharest-Ilfov region between 2011 and 2018 and this has been facilitated by the development of the business tourism that has transformed the capital city into an important destination for this type of tourism. In contrast, the South-Muntenia Region, which registered a slight decline in its share from 9.5% in 2011 to 6.7% in 2018, stands out. Also, one must note that there is a concentration of the overnight flows of foreign tourists in three regions out of eight (Bucharest-Ilfov, Centre, and North-West) that cover over 70% of the total number of overnights registered in 2018 in Romania, increasing by more than five percentage points, as compared to 2011.

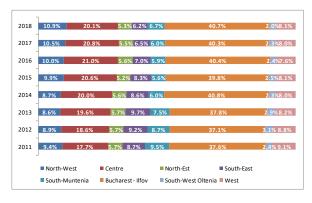


Figure 2 – Distribution of the overnight stays of foreign tourists in Romania broken down by development regions, 2011-2018 (%)

Source: own calculations based on data from the National Institute of Statistics (2019)

# Main Countries of Origin

It is noted that there is a preference manifested by tourists from Germany for the Centre Region, the West Region, and the South-East Region, but this is smaller in the case of the South-Muntenia Region and the Bucharest-Ilfov Region, these being preferred by tourists from Israel.

Given the geographical proximity, the Republic of Moldova is the first generating market for the North-East Region, but only the fourth generating market for the Centre Region, but it is not among the main five generating countries in the other six development regions of Romania. Similarly, given the presence of the Hungarian community in Transylvania, Hungary is the first generating market for the North-West Region, the second one for the Centre Region, and the third one for the West Region, but surprisingly, it is also the third generating country for the South-West Oltenia Region – a region situated outside the Carpathians, where there is no Hungarian minority; in the other four regions, Hungary is not part of the top five generating countries.

It is important to highlight the presence in this list of countries that are not part of the top positions of the main generating countries at national level. This is the case of Poland – the fourth generating country for the South-West Oltenia Region and the South-East Region; Austria – the fifth generating country for the Western region; Turkey – the fourth generating country for the South-Muntenia Region, and the United Kingdom – the fourth generating country for the Bucharest-Ilfov Region; last but not least, France is the third generating market for the South-Muntenia Region and the South-East Region, the fourth generating market for the West Region, and the fifth one for the North-East Region (see table no. 2).

Table 2. Overnight stays of foreign tourists in the development regions of Romania in 2018: Top 5 generating countries

Region		First 5				
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	countries, cumulated
Centre	DE	HU	ISR	MD	IT	53.3%
North-	MD	IT	DE	ISR	FR	52.8%
East						
South-	ISR	IT	FR	TK	DE	46.5%
Muntenia						
South-	IT	DE	HU	PL	FR	40.0%
West						
Oltenia						
North-	HU	DE	IT	USA	FR	48.5%
West						
South-	DE	IT	FR	PL	USA	41.1%
East						
Bucharest	ISR	USA	IT	UK	DE	47.1%
-Ilfov						
West	DE	IT	HU	FR	AT	43.8%
Romania	DE	ISR	IT	HU	USA	43.8%

Source: based on data received upon request from the National Institute of Statistics

Note: DE = Germany, HU = Hungary, ISR = Israel, IT = Italy, MD = Republic of Moldova, FR = France, PL = Poland, AT = Austria, USA = United States of America, UK = United Kingdom, TK = Turkey

At the same time, it is observed that in some regions such as Centre Region and the North-East Region there is a higher concentration of the main five generating countries as compared to the national average; in both regions were registered more than half of the total number of overnight stays of foreign tourists from the five generating countries. At the opposite pole, there are the regions of South-West Oltenia and of South-East, with 40% and slightly more than 40%, respectively, of the total number of overnight stays of foreign tourists coming from five countries of origin.

Main Types of Accommodation Establishments Foreign tourists choose, in an overwhelming proportion, to stay in hotels when visiting Romania (over 80%). However, there are some differences between the development regions, this percentage ranging from 67.3% in the case of the Centre Region to 93.6% in that of Bucharest-Ilfov Region (see Figure 3). In the case of the Centre Region, there stands out an almost triple share as compared to the national level in the case of overnight stays in boarding houses (including agro-tourist boarding houses): 22.6% vs. 7.9%. Important weights of overnight stays in boarding houses are registered in the South-West Oltenia Region (14.2%), the North-East Region (11.7%), and the North-West Region (10.9%). In terms of patterns involved in booking accommodations, hostels are also popular among foreign tourists for overnight stays in a proportion higher than the national level (3.3%) for the West Region (5.3%), the North-West Region (3.9%), and the Bucharest-Ilfov Region (3.6%). Overall, as a general rule, when it comes to the accommodation establishments chosen, almost 90% or slightly over 90% of the total number of foreign tourists' overnight stays in each development region comprise hotels and boarding houses.

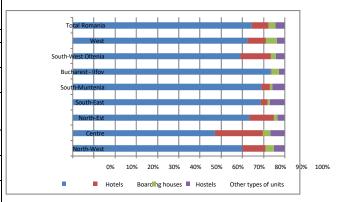


Figure 3 – Distribution of the overnight stays of foreign tourists in Romania and in its development regions, broken down by type of accommodation establishments in 2018

Source: own calculations based on data from the National Institute of Statistics (2019)

### Seasonality

The analysis of seasonality highlights the fact that at national level there is a propensity for a certain season, respectively, summer (comprising June, July, and August) which concentrates the highest number of overnight stays (34.3%). In contrast with this situation, there are significant variations ranging from a strong seasonality registered in the summer months (the case of the South-East Region, with just slightly over half of the total number of overnight stays of foreign tourists recorded in a year) to a very low summer season for the Bucharest-Ilfov Region (28.4%). Similarly, the Centre Region (40.5%), the North-West Region (37.1%), and, partially, the North-East Region (36.9%) have a more pronounced seasonality as compared to the national average (34.3%). At the opposite pole lie the South-West Oltenia Region and the West Region that have a lower seasonality for the summer season (see Figure 4).

A more in-depth analysis in terms of months shows that, at national level, for half of the development regions in Romania, August is the peak of the season, followed by July. In the case of the South-East Region, the North-West Region and the South-Muntenia Region, July is the peak of the season, followed by August and for the Bucharest-Ilfov Region, in which the peak month is June, followed by May. An atypical situation is encountered in the South-West Oltenia Region with March having a weight equal to that of August, where, however, July remains the peak of the season.

As regards the low season, it covers cumulatively the winter months, December, January and February, respectively, all these three months covering nationally only 16.5% of the total number of overnight stays of foreign tourists in a year. Nevertheless, there are regions in which the low season

exceeds the national average (16.5%): the South-West Oltenia Region (19.6%), the Bucharest-Ilfov Region (19.1%), and the West Region (18.8%), proving once again that they have a lower seasonality. At national level, February is the month accounting for the smallest flow of foreign tourists registered in a year, this being true for four of the eight development regions of Romania. However for three development regions (South-East, South-Muntenia, and South-West Oltenia) the month with the least number of foreign tourists' overnights is December, while for the North-West Region, this is January.

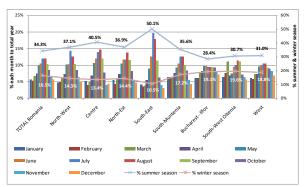


Figure 4 – Seasonality of overnight stays of foreign tourists in Romania and in its development regions, in 2018

Source: our own calculations based on data from the National Institute of Statistics (2019)

# IV. LIMITATIONS

The limitations of this analysis derive from the very shortcomings of the method of registering tourists in accommodation establishments. Minciu (2004) mentions the following shortcomings: the registration is incomplete, as only authorized establishments are taken into account, leaving out the accommodation provided by relatives, friends, by secondary residences, or by places that have not been planned accordingly; the fact that it does not rigorously deliver the number of tourists (accommodated persons) but only the number of overnight stays; besides, the results depend on the system of recording tourists used and which is specific to countries or hotel chains (p. 95).

For example, a study conducted in Italy by Guizzardi and Bernini (2012) indicated an underreporting in domestic tourism by comparing two official data sources: accommodation statistics and the Italian 'trips and holidays' survey. The percentage of underreporting of the data provided by accommodation statistics is, on average, of 16%, for the period 2007-2009, but it features important differences from one year to another.

Indeed, in general, surveys on accommodation establishments generally cover only the so-called 'collective accommodation component' and exclude the 'private accommodation component' (Frent, 2009). The

latter refers to private vacation homes, rooms for rent provided by hosts, houses rented by private individuals or by specialized agencies, free accommodation offered by relatives and friends in their own homes (WTO, 1994, p. 17).

In the literature it is recognized that a large part of the tourists spend their vacations in private accommodation establishments (Ruggieri, 2008). However, the lack of a proper evaluation thereof was noticed in Romania too, (from a supply-side perspective) of tourism that takes place within the establishments belonging to the private accommodation (INCDT, 2005).

An earlier study conducted by Jovor and Kalcic (2003) in Croatia revealed that 19.0% of the number of overnight stays of non-resident (foreign) tourists took place in 1999 in private accommodation establishments and 17.3% of arrivals were registered in private accommodation establishments too. Furthermore, within the private accommodation category, we must differentiate between paid accommodation provided by individuals (private houses available for rent) and nonpaid accommodation provided by individuals (private houses where accommodation is free of charge), as the first category generates accommodation expenses and a certain economic impact and the latter does not involve expenses (INCDT, 2005). In fact, empirically, a study conducted in the Lipari Islands of southern Italy pointed out that there are no relevant differences between the tourist behaviour of tourists staying in private accommodation establishments and those benefiting from the services the authorized accommodation establishments (Ruggieri, 2008).

It should be mentioned, however, that the new standards in the field of tourism statistics (IRTS 2008) no longer present a classification of the types of accommodation units and therefore no longer differentiate between the private accommodation component and the collective accommodation component (United Nations, 2010).

In another train of thoughts, in Italy too, Volo and Giambalvo (2008) point out that there is a low motivation among hotel owners and accommodation establishments' owners to keep a track of the arrivals and of the overnight stays of tourists and they underreport these parameters on purpose, which leads to an "underground component of tourism earnings that might constitute an amount large enough to underestimate the contribution to the national economy" (p. 371). In contrast, in Austria, there is interest at the destination level that accommodation statistics should cover all kinds of private accommodation, as long as there is a fee (Wöber. 2000).

Nevertheless, Saarinen (2003) admits that "in regional analysis, the official statistics may cover only a part of the total commercial capacity" (p. 98). Therefore, we must be aware of the main and most

important limitation of accommodation statistics given that they only partially cover the tourism phenomenon at regional level. At the same time, in order to make a full assessment of visitors' flows, it is recognized among specialists that there is a need to make estimates of other categories such as day visitors (persons who do not stay overnight at a destination) and those who do not stay in forms of paid accommodation (Massieu, 2008). Unfortunately, such data is not available in the case of foreign tourists visiting Romania.

# V. CONCLUSIONS

This paper has presented a model for the analysis of the inbound tourism at the level of the development regions in Romania based on the existing data officially collected by the National Institute of Statistics.

It was found that during the analyzed period (2011-2018) tourism did not have a constant, unitary evolution in the development regions of Romania. There are also differences in the dynamics of tourist flows. Thus, we have regions with average annual growth rates above the average level recorded nationally such as the Centre region, the North-West Region, and Bucharest-Ilfov Region, and, at the opposite pole there are regions where the inbound tourism has registered a quite modest evolution such as the case of the South-East Region and the South-Muntenia Region. This will result in an increase in the gaps between regions in terms of distribution of the

flows of foreign tourists.

At the level of each development region, a coherent strategy for attracting foreign tourists must be put in place, one taking into account the regional specificity and the particularities of the tourists' generating markets. Regarding this last aspect, it was highlighted that there are differences between the regions in terms of the dominant tourist markets: for example, Israel is the most important foreign tourists' generating market for the South-Muntenia Region and the Bucharest-Ilfov Region. Similarly, Germany plays the same role for the Central Region, the West Region, and the South-East Region, while the Republic of Moldova is the main generating market for the North-East Region. This is reflected by the fact that the distribution of overnights broken down by the most important five countries of origin at national level is different from that registered at the level of development regions.

Regional tourism stakeholders need to consider all these aspects when undertaking a regional tourism analysis, and the model offered by this paper can act as a starting point in this endeavour.

# VI. ACKNOWLEDGMENT

This work was supported by a grant of Romania's Ministry of Research and Innovation. CNCS - UEFISCDI project number PN-III-P1-1.1-TE-2016-0238, within PNCDI III.

# VII. REFERENCES

- 1. Cristureanu, C. (2006) Strategii și tranzacții în turismul internațional, Editura C.H. Beck, București 2006, p. 430.
- 2. de Cantis, S., Parroco, A.M., Ferrante, M, Vaccina, F (2015) Unobserved tourism, Annals of Tourism Research, 50, pp.1-18.
- 3. Frenț, C. (2009) Impactul Economic al Turismului Statistică și Metode de Evaluare, Editura Universitară, București, pp. 54-60.
- 4. Guizzardi, A., Bernini, C. (2012) Measuring underreporting in accommodation statistics: evidence from Italy, Current Issues in Tourism, 15:6, pp. 597-602.
- 5. INCDT (2005) Studiul de fezabilitate privind introducerea Contului Satelit al Turismului în România, Faza I Sistemul statisticilor din turism în România descriere și diagnosticare, București.
- 6. National Institute of Statistics (2019), *Tempo database*, <a href="http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table">http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table</a>, accessed October 25, 2019.
- 7. Javor A, Kalcic I (2003) *Private Accommodation in Tourism Statistics in the Republic of* Croatia. In Lennon J.J. (ed.), Tourism Statistics: International Perspectives and Current Issues, Continuum, London, New York, pp. 92-104.
- 8. Libreros, M. (2009) Coherence and consistency in tourism statistics: an overview, <a href="http://cf.cdn.unwto.org/sites/all/files/docpdf/coherence.pdf">http://cf.cdn.unwto.org/sites/all/files/docpdf/coherence.pdf</a>, accessed November 5, 2019.
- 9. Massieu, A. (2008) *Developing tourism statistics at the sub-national level: the measurement of flows of trips and visitors.* In World Tourism Organization, Enzo Paci Papers on Measuring the Economic Significance of Tourism, Madrid, World Tourism Organization, pp. 3-32. 10. Minciu, R. (2004) *Economia Turismului*, Editura Uranus, Bucureşti, pp.94-95.
- 11. Ruggieri, G. (2008). *The economic impact of tourism in private homes: the case of Lipari Archipelago*. In Keller, P, Bieger, T. (eds.) Real Estate and Destination Development in Tourism, Erich Schmidt Verlag, Berlin, pp. 121-130.
- 12. Saarinen J. (2003) The Regional Economics of Tourism in Northern Finland: the Socio-economic Implications of Recent Tourism Development and Future Possibilities for Regional Development, Scandinavian Journal of Hospitality and Tourism, 3:2, pp. 91-113.
- 13 United Nations (2010) International Recommendations for Tourism Statistics 2008, United Nations Publication, New York, p. 102
- 14. Volo, S., Giambalvo, O. (2008) Tourism Statistics: Methodological Imperatives and Difficulties: The Case of Residential Tourism in Island Communities, Current Issues in Tourism, 11:6, pp. 369-380.
- 15. World Tourism Organization, WTO (1994) Recommendation of Tourism Statistics, New York, NY, p. 17.
- 16. Wöber, K. W. (2000) Standardizing tourism statistics, Annals of Tourism Research, 27:1, pp. 51-68.