# TOURISM IMPACT ACTIVITY OVER THE LABOUR MARKET IN THE ROMANIA DANUBE REGION COUNTY'S

#### **Ruxandra-Eugenia POP**

Research Institute for the Economy of Agriculture and Rural Development, 61 Marasti Boulevard, District 1, 011464, Bucharest, Romania, Phone: +40213136087, Fax:+ 40213136096, Mobile:+40726109516, Email:pop.ruxandra@iceadr.com

Corresponding author: pop.ruxandra@iceadr.com

#### Abstract

According to the concept of efficient economic growth, it is important that the sustainable development strategy in Romania take into account the constantly changing economic and social factors, both at national and international level. Unfortunately, taking into consideration the Danube region in Romania, we find several obstacles like the low level of the growth regarding the infrastructure in the area, the psycho-social characteristics of the population, the professional training degree, the crisis economic, superficiality in the work done by certain local public administrations. Of course, the factors enumerated above influence among other economic activities and the tourism activity in the area of interest. Being one of the important sources of income for the Danube population in Romania, both traditional and industrial tourism affect the labor market, with phenomena such as population migration or high unemployment rate. This paper present the current trend in tourism and labor market in counties such as Braila, Constanta, Tulcea, Galati, Ialomita, using the online statistical databases. We will also analyze, using different statistical indicators, the degree of impact and the correlations existing between the economic tourism activity and the characteristics of the labor market.

Key words: labour market, Danube region, tourism, chi-square, contingency coefficient

#### **INTRODUCTION**

In the literature, tourism is defined as an important source of income, a job generator, an opportunity to improve lifestyle. In Romania, tourism is considered a priority for economic growth, both at national and local level.[3]

Due to the fact that tourism is becoming increasingly important for communities around the world, the need for sustainable tourism development is also becoming a major concern. The population represents for tourism both a primary resource on which it depends, because the folk presence in a certain area can justify the development of tourism itself at some point. The population in a certain area can influence the demand on the tourism market, considering that tourists are interested in observing and to live a few days like the residents of the area they are visiting.[5]

Among the factors that contributed to the modernization of tourism are: increasing the demand for health tourism due to the demographic characteristics of the tourists, significant climate change, which has led to even greater concern regarding environmental protection, changes in the behavior of consumption of tourists, especially those with a younger age, technological progress and improvements in digital techniques that have led to an improvement in service quality and diversity. In particular, industrial tourism can provide opportunities both for companies in the area of interest and for the regions in which they operate. Therefore, tourism development influences various adjacent economic structures, including labor market dynamics. [1]

In the context of the major importance of tourism, under its various forms, the European Union Strategy for the Danube Region (EUSDR) includes, under the coordination of Romania and Bulgaria, priority number 3 on culture and tourism.[4]

On the Romania territory, the Danube runs 1075 km, respectively 4 of the 8 regions, 12 of the 41 counties, forming at the Black Sea Danube Delta. For Romania, the Danube is an important transport axis and a great tourist and economic potential. [2]

The counties of Romania crossed by the Danube are: Brăila, Constanța, Galati, Tulcea, Calarasi, Giurgiu, Ialomita, Teleorman, Ilfov, Dolj, Mehedinti, Olt and Caras - Severin. These areas will be the subject of this research, analyzing economic indicators related to the labor market on the one hand, and on the other hand indicators referring to the tourism activity in the mentioned areas.

Thus, taking into account the recorded statistical data, we can formulate the following hypotheses of this research:

-H1: The development of tourist capacity in a county significantly influences the population's choice of working or not in this field;

-H2: Increasing the tourism capacity in a county significantly influences the recorded unemployment rate;

-H3: The level of the income of the population registered by the county, in hotels and restaurants sector, influences the population's decision to work or not in this field;

-H4: Tourism demand influences the registered offer;

-H5: The tourism demand influences the level of income of the population in this field.

## **MATERIALS AND METHODS**

In order to accomplish this paper, three main working methods will be used, such as:

(i)dissemination of existing information in specialized, native and international literature of interest;

(ii)quantitative and comparative account, regarding the data from INSSE database about: labor market in the Danube region, the indicators related to tourism activity in the areas of interest;

(iii)analyzing and interpreting data using the SPSS statistical program by producing the following outputs:

-value of chi square test and contingency coefficient: (Analyze – Descriptive Statistics – Crosstabs – Statistics – Chi-square/ Contingency coefficient);

-Scatter plot representation (*Secțiunea Graphs* – *Chart Builder* – *Scatter/Dot*).

### **RESULTS AND DISCUSSIONS**

The characterization of the labor force available to a market segment may include a number of factors, depending on the specificity. However, there are some general criteria for defining the labor market, selfdependent of the field to which it refers, such as: active population, employed population, unemployment rate, gross or net income, and others. Of course these characteristics could depend on the social or demographic factors that the population own.

Figure 1 shows the statistics on the occupied population (thousands of people), according to the counties of interest for the work, between 2010-2016.



Fig. 1. Occupied population distribution according to the county

Source: TEMPO-Online time series, www.insse.ro [6]

Thus, we observe that, by far, the highest concentration of the occupied population is located in the Bucharest-Ilfov region, which is to be expected given the high degree of industrialization and development of the capital compared to the other analyzed counties. There is a distribution of the busiest population in the counties: Constanta, Dolj, Galati. On the opposite side there are the counties of Tulcea, Giurgiu and Ialomita.

Figure 2 shows the statistical data on occupied population (thousands of people), with activity in hotels and restaurants, depending on the county, between 2010-2016.

Also, in this case, the largest share of the population with activity in hotels and restaurants is found in Bucharest.

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Fig. 2. Occupied population distribution (restaurants and hotels) according to the county

Source: TEMPO-Online time series, www.insse.ro [6]

The hierarchy of counties is maintained as in Figure 1, as regards the more developed counties in terms of active, active population. The counties with the lowest number of employees are Giurgiu, Teleorman, Olt and Ialomita.

In Table 1 we present the share that the population working in the hotel domain holds in the number of people working, regardless of the field, taking as a reference the interval 2010 - 2016.

Tabel 1. Share of occupied population (hotels, restaurants) in the total occupied population (regardless of the field), taking as reference the interval 2010 - 2016

County	Share occupied population (hotels and restaurants)	
BR	1.65%	
CT	3.00%	
GL	1.89%	
TL	1.84%	
GR	0.46%	
IL	1.33%	
TR	0.61%	
Mun. Buc - IF	2.63%	
DJ	1.47%	
MH	1.25%	
OT	0.61%	
CS	1.95%	

Source: Own calculation.

We observe that in Constanta County we have the highest share of people working in the field of tourism, followed by Bucharest, Caraş Severin, Galati and Tulcea. The counties of Giurgiu, Teleorman and Olt are located at the opposite pole, these counties having basic activities like agriculture and fishing.

As far as that goes the unemployment rate identified in the 12 counties, we can state that the lowest level was registered in Bucharest, Ilfov, Caras Severin, Constanta. Surprising is the changes of the unemployment rate identified in the territory of Caraş Severin county, this amount reaching 9% in 2010 and only 2.2% in 2016, a decrease of almost 7 percentage points. High unemployment rates were recorded in Teleorman, Dolj, Mehedinți and Olt. (Figure 3).



Fig. 3. Unemployment rate according to county Source: TEMPO-Online time series, www.insse.ro [6]

In Figure 4 we graphically represent the nominal monthly net salary, according to the county. It is noticed that the lowest salary recorded in hotels and restaurants is recorded in the Giurgiu, Olt, Tulcea and Mehedinti counties. The highest salaries in this area were collected on the territory of the counties of Bucharest, Constanta, Galati and Teleorman.



Fig. 4. Net nominal monthly salary by county Source: TEMPO-Online time series, www.insse.ro [6]

For all counties analyzed, there is an upward trend in salary during the reference period 2010-2016.

If we have analyzed the labor market indicators so far, we will analyze indicators related to the tourism activity. In Table 2, we present the rate of occupation of tourist capacity on the territory of the counties of interest for the present research in the period 2010-2017.

Thus, we notice that, on average, the highest rate of occupation of tourist capacity was recorded in Bucharest, Galati, Tulcea and the lowest value was recorded in Teleorman County. Table 2. Share of tourism capacity (hotels and restaurant) in total types of tourist accommodation structures

County	Tourist capacity occupancy rate							
county	(hotels and restaurants) %							
	2010	2011	2012	2013	2014	2015	2016	2017
BR	9.60	10.48	9.46	8.61	8.70	11.10	11.34	12.34
CT	8.06	7.46	8.94	8.61	8.32	9.24	11.46	11.83
GL	12.87	14.45	14.71	15.37	12.45	11.76	11.80	13.70
TL	12.46	14.40	13.68	12.29	11.51	12.33	12.05	14.86
GR	11.91	11.74	10.18	8.96	10.98	11.63	11.24	9.85
IL	6.36	6.96	6.46	7.17	7.07	7.35	8.21	8.13
TR	5.07	5.12	6.10	4.74	4.12	4.82	4.16	4.76
Mun.								
Buc - IF	14.02	16.78	17.57	18.91	21.58	23.42	25.49	26.37
DJ	4.85	8.13	9.90	11.08	11.87	12.58	11.14	12.12
MH	10.81	10.95	9.77	9.12	8.68	12.25	12.82	13.99
OT	7.33	10.81	12.43	11.73	11.02	10.77	11.35	11.19
CS	6.09	6.75	6.05	6.41	6.47	8.41	8.34	8.92
~	-							

Source: Own calculation.

Once the statistical data is presented, we will present the results obtained with SPSS, obtained on the five hypotheses elaborated in the introduction.

Thus, in Table 3, we present the results obtained from the SPSS questionnaire on the link between the existing tourism capacity and the population's option to work in tourism.

Table 3. Tourism capacity - employees in tourism correlation

Symmetric wreasures			
			Approximate
		Value	Significance
Nominal by	Contingency	.816	.020
Nominal	Coefficient		
N of Valid Case	es	12	

Source: Results obtained with SPSS.

The chi square test value, lower than 0.050, (0.020) shows a representative connection between the tourism capacity and the number of employees in tourism. The contingency coefficient value (0.816) shows that the link is strong, significant intensity.

Table 4. Tourist capacity - unemployment rate correlation

Symmetric	Measures
Symmetric	Measures

			Approximate
		Value	Significance
Nominal by	Contingency	.773	.021
Nominal	Coefficient		
N of Valid Cases	3	12	
Source: Desults obtained with SDSS			

Source: Results obtained with SPSS.

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In Table 4, we present the results obtained from the SPSS questionnaire on the link between the existing tourist capacity and the registered unemployment rate.

The chi square test value, lower than 0.050, (0.021) shows a representative connection between the tourism capacity and the level of unemployment rate. The contingency coefficient value (0.773) shows that the link is strong, significant intensity.

In Table 5, we present the results obtained from the interrogation in the SPSS program on the link between the net monthly salary level and the population's decision to work in the field of tourism.

 Table 5. Correlation of net earnings - employed tourism

 Symmetric Measures

			Approximate	
		Value	Significance	
Nominal by	Contingency	.755	.014	
Nominal	Coefficient			
N of Valid Cases		12		

Source: Results obtained with SPSS.

The chi square test value, lower than 0.050 (0.014) shows a representative connection between the net salary level and the number of employees in tourism. The contingency coefficient value (0.755) shows that the link is strong, significant intensity.

In Table 6, we present the results obtained from the SPSS questionnaire on the link between the demand on the tourism market and the existing tourist offer.

Table 6. Tourism demand - touristic offer correlation Symmetric Measures

Value	Significance
.808	.032
12	
	.808

Source: Results obtained with SPSS.

The chi square test value, lower than 0.050 (0.032) shows a representative connection between the tourism demand and the touristic offer. The contingency coefficient value

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(0.808) shows that the link is strong, significant intensity.

In Table 7, we present the results obtained from the interrogation in the SPSS program, regarding the link between the demand registered on the tourism market and the level of registered earnings.

 Table 7. Correlation of net earnings - tourist demand

 Symmetric Measures

		Approximate
	Value	Significance
Contingency	.617	.289
Coefficient		
	12	
	0 ,	Contingency .617 Coefficient

Source: Results obtained with SPSS.

The chi square test value, bigger than 0.050 (0.617) shows that there is no significant relationship between the two variables analyzed.

#### CONCLUSIONS

In the first part of this paper I presented theoretical aspects taken from the literature, both national and international, on tourism and its importance in a healthy economy, the force work and various links highlighted between them. I also described the Romanian Danube area and the counties included in this area, those of interest for the present work.

Analyzing the statistical data on the descriptive indicators for the labor market (total population, tourism working population, unemployment rate, monthly net earnings), as well as tourism indicators of the areas of interest (existing tourist capacity, number of tourists arrivals), we highlighted their dynamics and the degree of development of each county.

It is noted that, taking into account the abovementioned aspects, the Bucharest/ Ilfov region is remotely the most increased area, with the highest percentage of the active population present, in general, the lowest unemployment rate and the highest rate of occupying tourist capacity. This is explicable because Bucharest is a european capital, it is normal that the values analyzed are higher in its territory. Another county that is close to the values

registered in the first analyzed region is Constanta. It is known that in this county is found the seaside area of our country, which attracted a number of approximately 1 235 542 tourists in 2017, a growing number. Caraş Severin county presents an interesting situation as well as proof that a more developed tourism segment can have positive effects on the people living standard. The identified unemployment rate was 2.2% in 2016, compared with 9% (2010) or 4.2% (2015). This is due to a touristic activity, in the year 2017 a number of 191 968 people visited this county, almost double the value recorded in Tulcea county, a county which is still representative for the Danube area of our country.

In the last part of the paper, we presented the results obtained in the SPSS program, as a result of codification, introducing and analyzing them, elaborating five hypotheses regarding the obtained results. Following the results of the chi square test and the coefficients of the contingency coefficient, we state the following:

-An increased tourism capacity can affect the number of people who are working in the tourism domain; (hypothesis 1 confirmed)

-An increased tourism capacity can affect the unemployment rate; (hypothesis 2 confirmed) -The net salary amount of the employees in the tourism sector influences the population's decision to work or not in this field; (hypothesis 3 confirmed)

-The demand registered for tourism influences the registered offer; (hypothesis 4 confirmed)

-Tourism demand does not affect the wage earning of the population in this area. (hypothesis 5 denied).

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