

CHARACTERISTICS AND SPECIFICITIES OF THE DEVELOPMENT OF TOURISTIC RECEPTION ESTABLISHMENTS AND THE EXISTING ACCOMMODATION CAPACITY IN TERRITORIAL PROFILE IN ROMANIA, DURING 2002 - 2012. AN ECONOMETRIC APPROACH

MARIAN ZAHARIA

Professor PhD,

Petroleum-Gas University of Ploiesti

marianzaharia53@gmail.com

Abstract: *The economic evolutions in Romania, in the first decade of the XXI century, were marked by increases and decreases with rather large amplitudes. Growth period up to 2008 was followed by a significant recession, the economic crisis started in 2009 having implications in the all economic sectors. After 2011 the economy starts to recover so that we are witnessing a new process of growth. The tourism, industry of the national economy, has perceived the economic crisis also. The number of touristic reception establishment and the existing accommodation capacity has recorded regresses. Both during growth and during the economic crisis, at the regional level, the developments differ significantly. This paper, based on statistical and econometric analysis, highlights the characteristics and peculiarities of the ways in which evolved the indicators of tourism supply of accommodation, both at the macro-regions and development regions of Romania, during the period 2002 2012.*

Keywords: *regional development, existing accommodation capacity, touristic reception establishment, regression, correlation, statistical tests*

JEL classification: C10, C51, L83, R11

1. Introduction

Economic developments, the growth of the leisure time, the increase of the individual's incomes are only a few factors that favor the development of tourism. In Romania, „the social-economic national development strategy on medium term regards tourism as a priority sector, being considered that it is capable of contributing with an important weight in Romania's launching and economic straight” (Gogonea R.M., 2009).

Also, among the factors that influence supply and thus increased demand for travel both in Romania and, especially in the development regions, is favored by Increase of the knowledge and education level. Considering that tourism products are not transportable in informing on offer, and purchased, the Internet plays a vital role. Unfortunately, there are still development regions in which “poor development of information infrastructure is a major obstacle in the development of any e-work activities basically would prevent optimal exhibition. On the other hand, have not made significant investments in this sector” (Enachesu D., 2013).

Development of a sustainable tourism, long term, and ensure exploitation of natural and anthropogenic resources, of all development regions should start “from the early stages which deal with the projection and the construction of the technical-material base, with the purpose of harmonizing with the environment, the local community or other sectors of the economy, and continues during the development of the touristy activities” (Gogonea R.M., 2009).

The tourism development and its necessary infrastructure must be conducted in close connection with the protection and environmental conservation. This is unanimously recognized and the green tourism concept currently gaining increasingly more adherents. It “is one of the recently entered words in our vocabulary, and which, is used increasingly more often”, being “tourism that does not harm nature.” (Răbonțu C.I. & Babucea A.G., 2011)

Starting from the idea of tourism as one of the sectors to support the Romanian economy in recovery, Răbonțu & Vasilescu highlight factors that natural tourism potential of Romania “this is not the only element used to solve this premise of economic recovery, and there are other issues to be considered, still not resolved, even if they are obvious and extremely important for tourism development so as to hold up the economy” (Răbonțu C.I & Vasilescu M. , 2012).

Tourism development, the supply of accommodation capacity in Romania, both in ensemble and especially at the local level, in the eight development regions “might have higher achievement if they had promoted a policy

favorable to the Government, a climate conducive to business-offering investment incentives marketing and promoting sustained and effective, but also policies that comply with the environment and local culture” (Babucea A.G. & Bălăcescu A., 2012).

For the analysis of the accommodation supply of tourism industry, in the four macro-regions in Romania, were considered two indicators: the number of touristic reception establishments with functions of touristic accommodation and the existing accommodation capacity.

The data series used in the paper are taken from Eurostat Data Base (<http://epp.eurostat.ec.europa.eu>). Data processing was performed using Excel (Oprea C. & Zaharia M., 2011), and analysis, development and testing of the econometric models was performed using SPSS (Jaba E. & Grama A., 2004)

2. Comparative analysis of the evolution of the number of touristic reception establishments with functions of touristic accommodation in Romania and UE28, from 2002 to 2012

In the period under review the number of touristic reception establishments at UE28 was growing. Around it there were oscillations due to the characteristics of economic development as a whole. During 2002 - 2007 the annual rates of evolution in the number of touristic reception establishments were registered two peaks in 2004 (2.7%) and 2006 (4.3%), and two minima, in 2005 (-0.8%) and 2007 (0.1 %). In 2008 and 2009 recorded significant increases of 4% and 7.6% respectively in 2010 the economic crisis is reflected by a reduction in the growth rate of the number establishments of tourists reception, which dropped to 1.2% in 2011, its annual growth rate becomes negative (-1.4%), a total of 6559 of establishments of tourists reception shutting down. This negative impact is very short, however, in 2012, the registered number of 70417 new establishments of tourists reception, registering an annual rate of 14.8%.

In Romania, the number of touristic reception establishments evolved relatively different up to 2006 recorded annual rates much higher than in UE28. Thus, if in 2005 the annual rate of evolution of the number touristic reception establishments in UE28 was -0.8%, in Romania this record The Value of 8.4%. A year later, in 2006, was recorded a rate of 11.5%, the highest value recorded in the period. But 2007 brings a significant decline followed over the next two years by annual rates by 4%. The economic crisis has on the tourism industry in Romania, a stronger effect than on UE28, the number of touristic reception establishments decreasing by 4.2%. Although 2012 brings revival their number remains with 103 units less than in 2010.

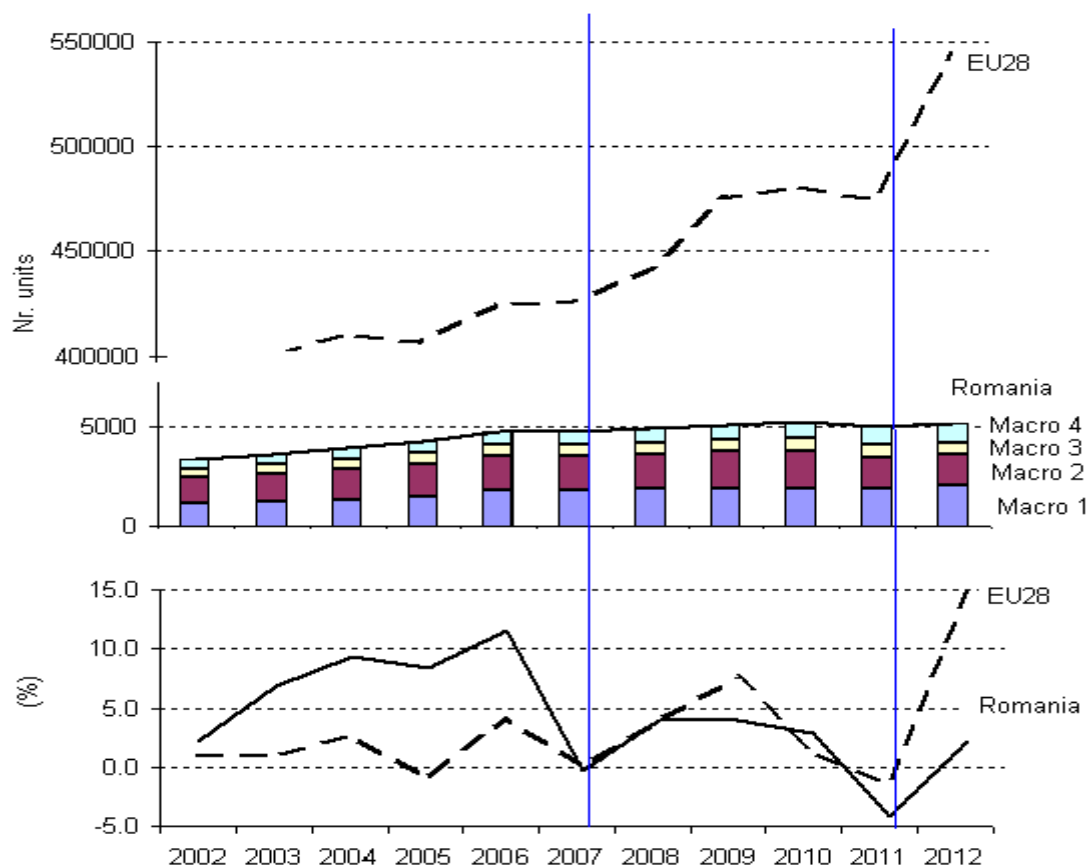


Figure 1 – Evolution of the number and of the annual rates of touristic reception establishments from Romania and UE28 during 2002-2012

To get a more conclusive image on ways in which evolved the number of touristic reception establishments in Romania and UE28 and highlight similarities and differences between these evolutions have been tested several econometric models. The results of evaluations of the validity and of their quality are shown in Table 1.

After analyzes and tests performed to describe the time evolution of the number of touristic reception establishments of UE28 (TRE_{EU28}) were chosen two models, one linear (1) and one exponential (2):

$$TRE_{EU28}(t) = 26108 + 12868 \cdot t \quad (1)$$

$$TRE_{EU28}(t) = 372108 \cdot e^{0.28408 \cdot t} \quad (2)$$

Both models are valid ($Sig.F = 0.0000 < \alpha = 0.05$). Also, from the application of test $t - statistic$, the coefficients of both models are statistically significant. Since $R Squared$ value corresponding to the model (2) is greater than that of the model (1) was chosen model (2) to describe the evolution of the number of touristic reception establishments in UE28.

In Romania, the mode of evolution of the number of touristic reception establishments (TRE_{RO}) is different from that in UE28. After several tests have been identified, also in Romania, two models available, one linear (3) and one power (4):

$$TRE_{RO}(t) = 3405.8 + 185.9 \cdot t \quad (3)$$

$$TRE_{RO}(t) = 3233.8 \cdot t^{0.204} \quad (4)$$

Taking into account, on the one hand the values of $R Squared$, and the shape of evolution (Figure 1) for a description of the development of tourist reception establishments in Romania, was chosen model (4).

Table 1 - Models of the evolution of the number of touristic reception establishments in Romania and EU28

Dependent variable	Method	Regression statistics		Analysis of variance		Var	B	t	Sig.t
EU28	LINEAR	Mult.R	.929	F	56.54	TIME	12868	7.52	.0000
		R Sq.	.863	Sig. F	.0000	(Cons.)	366108	31.54	.0000
	EXP.	Mult.R	.943	F	72.38	TIME	.028408	8.51	.0000
		R Sq.	.889	Sig. F	.0000	(Cons.)	372108	8.51	.0000
ROMANIA	LINEAR	Mult.R	.933	F	61.47	TIME	185.9	7.84	.0000
		R Sq.	.872	Sig. F	.0000	(Cons.)	3405.8	21.17	.0000
	POWER	Mult.R	.977	F	193.32	TIME	.204	13.90	.0000
		R Sq.	.955	Sig. F	.0000	(Cons.)	3233.8	39.11	.0000

In ones presented so far we have analyzed the touristic reception establishments overall. As is known in the category of touristic reception establishments includes hotels and motels, hostels, touristic inns, touristic chalets, campings, touristic villas, bungalows, camps, touristic boarding houses, agro-touristic boarding houses, touristic halting places, holiday villages and ships accommodation spaces. Of these, due to the number of accommodation places as well as particularities of their largest share have hotels and similar accommodation units. Given these considerations, it was analyzed the evolution of their number, in Romania and in UE28.

As can be seen from Figure 2, the evolution of the number of hotels and similar accommodation differs significantly from the of touristic reception establishments as a whole (Figure 1) both in UE28 and in Romania. In the UE28, except for a decrease around 2005 by 5.23%, the number of hotels and similar accommodation remained almost constant.

In Romania, the number of hotels and similar accommodation in the period 2002 - 2010, has steadily increased, with annual rates ranging from a maximum 14.3% in 2006 and a minimum of 0.9% in 2007. Note that except for 2007, annual rates were over 3%. In Romania, the economic crisis has had a significant impact on the number of hotels and similar accommodation, their number decreasing dramatically from 4724 units in 2010 to 2216 units in 2012 (a decrease of 51.95%).

A conclusion which is drawn here is that increasing the number of touristic reception establishments in UE28 during the analyzed period due to the increase in the number of establishments other than hotels and similar accommodation, which highlights a reorientation of the customer demand towards those that offer a closer integration with the nature (touristic boarding houses, agro-touristic boarding houses, touristic villas, holiday villages etc). In Romania, this reorientation of tourism demand is still at the beginning stage.

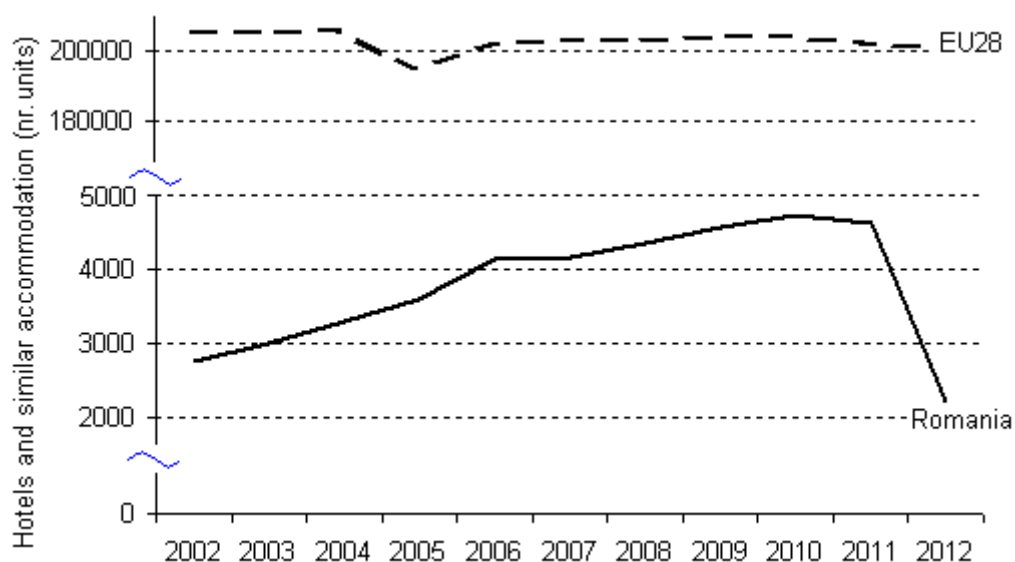


Figure 2 – The evolution of the number of hotels and similar accommodation in Romania and UE in the period 2002 - 2012

3. Evolutions of number of touristic reception establishments in Romania, at the macro-regions level, during 2002 - 2012

In Romania, as shown above (Figure 1), the annual rates of evolution in the number of tourist accommodation establishments have evolved from a maximum of 11.5% recorded in 2006 and a minimum of -4.2% in 2011, the range being 15.7 percentage points.

At the macro-level development, annual rates (Figure 3) had values between 19.9% recorded in 2006 in Macro 1 and a minimum of -18.6% in 2011 Macro 2, the range being of 38.5 percentage points, 2.45 times higher than in Romania. This is owed to the fact that at certain stages, the evolutions of values of touristic reception establishments was in antiphase.

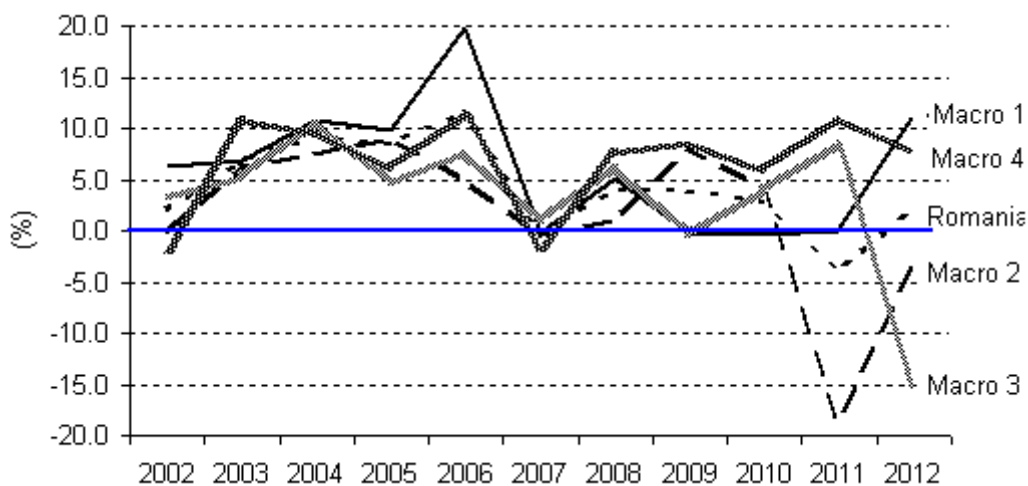


Figure 3 - The evolutions of annual rates of the number of touristic reception establishments with functions of touristic accommodation, at the macro-level, during 2002-2012

As can be seen from Figure 3, there are three periods in which the amplitudes of evolution annual rates differ significantly: 2005-2007, 2008-2009 and 2011-2012.

The period 2005 - 2007 is characterized by a significant increase of the disparities between the four macro-region of Romania, between 2005 and 2006, followed by a process of decline and convergence to a level very close to 0. In 2005, the range of the values of annual rates was 5.2 percentage points (between 4.7% in Macro_3 and 9.8% in the Macro_1), at Romanian level the average being 8.4%. In 2006 it reached 14.6 percentage points (between 5.1% in Macro_2 and 19.9% in the Macro_1), at Romanian level the average being 11.5% (the highest in the entire period under analyzed). In 2007 we are witnessing a collapse of the values of annual rates, and a negative convergence (-0.3% at Romanian level). The pperiod 2008 - 2009, in Romania, seems a period of stability, the rate of the tourist reception establishments maintaining constant to 4%.

However, this level is determined by the antiphase evolutions at macro-regions level. In 2007, while in Macro_4 was registered a 7.6% rate, in Macro_2 its value was only 0.9%. A similar situation is recorded in 2009, the values of of annual rates ranging from 8.6% in Macro_1, and -0.3% in Macro_3.

The greatest disparity in the evolution of the number of touristic reception establishments with functions of touristic accommodation is recorded in the period 2011 - 2012, the economic crisis manifesting differently at territorial level. The ranges of the values of annual rates, at the macro-regions level in 2011 and 2012 were 29.6 and, respectively, 26 percentage points, while at the level of Rumania, in 2011 the annual rate was to -4.2%, and in 2012, was to 2.2%. This situation is due to the antiphase evolutions recorded in Macro_2 and Macro_3. Thus, while in Macro_2 in 2012 the annual rate increased by 14.9 percentage points (from -18.6% in 2011 at the -3.7% in 2012), in Macro_3 it fall by 23.6 percentage points (from 8.5% in 2011 to -15.1% in 2012).

To highlight other features of the ways in which the number of touristic reception establishments has evolved at macro-regions level and to identify similarities and differences between their evolutions, and ones registered at Romanian and UE28 level, were tested four types of econometric models (linear, polynomial of degree 2, power and exponential) in each macro-region.

For Macro_1, the results of the validity test , as well as the performance indicator values, taking into account, are shown in Table 2. The models are:

$$Macro_1(t) = 1131.24 + 67.16 \cdot t \tag{5}$$

$$Macro_1(t) = 910.41 + 188.09 \cdot t - 8.49 \cdot t^2 \tag{6}$$

$$Macro_1(t) = 1073.5 \cdot t^{0.22587} \tag{7}$$

$$Macro_1(t) = 1160.7 \cdot e^{0.556} \tag{8}$$

All of the four models are valid ($Sig.F = 0.0000 < \alpha = 0.05$). Also, after applying the test $t - statistic$, the coefficients of these models are statistically significant ($Sig.t < \alpha = 0.05$). Given that the value of $R Squered$ corresponding to model (6) is higher than the corresponding values of the other, it could be chosen to describe the evolution of touristic reception establishments in Macro_1. However, given that the model (6) is a polynomial function of degree 2 with pointing up ($\frac{d^2 Macro_1(t)}{dt} < 0$), whose maximum

$\frac{-\Delta}{4 \cdot (-8.49)} \approx 1951$ units is achieved in 2012, after which the model (6) has the decreasing values, was

chosen model (7), which also provides a good approximation of the evolution of the number of touristic reception establishments in analyzed period, but the model is increasing monotone.

Table 2 - Models of the evolution of the number of touristic reception establishments in Macro_1

Dependent variable	Method	Regression statistics		Analysis of variance		Var	B	t	Sig.t
Macro_1	LINEAR	Mult.R	.936	F	64.31	TIME	86.17	8.020	.0000
		R Sq.	.877	Sig. F	.0000	(Cons.)	1131.24	15.52	.0000
	QUADR	Mult.R	.971	F	67.05	TIME	188.09	5.52	.0006
		R Sq.	.943	Sig. F	.0000	TIME**2	-8.49	-3.07	.0153
						(Cons.)	910.41	10.24	.0000
	POWER	Mult.R	.966	F	129.47	TIME	.2587	11.38	.0000
		R Sq.	.935	Sig. F	.0000	(Cons.)	1073.5	25.24	.0000
	EXP.	Mult.R	.924	F	53.16	TIME	.0556	7.29	.0000
		R Sq.	.855	Sig. F	.0000	(Cons.)	1160.7	19.34	.0000

To Macro_2, the results of their validation testing, as well as the values of performance indicator , taking into account, are shown in Table 3. As can be seen, given the chosen significance level ($\alpha = 0.09$), the linear model (for that $Sig.t = 0.0664 > \alpha = 0.05$), and the exponential model (for that $Sig.t = 0.0585 > \alpha = 0.05$) are not valid, and therefore they can not be considered.

To Macro_2 the valid models are

$$Macro_2(t) = 1060.87 + 201.77 \cdot t - 14.08 \cdot t^2 \tag{9}$$

$$Macro_2(t) = 1337.81 \cdot t^{0.2092} \tag{10}$$

After applying the *t* – statistic test, the coefficients of models (9) and (10) are statistically significant (*Sigt* < $\alpha = 0.05$). Given *RSq* = 0.943 value corresponding to the model (9), which is much higher than the corresponding values of the model (10), and the evolution of annual rate of the number of touristic reception establishments with functions of touristic accommodation, was chose the model (9), for Macro_2 .

Tableful 3 - Models of the evolution of the number of touristic reception establishments in Macro_2

Dependent variable	Method	Regression statistics		Analysis of variance		Var	B	t	Sig.t
Macro_2	LINEAR	Mult.R	.571	F	4.35	TIME	32.76	2.088	.0664
		R Sq.	.326	Sig. F	.0664	(Cons.)	1427.05	13.408	.0000
	QUADR	Mult.R	.971	F	10.88	TIME	201.77	5.001	.0011
		R Sq.	.943	Sig. F	.0092	TIME**2	-14.08	-4.301	.0026
						(Cons.)	1060.87	10.070	.0000
	POWER	Mult.R	.739	F	129.47	TIME	.1177	3.300	.0092
		R Sq.	.547	Sig. F	.0000	(Cons.)	1337.81	16.087	.0000
	EXP.	Mult.R	.585	F	4.69	TIME	.02092	2.166	.0585
		R Sq.	.342	Sig. F	.0585	(Cons.)	1423.05	15.264	.0000

In the case of in Macro_3, all four types of models are statistically valid (Table 4). Their forms are:

$$Macro_3(t) = 442.27 + 20.45 \cdot t \quad (11)$$

$$Macro_3(t) = 347.81 + 51.58 \cdot t - 2.59 \cdot t^2 \quad (12)$$

$$Macro_3(t) = 432.421 \cdot t^{0.1759} \quad (13)$$

$$Macro_3(t) = 447.44 \cdot e^{0.03745} \quad (14)$$

From the point of view of the values of *RSquared*, the models (12) and (13) have similar performance, but better than the model (11) and (14). Taking into account the evolution of annual rates of the number of touristic reception establishments in Macro_3 shown in Figure 3, the model (12) better describe its evolution. Moreover, the model (12) has the highest value of the degree of determination (*RSq.* = 0.897).

Tabele 4 - Models of the evolution of the number of touristic reception establishments in Macro_3

Dependent variable	Method	Regression statistics		Analysis of variance		Var	B	t	Sig.t
Macro_3	LINEAR	Mult.R	.893	F	35.51	TIME	20.45	5.959	.0002
		R Sq.	.797	Sig. F	.0002	(Cons.)	442.27	18.998	.0000
	QUADR	Mult.R	.947	F	35.18	TIME	51.58	4.521	0.0019
		R Sq.	.897	Sig. F	.0001	TIME**2	-2.59	-2.801	.0232
						(Cons.)	374.81	12.580	.0000
	POWER	Mult.R	.944	F	73.94	TIME	.1759	8.599	.0000
		R Sq.	.891	Sig. F	.0000	(Cons.)	423.421	28.053	.0000
	EXP.	Mult.R	.894	F	36.15	TIME	.03745	6.013	.0002
		R Sq.	.800	Sig. F	.0002	(Cons.)	447.44	23.670	.0000

Finally, to Macro_4, the characteristics of the four types of models are shown in Table 5. Given the values of *RSquared*, all four types of models are valid and provide a good approximation of the evolution of the number of touristic reception establishments Macer_4. Their forms are:

$$Macro_4(t) = 405.24 + 46.582 \cdot t \quad (15)$$

$$Macro_4(t) = 452.38 + 24.819 \cdot t + 1.813 \cdot t^2 \quad (16)$$

$$Macro_4(t) = 419.28 \cdot t^{0.2933} \quad (17)$$

$$Macro_4(t) = 442.94 \cdot e^{0.0686} \quad (18)$$

Of these models, the highest value of the coefficient of determination have the models (16) and (18) that $R Sq. = 0.985$. Of this model was chosen (18) because the values of $Sigt$, corresponding to it, are lower than those for the model (16).

In view of the presented here, we conclude that in terms of the evolution of the number of touristic reception establishments with functions of touristic accommodation, the Romanian macro-regions can be grouped into two groups.

A first group consists of Macro_1 and Macro_4, is characterized by increasing trends, the models which are selected for they being of power type (7) in the case of Macro_1, the same type of model identified at Romania level(4), respectively, of type exponentially (18), in the case of Macro_4, the same type of pattern identified at the UE28 level (2).

Tabele 5 - Models of the evolution of the number of touristic reception establishments in Macro_4

Dependent variable	Method	Regression statistics		Analysis of variance		Var	B	t	Sig.t
Macro_4	LINEAR	Mult.R	.986	F	335.39	TIME	46.582	18.314	.0000
		R Sq.	.973	Sig. F	.0000	(Cons.)	405.24	23.490	.0000
	QUADR	Mult.R	.992	F	269.61	TIME	24.819	2.788	.0236
		R Sq.	.985	Sig. F	.0000	TIME**2	1.813	2.510	.0364
						(Cons.)	452.38	19.464	.0000
	POWER	Mult.R	.953	F	89.1	TIME	.2933	9.439	.0000
		R Sq.	.908	Sig. F	.0000	(Cons.)	419.28	18.469	.0000
	EXP.	Mult.R	.992	F	606.31	TIME	.0686	24.623	.0000
		R Sq.	.985	Sig. F	.0000	(Cons.)	442.94	52.897	.0000

The second group consists of Macro_2 and in Macro_3. Their evolution is characterized by upward trends up to a maximum of about 1,800 units in 2008-2009 in the case of Macro_2 and about 610 units in 2011, in the case of Macro_3, followed by downward trends.

4. Evolutions of existing accommodation capacity at macro-regions level, during 2002 - 2012

Existing accommodation capacity in touristic reception establishments in Romania had until 2010 an upward trend with an average annual increase of 2158 places. But evolution was not linear. Annual rates increased from 0.37% in 2003 to 2.63% in 2005 and then decrease to -1.2% in 2007, followed by an increase in 2008 (3.7%), and a period of stability around value of 2.9% in 2009 and 2010.

The consequences of the economic crisis triggered in 2009, is manifested particularly strongly in 2011, when, the existing accommodation capacity decreases by 33195 places as compared to 2010. Although 2012 brings a revival of tourism, the existing accommodation capacity, although increases by 6985, barely reaches the level from 2006.

As in the case of tourists reception establishments, at territorial level, the existing accommodation capacity evolutions are different, so that trends and structurally. In terms of trends, (figure 4) these are similar to those recorded by touristic reception establishments, including grouping them in the two categories.

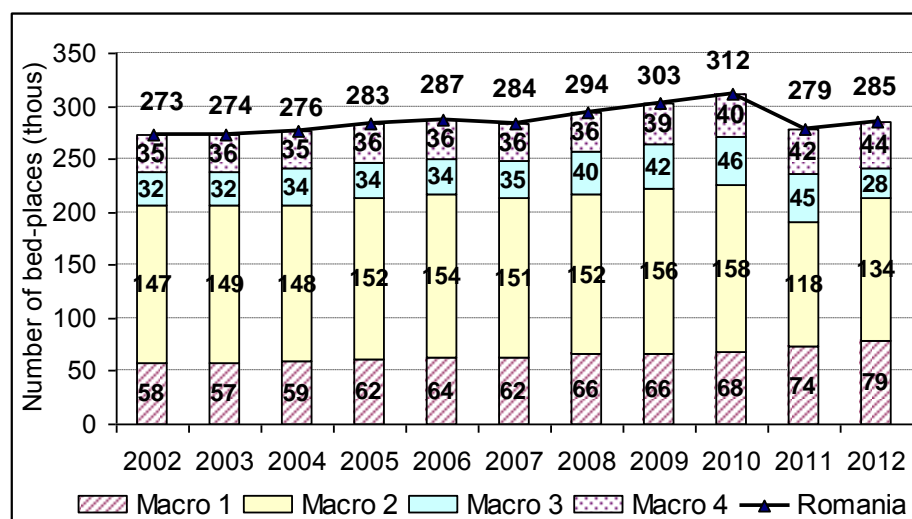


Figure 4 - Evolution of existing accommodation capacity, at the macro-regions level, in the period 2002-2012

In terms of territorial distribution of existing accommodation capacity, there are some differences., specially in the crisis period Thus, in 2002, of the 272596 available places in Romania, 54% of them there were in Macro_2, 21%, in Macro_1, 13%, in Macro_4, and 12% in Macro_3. No in growth period 2002 - 2006, nor in the decline from 2007, the territorial distribution of existing accommodation capacity does not change significantly. In the period 2008-2010 occur from this point of view some changes. In 2010, while the proportion of existing accommodation capacity in Macro_2 decreased by 4 percentage points in Macro_3 their percentage increased by 3 percentage points at the 15%, outpacing the percentage recorded in the Macro_4 (13%). The percentage of existing accommodation capacity, in Macro_1, had grown with a 1 percentage point since 2006.

Economic crisis effects are, in case of the territorial distribution of existing accommodation capacity significantly. While in Macro_2, their share falls in 2011 to 42% in the other macro-region are registered increases, reaching to 27% in Macro_1, to16% in Macro_3, and to 15% in Macro_4. Except Macro_1, the increases in percentages in Macro_3 and Macro_4 are not determined by a real increase of existing accommodation capacity in them, but are the result of more pronounced decrease in the existing accommodation capacity in Macro_2.

The year 2012 also brings significant changes. Due to the reduction of existing accommodation capacity, in Macro_3 on the one hand, and its growth in other macro regions, the percentage of existing accommodation capacity in Macro_3 drops to 10%, while in the other are registered increases reaching to 46% in Macro_2, to 28 Macro_2 and to 16% in the Macro_4.

5. Evolutions of the number of touristic reception establishments and the existing accommodation capacity in the development regions, during 200 – 2012

The way evolved, in the analyzed period, the number of touristic reception establishments with functions of touristic accommodation and existing accommodation capacities in the four macro-regions in Romania were determined, in their turn by the evolutions of these indicators in the eight development regions of Romania.

The evolutions of the number of touristic reception establishments with functions of touristic accommodation in developing regions of Romania during the analyzed period are shown in Figure 5. From the viewpoint of territorial distribution, in 2002 most touristic reception establishments were in the South East (1014 units), representing 30% of the total in Romania. In second place with 24%, was Center region, followed by the regions South-Muntenia and North-West (10%), and by the regions West and North-East (9%). In the last places were the regions South-West (5%) and Bucharest-Ilfov (3%).

Between 2002 and 2010 there was a general trend of growth. But, it has manifested differently from one region to another. Thus, while in the development regions North-West and North-East the annual rates of evolution of existing accommodation capacity were positive all the period, in the other, the periods of growth alternating with periods of decline. Significant, in this respect, are the evolutions from the development regions Center, South West and West.

In Center region, after a growth rate by 23.2% recorded in 2006, its value becomes negative in 2007 (-1.1%), followed by an increase (4.9% in 2008) and regress (-4.8% in 2009 and -1.6% in 2010), this region being the only region in which in 2010 recorded a negative rate. In the South West Oltenia there is an alternation of positive and negative growth rates between 2007 and 2009 from 3.6% in 2007 to -1.5% in 2008 and to 11% in 2009. A similar oscillation but much larger amplitude took place between 2006 and 2008 in the West region, from 12.1% in 2006 to -4.9% in 2007 and to 13.6% in 2008.

After these evolutions, territorial distribution, by region, in the number of touristic reception establishments on the first place is still the South East region with 26%, followed by Central (22%), North West (13%), North East (11%) and West (10%). With a percentage of only 9% South-Muntenia passes from the places 2-3, in 6th place. On the last places remain South West Oltenia (6%) and Bucharest-Ilfov (3%).

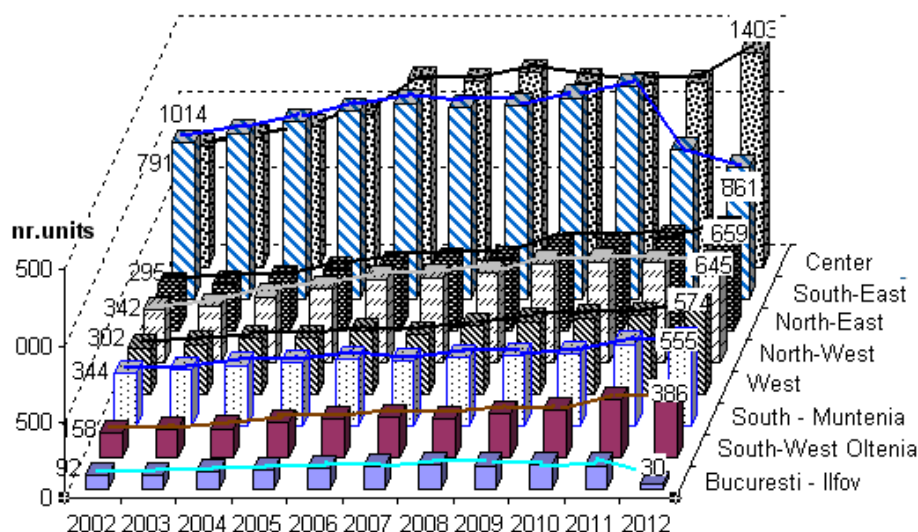


Figure 5 - Evolution of the number of touristic reception establishments with functions of touristic accommodation by the development regions in Romania during 2002-2012

The economic crisis had, on the number of touristic reception establishments in the regions South-East and Bucharest-Ilfov, a powerful impact. In South-West region, the annual rate of evolution of the number of touristic reception establishments with functions of touristic accommodation has register, in 2011, value of -29.7%, and of -11.6% in 2012. Also in Bucharest-Ilfov registered values were -4.9% in 2011 and -80.6% in 2012. In contrast to these, the annual growth in the number of touristic reception establishments, in South-West Oltenia the registered values were 23.6% in 2011 and 2.4% in 2012. Significant positive values were registered in the South-Muntenia, Centre and West.

In 2012 the territorial distribution of touristic reception establishments was: Center (26%), which leads on the first place, South-East (17%), North-East and North-West (13%), West and South-Muntenia (11%), South-West Oltenia (8%) and Bucharest-Ilfov (1%).

Regarding the distribution of existing accommodation capacity by development regions, there is some differences compared with the distribution of touristic reception establishments. The evolutions of existing accommodation capacity by development regions of Romania are shown in Figure 6.

A significant difference to the territorial distribution of touristic reception establishments is recorded in the South-East. Thus while the percentage of the touristic reception establishments in total in Romania was 26% in 2010 and only 17% in 2012, in the region South-East, the percentage of the existing accommodation capacity was 49% in 2002, 45% in 2010 and 39% in 2012, on the second place being, at a great distance, the Central region with 13% in 2002, 14% in 2010 and 17% in 2013. This feature comes from the fact that, in the region South-East. It there is tourist resorts on the Black Sea where the majority of touristic reception establishments with functions of touristic accommodation are much larger than those in other regions.

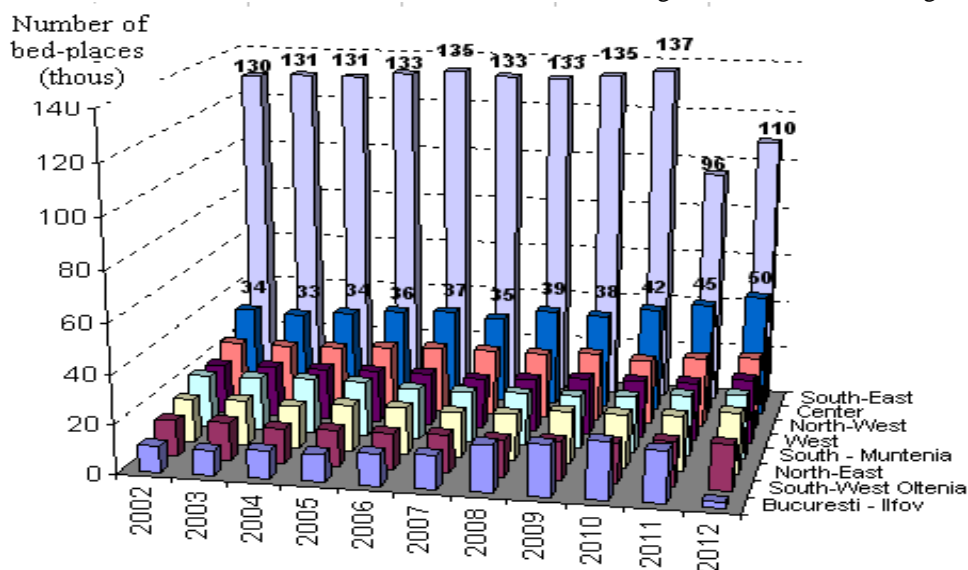


Figure 6 - Evolutions of existing accommodation capacity, by development regions in Romania, during 2002-2012

Finally, analyzing the evolution of the average of existing accommodation capacity per touristic reception establishment, by region, from 2002 - 2012 (Figure 7), except for Bucharest-Ilfov region, we see that there are two trends determined by the type of tourism. In South East the region, where predominantly is the seaside tourism, after a descending process, manifested until 2011, there is a trend of increasing of existing accommodation capacity per tourist accommodation structure, the vast majority of tourists preferring the hotels over 3 stars, with as many services and facilities.

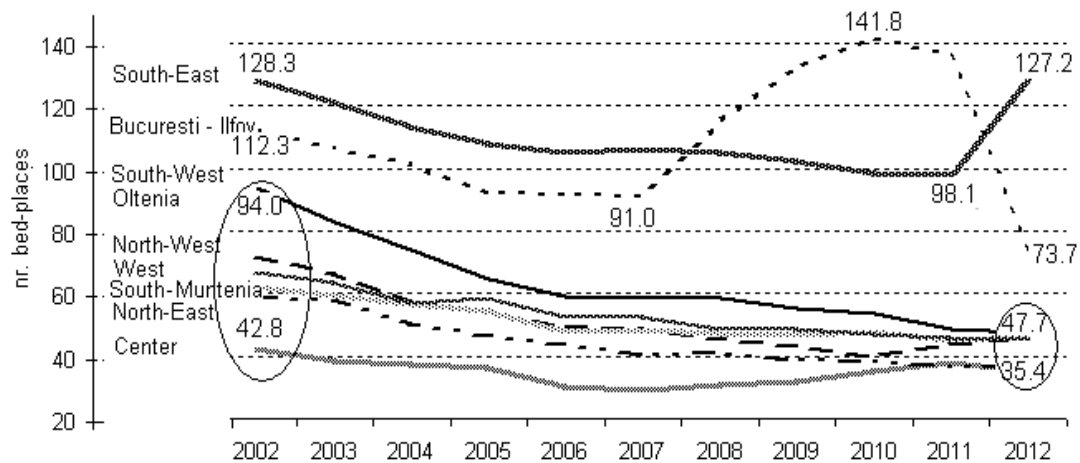


Figure 7 - Evolutions of existing accommodation capacity per tourist accommodation structure, by development regions of Romania, during 2002-2012

Unlike the specific circumstances of the region South-East, in the other six development region, in Romania, in the period under review, there has been a process of convergence. Compared to 2002, when average accommodation capacity per touristic reception establishment was between 42.8 and 94.0 seats, in 2012 it ranged between 35.4 and 47.7 bad-places.

Conclusions

In the analyzed period are significant discrepancies both between the macro regions, and, especially, among the eight development regions of Romania, both in terms of number of touristic reception establishments with functions of touristic accommodation and existing accommodation capacity.

Economic and social processes that have occurred particularly at the local level in Romania, UE28 and not only, caused alternating periods both of increase and decrease of the supply of accommodation, as well as alternating processes of convergence and divergence between the development regions.

In terms of the evolution of the number of touristic reception establishments with functions of touristic accommodation, the Romanian macro-regions can be grouped into two groups: one, consists of Macro_1 and Macro_4, characterized by increasing trends in all the analyzed period, and other, consists of Macro_2 and in Macro_3, characterized by upward trends to a maximum value, followed by downward trends.

Economic crisis effects are significantly, both on the number of touristic reception establishment, and on the existing accommodation capacity and also on the territorial distribution of existing accommodation capacity, So, the greatest disparity in the evolution of the number of touristic reception establishments with functions of touristic accommodation was recorded in the period 2011 - 2012, the economic crisis manifesting differently at territorial level. The ranges of the values of annual rates, at the macro-regions level in 2011 and 2012 were 29.6 and, respectively, 26 percentage points, while at the level of Rumania, in 2011 the annual rate was to -4.2%, and in 2012, was to 2.2%

In the term of the evolution of the average of existing accommodation capacity per touristic reception establishment, by region, have resulted two trends determined by the type of tourism. In South East the region, where predominantly is the seaside tourism there is a trend of increasing of existing accommodation capacity per tourist accommodation structure (100 bad-places and more). On the other hand, in the other six development region (without Bucuresti-Ilfov) there has been a process of convergence to an average of 40 bad-places.

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