

The Economic Contribution of Tourism at Local Level: An Application for Predeal Resort in Romania

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ABSTRACT

In many cases, the measurement of the economic effects of tourism is carried out at national but also at regional level using different methods such as Tourism Satellite Accounts, Input –Output analysis, Computable General Equilibrium model, multipliers. However at local level (resort, town, city, and village) mainly due to some methodological difficulties, the application of these methods is severely limited. Under these circumstances the contribution of tourism to local economies may be outlined by the analysis of the existing statistical data at local level.

This paper aims such an analysis (based on the existing statistical data) customized for one of the most famous tourist resorts in Romania, Predeal located in Brasov county. Choosing this resort is not accidental: unlike other resorts located on Prahova Valley, Predeal did not benefit from a strong industry in the communist period and not even before, so its economic profile from the historical point of view is almost exclusively based on services, in particular tourism services.

A series of statistical indicators that characterize both the Predeal local economy at the sectoral level (number of firms, turnover, average number of employees, labor productivity) and tourism as a distinct activity through specific indicators (the capacity accommodation and food and beverage units, occupancy, number of arrivals, overnight stays, length of stay) will be analyzed. The results obtained show that tourism as an economic activity has a major contribution to the local economy of Predeal.

KEYWORDS

Economic contribution of tourism, local economy, statistics, Predeal Resort

JEL Classification

O12, M19.

Introduction

Usually, the measurement of the economic effects of tourism is carried out at national but also at regional level using different methods such as Tourism Satellite Accounts, Input –Output analysis, Computable General Equilibrium model, multipliers. However at local level (resort, town, city, and village) mainly due to some methodological difficulties, the application of these methods is severely limited.

Moreover, it has to be mentioned that the starting point in measuring the economic benefits of tourism at local level is conditioned by the existence of detailed statistical data regarding tourism expenditures. In many cases these data are not available at local level for a tourist destination. Actually tourism expenditures are usually resulted from a special household survey with national coverage without any breakdown at local level for a tourist destination.

In this respect, the analysis of the contribution of tourism to local economies may be based primarily only on the existing statistical data at local level. In this regard the Predeal resort located in Brasov county, Romania was considered as a case study. It has to be mentioned that unlike other resorts

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located on Prahova Valley, Predeal did not benefit from a strong industry in the communist period and not even before, so its economic profile from the historical point of view is almost exclusively based on services, in particular tourism services.

This kind of analysis (based on the existing data) will reveal some characteristics which can represent a reference point for any local tourist destination in Romania who want to undertake such an analysis.

1. Brief history of Predeal tourist resort

The development of tourism sector in Predeal town is an integral part of the evolution of Romanian tourism, having a tradition for more than one century in this field. Therefore for Predeal resort its tourism profile occurred from late nineteenth century, Predeal standing out in particular as a winter sports resort, the slope Clăbucet being planned for ski ever since 1892 (Babes Bolyai University, 2009). During the interwar period the resort was frequented by many visitors who came here, both for its landscape beauty and the climate benefits. In that period there were already two hotels in town - Predeal and PALACE - six restaurants, a casino restaurant, ballroom, cafeteria and pub, three butchers, a bakery, etc. (Municipality of Predeal town, 2011).

However the resort began a period of more pronounced development after the '60 - '70 when they were built accommodation facilities in all areas of Romania. It is the period when the communist regime has made massive investments in generally large hotel units. For example in 1974 Belvedere Hotel was built in Predeal resort under the name Cioplea Hotel.

After the 90's once the new economic and social changes it meant for the resort a period of readjustment to new realities, which generally resulted in a decline of tourism activities following the national trend. Yet, especially in the last decade, some investments have made especially targeted on increasing the comfort of accommodation facilities or developing new capacities in this field.

2. An analysis based on the existing statistical indicators

The starting point in any economic analysis is the review of the existing statistical indicators. At local level, in Romania the current statistical indicators provided by the official statistics represented by the National Institute of Statistics are relatively limited and could be classified into:

- a) Indicators characterizing local economy:
 - Number of firms;
 - Turnover;
- b) Indicators of employment:
 - Average number of employees;
 - Number of unemployed persons/ Unemployment rate;
 - Labor productivity (as ratio between turnover and number of employees);
- c) Indicators of tourism activity
 - Accommodation capacity (number of units, number of rooms, number of bed-places);
 - Food and beverage capacity (number of units, number of seats);
 - Number of arrivals, overnight stays, length of stay, occupancy rate.

It is important to mention that this classification was made taking into consideration all statistical data sources available at this moment in Romania.

2.1 Local economy

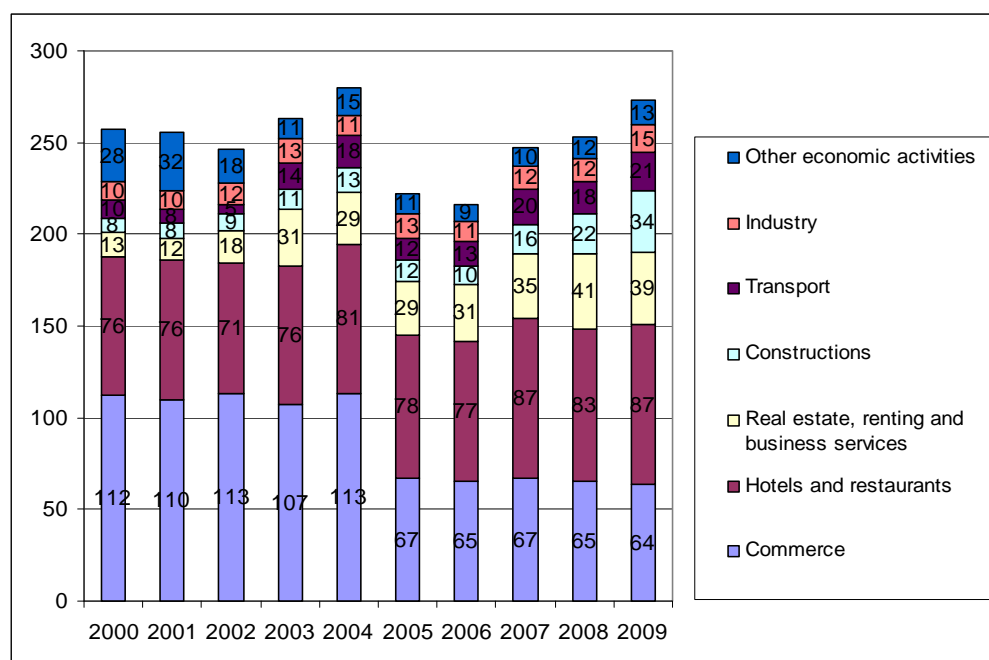
The local economy of Predeal town is mainly concentrated on tourism and some services activities also. It has to be mentioned that excepting some small units activating in Food industry Predeal hasn't been and is not at all specialized in industrial sector currently. This situation is mainly due to the proximity of Brasov city which has had an important industrial profile.

In the period 2000-2009 approximately 250 firms operated in Predeal resort, this number oscillating from year to year: thus their number dropped in the period 2001-2002 and 2005-2006 and increased in the period 2003-2004 and 2007-2009. In 2009 a number of 273 firms operated in Predeal town.

Important for the tourist profile of the resort is the fact that many firms are activating in Hotel and Restaurants industry (87), which is the sector with most active firms. Commerce is the second activity where firms in Predeal are operating, 64 firms activating in this field. The following positions are occupied by Real estate, renting and business services sector (39), Construction (34), Industry (15) and Other economic activities (13).

Analyzing the trend in the period 2000-2009, the construction sector experienced the largest dynamics especially in the period 2008-2009. The same situation, but in a lesser extent applies to Real estate, renting and business services sector. In the same time, there is an involution of firms mainly activating in Commerce especially compared with 2000-2004 period.

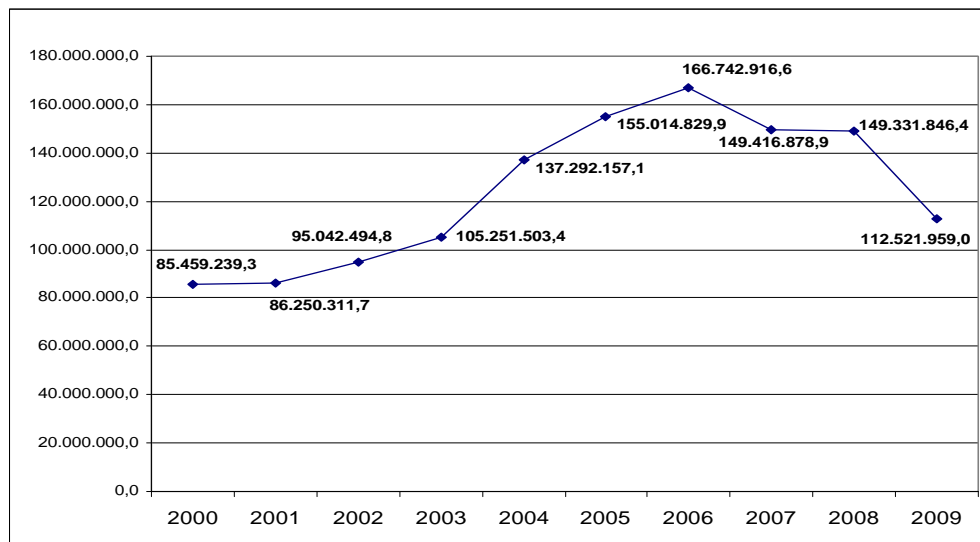
Graph 1: Number of firms by economic activities, Predeal resort, 2000-2009



Source: National Institute of Statistics – Brasov County Division of Statistics, *processed data*

The analysis of total turnover of businesses operating in Predeal shows to some extent the size of local economy. During 2000 – 2009 there are basically two major trends of this indicator, a robust increase until 2006 followed by a decrease in the period 2007-2009. Thus after an intensive increase in the period 2004 - 2006, the maximum level of local economy reached in 2006, e.g. a total turnover of RON 166,742,916.6 and was followed by a more pronounced decline in the value of turnover especially in 2009 when the value of turnover reached RON 112,521,959.0 less than the value recorded in 2003. This is a direct consequence of the economic crisis that strongly hit Romania including also Predeal resort.

Graph 2: Total turnover of businesses in Predeal resort, 2000 – 2009 (RON, constant prices*)

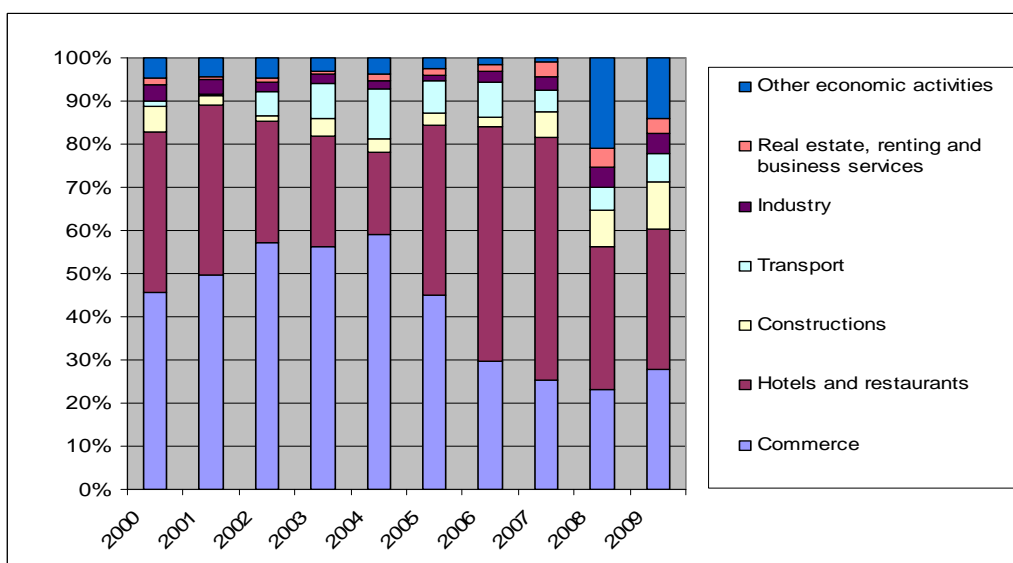


Source: National Institute of Statistics – Brasov County Division of Statistics, *processed data*

* - constant prices for year 2009; the deflation has being made using consumption price index.

Carrying a strong tourism and services activity in Predeal resort is demonstrated also by analysis of aggregate turnover percentage distribution of businesses that operate in Predeal resort. Thus in the period 2000-2009 it could be seen a strong concentration of turnover in the two sectors Commerce and Hotels and Restaurants. In the period 2000-2007 the cumulated share of these two sectors is over 80% and for the period 2008-2009 the share dropped to 50-60%. It is important to mention that starting with 2006 most of the turnover of the firms in Predeal was concentrated in Hotels and Restaurants sector, which shows undoubtedly the major economic role of tourism in the resort. In 2008 and 2009 also it has to be noted an increase of the share of Construction sector in total turnover of the resort. The same thing is true for the residual category <Other economic activities>.

Graph 3: Turnover percentage distribution by economic activities, Predeal resort, 2000-2009



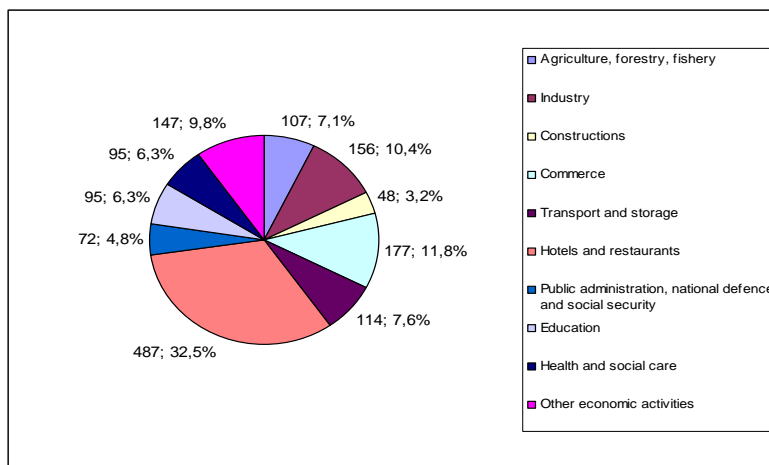
Source: National Institute of Statistics – Brasov County Division of Statistics, *processed data*

2.2 Employment

In 2009 in Predeal resort the average number of employees was 1,498. Most of them were employed in the activity Hotels and Restaurants respectively 487 employees representing 32.5% from the total number of employees. Commerce ranks second with 177 employees representing 11.8% of the total number of employees. The following positions are occupied by Industry (10.4%), Transport and storage (7.6%) and Agriculture, forestry and fishery (7.1%). Lower shares have Education (6.3%), Public administration, national defense and social security (4.8%) and Constructions (3.2%)

The fact that Hotels and Restaurants ranks first is not surprisingly as tourism is a very human resources intensive industry.

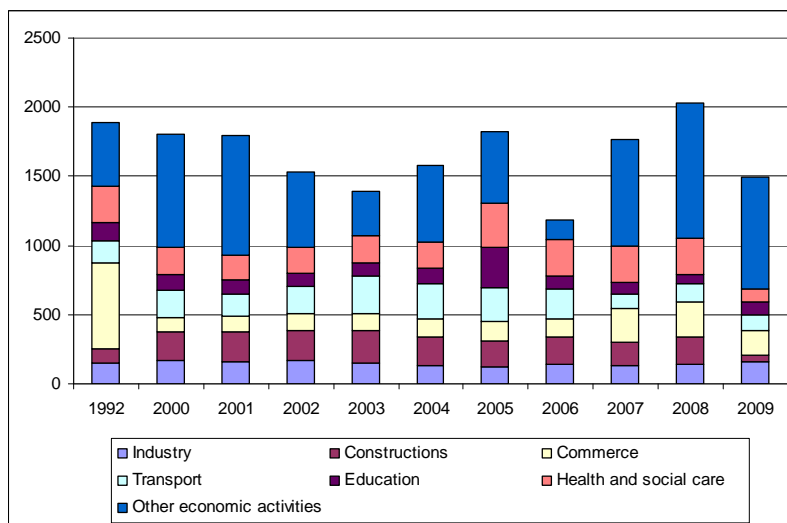
Graph 4: Average number of employees by economic activities, Predeal resort, 2009



Source: National Institute of Statistics – Brasov County Division of Statistics, *processed data*

It is interesting to see also the evolution of the breakdown of the number of employees in 1992 and the period 2000-2009. Overall, an oscillatory trend can be seen, notably the fact that the peak period was in 2008 with over 2,000 the maximum number of employees, after a steady increase which began in 2007 compared with previous years. Unfortunately in 2009 a reduced number of employees were registered. This led in a reduction of the employees especially in Constructions and social security sectors. In contrast, the number of employees in Industry was not too much impacted.

Graph 5: The breakdown of number of employees by economic activities, 1992, 2000-2009



Source: National Institute of Statistics – Brasov County Division of Statistics, *processed data*

Other indicator characterizing labor force is number of unemployed persons and unemployment rate. Number of unemployed persons is rather low in the period 2005-2008 and in 2009 and 2010 a slightly increase can be observed. As a consequence the unemployment rate recorded low values in the period of 2005-2008 and in 2009 a higher rate of unemployment of 3.3% was registered which further increased at 4.1% in 2010. However these values are far below the level registered at Brasov county level (7.2% in 2010) and national level (7% in 2010). Consequently one could conclude that unemployment is not an issue in Predeal resort.

Table 1: Number of unemployed persons and unemployment rate in Predeal town, 2004 - 2010

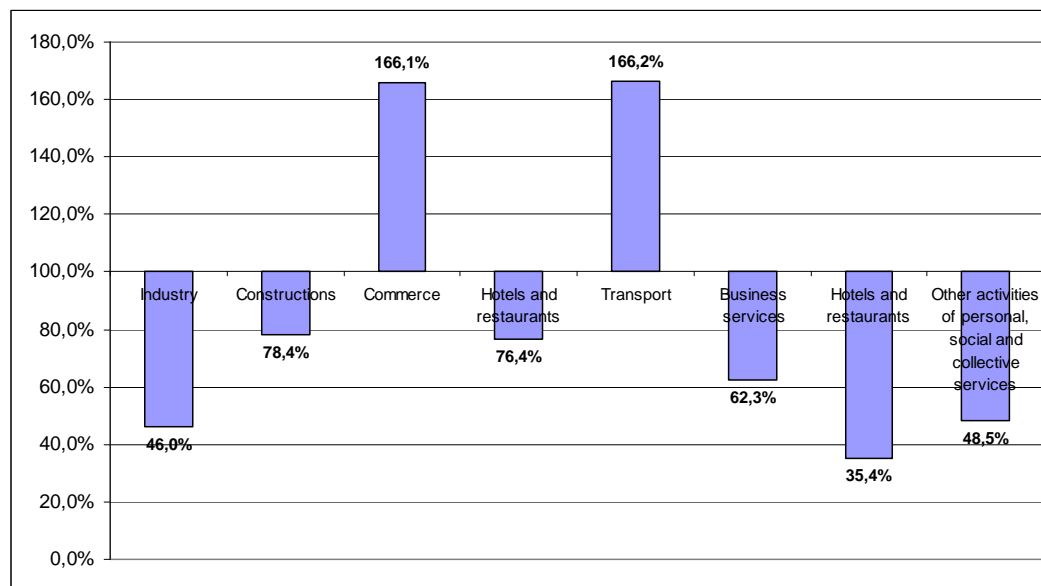
Indicator/Year	2004	2005	2006	2007	2008	2009	2010
Number of unemployed persons (at the end of the year)	111	48	34	16	23	86	105
Unemployment rate (at the end of the year) - % (estimative data)	4,3	1,9	1,3	0,6	0,9	3,3	4,1

Source: National Agency of Employment Brasov, 2011

By dividing the value of turnover to number of employees, labor productivity can be computed, a very important indicator in any economic analysis. For 2009 the value of this indicator was 78,852.1 RON. Economic activities registering higher levels of productivity than the resort average (100%) are Transport (166.2%) and Commerce (166.1%).

The rest of economic activity registered levels of productivity below resort average. Thus Construction sector has a labor productivity that is 78.4% of the average labor productivity recorded in Predeal. For Hotels and Restaurants the productivity level is 76.4%, maintaining the tourism specific rule characterized by lower levels of labor productivity. However the lowest levels of labor productivity in Predeal were recorded in Industry (48.0%) and Other activities of personal, social and collective services (48.5%).

Graph 6: Labor productivity in the main economic activities, compared with the average (100%), Predeal resort, 2009



Source: National Institute of Statistics – Brasov County Division of Statistics, *processed data*

2.3 Tourism activity

Accommodation capacity

According with the Ministry of Regional Development and Tourism, Predeal resort has 123 classified accommodation units cumulating 1,949 rooms and 4,004 bed places. Most of accommodation bed-places are the three-star classified (58.0%).

The one star and five-star categories represent 4.7% respectively 0.7% from the total accommodation bed places in Predeal resort. Relatively similar shares have two-star category (19.4%) and three star classification categories (17.1%). It is important to see that the resort has one luxury unit five-star classified.

Table 2: Accommodation capacity in Predeal resort, year 2011*

Classification categories	Number of units	Number of rooms	Number of bed-places	% number of bed-places in total
One star	8	80	189	4.7%
Two-star	31	347	778	19.4%
Three-star	69	1.150	2.322	58.0%
Four-star	14	357	685	17.1%
Five-star	1	15	30	0.7%
Total	123	1.949	4.004	100%

Source: Ministry of Regional Development and Tourism

* - this data are referring to June 2011

Food and beverage capacity

In the provision of basic services for tourism, food and beverage units are also an important component of tourism supply. Although these can not be considered "100% tourist characteristic" as long as they addresses also to resident population, in tourism analysis it is accepted that when food and beverage establishments are located within tourist accommodation structures or located in tourist areas, they are considered an integral part of tourism supply.

Predeal resort has 7.366 seats in 87 food and beverage classified units. Most of seats are classified at three-star category (39.8%) and two-star category (33.6%). In the same time a significant share of four-star category (24.6%) can be observed. In numeric values 37 units are three-star classified, 26 are two-star classified and 20 units are four-star classified; only 4 units are one-star classified.

Table 3: Food and beverage units in Predeal resort, year 2011*

Classification categories	Number of units	Number of seats	% number of seats in total
One star	4	143	1,9%
Two-star	26	2.478	33,6%
Three-star	37	2.931	39,8%
Four-star	20	1814	24,6%
Total	87	7.366	100,0%

Source: Ministry of Regional Development and Tourism

* - this data are referring to June 2011

The ratio between number of seats (7.366) and total number of bed places (4.004) are 1.84 for Predeal resort, which allows a good level of coverage of demand for food and beverage services.

Moreover it should be consider that both analysis of accommodation units and food and beverage units has been based exclusively on the classified establishments by the Ministry of Regional Development and Tourism, not including the unclassified units whose number is unknown but estimated around

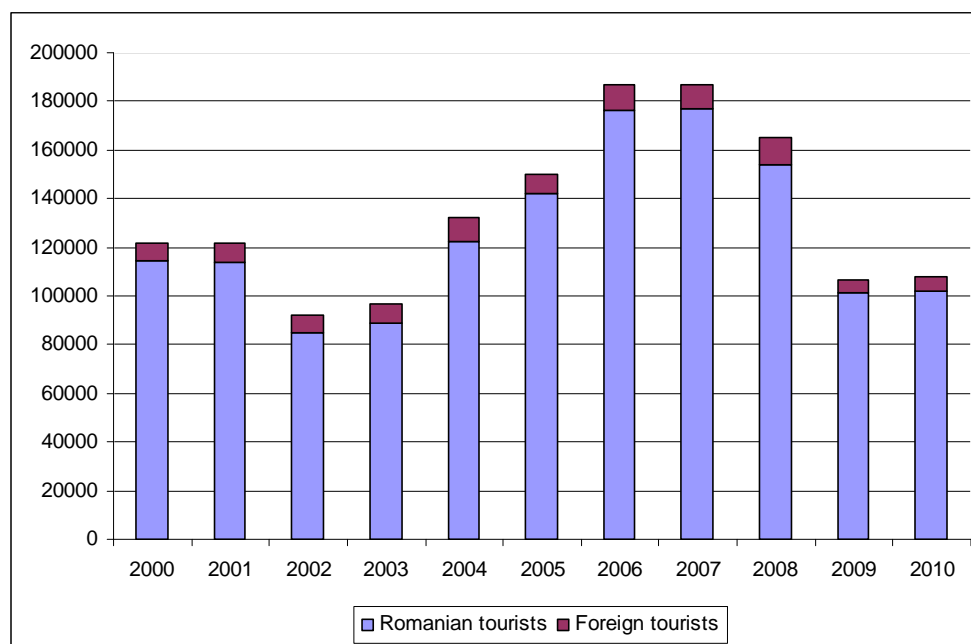
Tourist 'arrivals – number of tourists

In our approach arrivals registered in accommodation establishments are equivalent with the number of tourists which are accommodated in the resort.

In the period 2000-2010 number of tourists in Predeal resort (arrivals of tourists registered in accommodation establishment) has been characterized by a strong oscillatory trend. Thus from just over 120,000 tourists in 2000 and 2001, the number of tourists dropped bellow 100,000 in 2002 and 2003 and then increased at a sustained dynamics reaching more than 180,000 tourists in 2006 and 2007. The economic crisis has made the number of tourists to fall and reach over 100,000 tourists in 2009 and 2010, under the level registered in 2000 and 2001. It has to be noted that the largest number of tourists in all this period registered in 2006 (187,008), double the minimum value reached in 2002 (92,230).

Meanwhile it can be observed that the number of Romanian tourists prevails in Predeal resort, in all these years representing over 90% of the total number of tourists. However it can be seen that (in absolute values), the biggest number of foreign tourists was registered in 2008 (10,972) and the lowest in the following year (5,220).

Graph 7: Arrivals of tourists in Predeal resort, 2000-2010

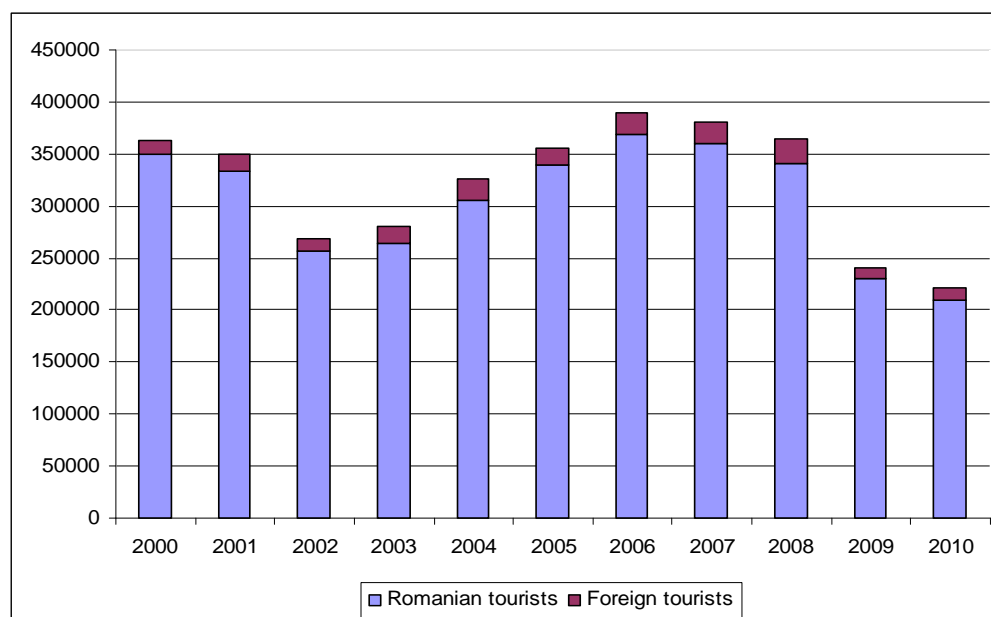


Source: National Institute of Statistics – Brasov County Division of Statistics

Overnight stays

Number of overnight stays in Predeal resort in the period 2000-2010 is following grosso-modo the same trend as the number of arrivals (number of tourists) with the difference that the period 2009-2010 was weaker than the period 2002-2003. The highest number of overnight stays was registered in 2006 (389,319) and after this year the overnight stays dropped more considerably after 2008 reaching to 221,897 in 2010.

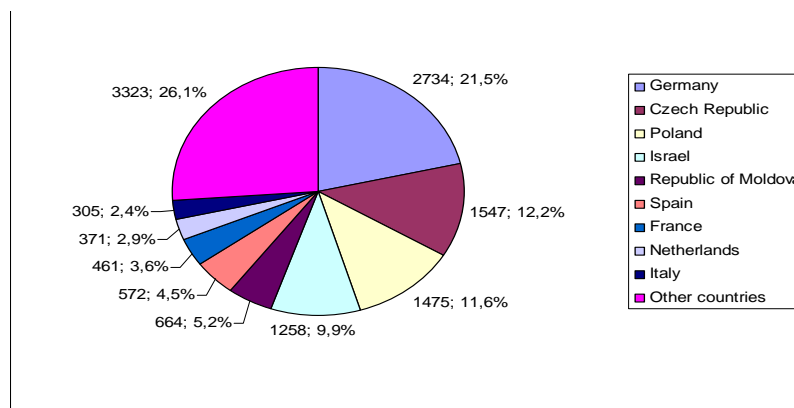
Graph 8: Overnight stays of tourists in Predeal resort, 2000-2010



Source: National Institute of Statistics – Braşov County Division of Statistics

Another aspect of characterizing tourist flows is given by the breakdown of overnight stays by countries of origin of tourists. It should be taken into account that foreign overnight stays did not represent more than 4-7% from the total overnight stays in the period 2000-2010. In 2010 most of foreign tourists came from Germany (21.5%), Czech Republic (12.2%), Poland (11.6%) and Israel (9.9%), these four countries accounting for over one half of the total number of overnights made by foreign tourists. Lower shares have Republic of Moldova (5.2%), Spain (4.5%), France (3.6%), Netherlands (2.9%) and Italy (2.4%). Over one quarter (26.1%) of foreign tourists' overnight stays are registered for tourist coming from other countries, unspecified above.

Graph 9: Breakdown of overnight stays of foreign tourists by countries, Predeal resort, 2010

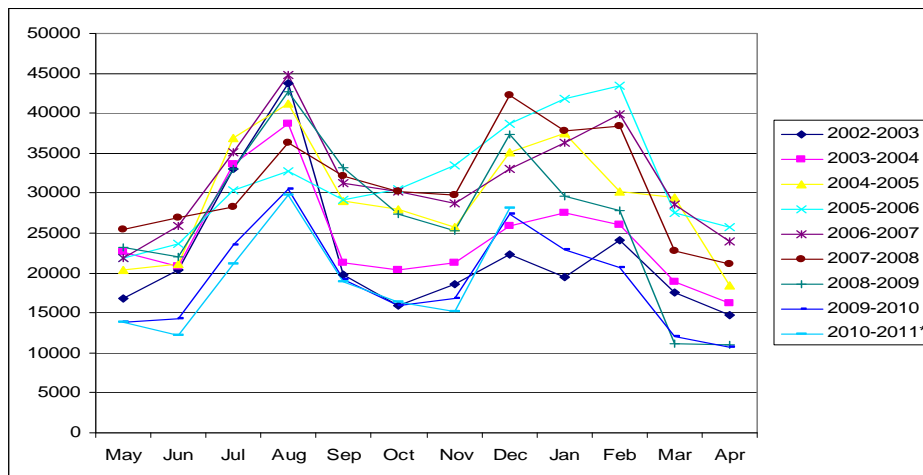


Source: National Institute of Statistics – Brasov County Division of Statistics

The analysis of monthly distribution of tourist flows (best highlighted by number of overnight stays) shows clearly a bi-seasonality characteristic of Predeal resort. On the one hand there is a summer season (with a peak month in August) and on the other hand a winter season which reaching the

highest intensity either in December (for the seasons* 2007-2008, 2008-2009, 2009-2010), either January (2003-2004, 2004-2005), or February (2002-2003, 2005-2006, 2006-2007). In the same time one can be seen that generally winter months concentrates a higher volume of tourist flows than summer months, as demonstrated by the resort profile focused on winter sports.

Graph 10: Bi-seasonality in Predeal resort, 2002-2010



Source: National Institute of Statistics – Brasov County Division of Statistics

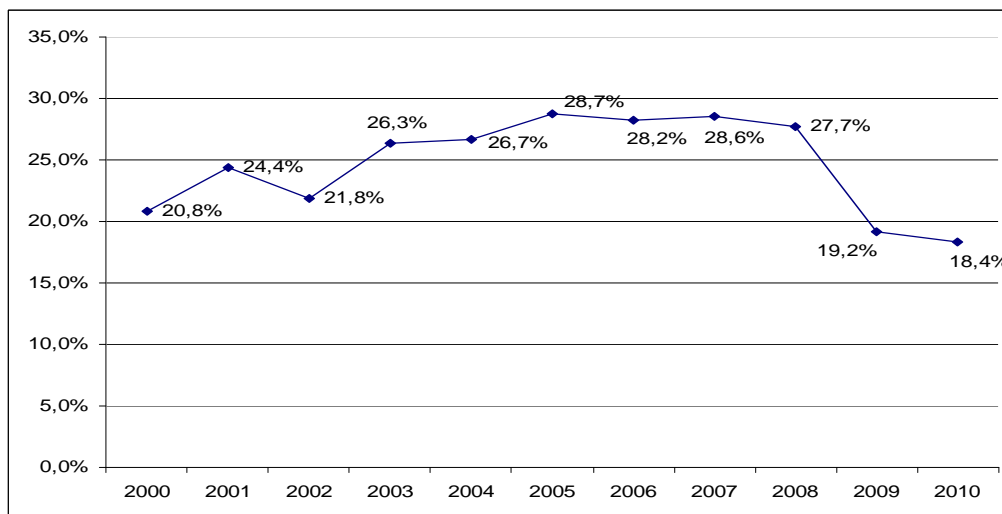
* - lack of data for 2011

Note: this analysis is based on the number of overnights

Occupancy rate

Another important indicator characterizing tourism activity is occupancy of accommodation establishments. In the period 2000-2010 the occupancy has experienced an oscillatory evolution. So after a general trend of increase in the period 2000-2005 except for 2002, one can be seen a relative stabilization (increases / decreases below 1% over the previous year) of occupancy rate of around 27-28% in 2006-2008; this was followed by decrease at 19.2% in 2009 and 18.4% in 2010.

Graph 11: Occupancy rate of accommodation establishments in Predeal resort, 2000-2010



Source: National Institute of Statistics – Brasov County Division of Statistics

* For a better illustration of bi-seasonality the monthly breakdown has been splitted in two seasons for two calendar years. First month is May and the last month is April of the following year.

Length of stay

The relation between overnight stays and arrivals (calculated as a ratio between these two indicators) is given by the average length of stay. In Predeal resort the average length of stay registered low oscillations both for Romanians and foreign tourists. However for Romanian tourists a decrease of length of stay is registering from 3 days in 2000 to 2.1 day in 2010 while for foreign tourists the average length of stay oscillated around two days in this period.

Table 4: **Average length of stay for Romanian and foreign tourists in Predeal resort, 2000-2010**

Indicator/Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Romanian tourists	3,0	2,9	3,0	3,0	2,5	2,4	2,1	2,0	2,2	2,3	2,1
Foreign tourists	2,0	2,0	1,8	2,0	2,1	2,3	1,9	2,0	2,2	2,0	2,1

Source: National Institute of Statistics – Braşov County Division of Statistics, *processed data*

One can be seen almost the same length of stay both for Romanians and for foreigners demonstrating that there is no different pattern of tourists accommodated in the resort.

Conclusions

From the existing statistical indicators point of view, a typical tourist resort in Romania such as Predeal is characterized by:

- The prevalence of the Hotels and Restaurants activity which has the highest share taking into consideration the following indicators:
 - Number of firms activating in the resort (31.9%)
 - Total turnover of firms in Predeal resort (32.5%)
 - Total number of employees (32.5%)
- Labor productivity in Hotels and Restaurants which is lower than the average labor productivity registered in the resort

Using the existing statistical data in order to quantify the economic contribution at local level seems to be a good possibility taking into consideration the impossibility of applying more advanced models as long as there is a general problem of having macroeconomic data at local level. However the existing statistics could be complemented by some specific surveys carried out local level. For example some survey on tourist consumption and characteristics could be performed in order to have demand-side statistics on expenditure or tourist's behavior etc. This will reveal important features of tourism demand at local level. In this regard new statistical indicators would be available (e.g. average expenditure per day, average expenditure per stay) characterizing tourism at local level.

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