

## Service Sector in Terms of Changing Environment

## Projecting accommodation capacities in Macedonia

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**Abstract**

Creating an adequate tourism supply which will meet the demand is a challenge for every country that seeks a planned tourism development. Tourism infrastructure is an essential part of the tourism supply and must be projected based on a detailed analysis of the tourism demand. This paper deals with the measures and activities for enhancing the competitiveness of tourism in Macedonia. The recommendations given in the paper stemmed from the analysis which is structured in two parts. The first part is built on the Travel & Tourism Competitiveness Index published by the World Economic Forum in order to assess the competitiveness of Macedonian tourism sector. The second part of the paper is dedicated to a projection of accommodation capacities, measured by the number of hotel beds and hotel rooms in Macedonia. In that respect, their optimal number is estimated by employing the standard formulas. The results point to a significant over dimension of current hotel supply in Macedonia: the current number of hotel beds is 1.5-2 times bigger than the projected optimal needs, while the estimations regarding the number of hotel rooms imply an over dimension of 1.5 times.

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**1. Introduction**

One may argue that tourism industry in Macedonia is far behind the competition, due to the lack of overall concept for development, as well as adequate general economic policy, especially development policy for supplementary sectors necessary for tourism follow-up development. The presence of uncoordinated activities, the lack of organisational forms functioning on horizontal and vertical line, unclear set of goals, aims and field of interest within the public, as well as the private tourism sector, resulted in poorly developed tourism sector in Macedonia. In order to cope with all serious challenges,

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obstacles and difficulties, Macedonia has just recently started to work on creating the foundations for increasing its competitiveness in tourism (USAID, 2006).

Consequently, all the efforts and attempts undertaken recently are directed toward promoting Macedonia as an attractive tourism destination. On one hand, tourist destination means temporary location whereas new travelling experiences may be gained, representing attractiveness of a certain destination (Leiper, 1979). On the other hand, attractiveness may be evaluated in many different ways, such as: from the point of view of emotions, experiences, adventures and satisfaction of tourists (Hu and Ritchie, 1993), with respect to the meaning of tourism attractions and business environment (Enright and Newton, 2004) or, by evaluation of different supporting factors which create tourism offer (Uysal, 1998; Dwyer and Kim, 2003). For instance, initially, the concept of tourism competitiveness was related to prices (Dwyer et al., 2000), and later on, econometric models were used for the purpose of ranking (Song and Witt, 2000). Undoubtedly, the most comprehensive approach is the one which, beside the competitive advantages, takes into consideration the comparative advantages as significant factors which determine tourism competitiveness of a certain destination (Ritchie et al., 2001). There is a variety of definitions and approaches, none being correct or false, but rather helpful in formulating hypothesis for proving different aspects of tourism destination competitiveness (Mazanec et al., 2007).

In the changing environment, it is especially important to define properly the role of government in giving the tourism sector an appropriate treatment, as a possible tool for achieving positive economic results. The role of the government is particularly crucial in the implementation of the tourism development plan in order to achieve sustainable growth of tourism industry. It can be accomplished by different measures and activities for supporting the international tourism or, by redirecting domestic tourists towards domestic tourism destinations. In both cases, it is fundamental to look at two particular issues: (1) tourism promotion and (2) appropriate tourism offer.

## **2. The competitiveness of Macedonian tourism sector: an overview**

In Macedonia, the budget expenditures allocated for the implementation of the Programme for tourism promotion are very modest, though their constant increases every year. For instance, approximately 100 000 EUR were scheduled for tourism promotion in 2005 (Government of Republic of Macedonia, 2009), and another 120 000 EUR were spent in 2011 (Government of the Republic of Macedonia, 2010). The need for more efforts in the field of tourism promotion in Macedonia is illustrated by the fact that Macedonia has been ranked low on the list of the most attractive destinations for travel and tourism, issued by the World Economic Forum. For example, in 2007 Macedonia was ranked as 83<sup>rd</sup> out of 124 countries. In 2008, it was placed at the same position, but this time out of 130 countries. In 2009, a small progress was made, i.e. Macedonia was ranked 80<sup>th</sup> out of 133 countries (Blanke and Chiesa, 2009, p. 31). Finally, a small progress was made in 2011, when Macedonia was ranked at the 76<sup>th</sup> place out of 139 countries. However, it should be mentioned that the majority of the countries in the region are significantly better positioned than Macedonia: Slovenia – 33<sup>rd</sup> place, Croatia – 34<sup>th</sup> place, Montenegro – 36<sup>th</sup> place, Bulgaria – 48<sup>th</sup> place and Albania – 71<sup>st</sup> place (Blanke and Chiesa, 2011, p. xv). Concerning the neighboring countries, only Serbia, and Bosnia and Herzegovina are ranked lower than Macedonia.

If we make a detail analysis of all indicators concerning certain sub indexes, many interesting concluding remarks emerge, in particular with respect to: travel and tourism regulatory framework, tourism business environment and infrastructure, tourism human, cultural and natural resources etc.

For the purpose of this paper, we refer only to the tourism infrastructure index, which is categorized within the business environment and the necessary infrastructure for tourism and travel development. Thus, tourism infrastructure of Macedonia, which is essential part of the tourism supply and represents its appropriateness, has a score of 3.8, ranking at the 69<sup>th</sup> place out of 139 countries (Blanke and Chiesa, 2011, p. 256). In the framework, it should be emphasized that hotel rooms are ranked at the 72<sup>nd</sup> place

(BlankeandChiesa, 2011, p. 257). It is also noticeable that this segment is not included in the list of competitive advantages of Macedonia, which is supported by our projection, presented later in the paper.

### 3. Methodology

Projecting accommodation capacities in Macedonia is undertaken in order to present (in)appropriate tourism supply. The main conclusions of the presented projection should initiate, among all key actors responsible for the tourism policy, the urgent need for carrying out measures and activities for enhancing tourism competitiveness in Macedonia.

The projection is based on the average values regarding the number of tourists and the average length of stay in all hotels in Macedonia. Thus, the data set does not cover the small accommodation facilities (motels, tourist camps, private accommodation etc.). The sample spreads over the period from 1990-2008, thus covering 19 years (State Statistical Office, 2008, p. 18).

The starting hypothesis applied in the projection is the economic presumption that the accommodation capacities must be projected upon a detailed analysis of the tourism demand in order to accomplish optimal business results. In other words, it means obtaining optimal degree of capacity utilization with minimum costs, thus achieving maximum income.

The projection of accommodation capacities consists of two mutually correlated projections. The first projection deals with the demand for beds, and the outcome serves as a data base for the next projection, which refers to the required number of hotel rooms. Such mutual interrelation is obvious having in mind that these two projections are complementary and represent the two sides of the coin.

The projections are fully based on application of the standard equations for forecasting tourism accommodation capacities, which may be applied in each tourism market separately, as well as for certain types of accommodation (European Commission – Eurostat, 2007). The aim is to determine the real need for total accommodation in a tourism destination.

Hence, the required number of beds is estimated by means of equation (1):

$$\text{Number of beds} = \frac{\text{number of tourists in certain time period} \times \text{average length of stay in overnights}}{\text{number of nights spent in certain time period} \times \text{percent of capacity usage}} \quad (1)$$

The second projection, which is complementary to the previous one, refers to the need for hotel rooms and it is based on the following equation for estimating the demand for rooms:

$$\text{Number of rooms} = \frac{\text{number of demand for beds}}{\text{average usage of room (person per room)}} \quad (2)$$

In order to obtain more accurate results, two variants are applied regarding the average room occupancy:

a) We presume 75% of average room occupancy, which can be treated as optimal rate of utilization; and

b) We presume 60% of average room occupancy, taken as a minimum rate which assures cost-effectiveness of hotels.

Due to the fact that tourism demand may not be met completely during the main tourist season, the calculations should be made with some acceptable occupancy rate. In that respect, the rate of 62% is set as internationally accepted average room occupancy, which is the most economically efficient rate for hotels (Horwath Consulting Zagreb, 1999).

The forecasted values refer only to the hotel accommodation capacities in Macedonia, mainly due to the following reasons:

(1) The hotels are the main and dominant factor of tourism accommodation supply, representing a ground for commercial tourism development in future; and

(2) Limited statistical data do not allow accurate projections of accommodation needs for other types of capacities (households, tourist camps, motels etc.).

#### 4. Analysis, results and discussion

The projection of accommodation needs in Macedonia is based on statistical data for the average number of tourists and the average number of stay in all hotels in the period 1990-2008 (State Statistical Office, 2008, p. 18).

The first projection refers to the required number of beds. So, after employing the standard equation (1), the obtained results imply that 7 794 beds are needed in order to meet the average tourism demand in Macedonia under the assumed optimal accommodation capacity occupancy rate of 75%.

$$\text{Number of beds} = \frac{557\,602 \text{ tourists} \times 3.83 \text{ overnights}}{365 \text{ nights} \times 75\% \text{ usage}} = \frac{2\,135\,616}{274} = 7794 \text{ beds}$$

In case of a minimal accommodation capacity occupancy of 60%, in order to meet the average tourism demand in Macedonia, it is necessary to have 9 752 beds on disposal in hotel capacities.

$$\text{Number of beds} = \frac{557\,602 \text{ tourists} \times 3.83 \text{ overnights}}{365 \text{ nights} \times 60\% \text{ usage}} = \frac{2\,135\,616}{219} = 9752 \text{ beds}$$

If we make a comparative analysis of the estimated values regarding the number of needed hotel beds with the existing ones, we can conclude that there is an over dimension of hotel accommodation capacities in Macedonia. Namely, during the sample period 1990-2008, the hotels in Macedonia have an average of 14 869 beds (State Statistical Office, 2008, p. 18), which is 1.5 - 2 times more than the projected needs.

The presence of such an imbalance between the current capacities and the tourism demand is reflected in the low average hotel accommodation occupancy rate of 39% in the sample period. The calculations are made by employing the standard equation for average accommodation capacity occupancy (European Commission – Eurostat, 2007). Such a low occupancy rate of 39% rules out the possibility for efficient and profitable working of hotels in Macedonia. Also, it hampers the opportunity for offering competitive price of tourism services within the region.

The second projection deals with the needed hotel rooms in Macedonia. Having in mind that the number of beds and the number of rooms are mutually connected and complementary in the sense that they both create the tourism accommodation supply, this projection is based and uses the already calculated needs for beds, presented in the first projection.

In addition, these estimates are based on the standards for average room occupancy. Namely, in a well known hotel, that indicator is 1.7 persons per room, while in a business hotel, that factor is lower representing 1.2 persons per room. At the same time, the projection is extended with additional, third indicator of 1.45 persons per room, as an average value between these two extreme points, in order to obtain more realistic outcomes.

By analogy to the first projection regarding the needed number of beds, in this case we carry out the calculations with both variants for average accommodation occupancy rate, i.e. 75% and 60%.

In that respect, if the average accommodation occupancy is 75%, the estimations show that 7 794 beds are required. Based on that number, the optimal number of rooms, estimated by equation (2) is:

- 4 585 rooms, with an average use of 1.7 persons per room;
- 6 495 rooms, with an average use of 1.2 persons per room; and
- 5 375 rooms, with an average use of 1.45 persons per room.

$$\text{Number of rooms} = \frac{7\,794 \text{ beds}}{1.7 \text{ persons per room}} = 4\,585 \text{ rooms}$$

$$\text{Number of rooms} = \frac{7\,794 \text{ beds}}{1.2 \text{ persons per room}} = 6\,495 \text{ rooms}$$

$$\text{Number of rooms} = \frac{7\,794 \text{ beds}}{1.45 \text{ persons per room}} = 5\,375 \text{ rooms}$$

The calculations undertaken assuming 60% average hotel accommodation occupancy rate imply that 9 752 beds are needed. Based on that figure, the optimal number of rooms is:

- 5 736 rooms, with an average use of 1.7 persons per room;
- 8 126 rooms, with an average use of 1.2 persons per room; and
- 6 725 rooms, with an average use of 1.45 persons per room.

$$\text{Number of rooms} = \frac{9\,752 \text{ beds}}{1.7 \text{ persons per room}} = 5\,736 \text{ rooms}$$

$$\text{Number of rooms} = \frac{9\,752 \text{ beds}}{1.2 \text{ persons per room}} = 8\,126 \text{ rooms}$$

$$\text{Number of rooms} = \frac{9\,752 \text{ beds}}{1.45 \text{ persons per room}} = 6\,725 \text{ rooms}$$

The above calculations produce opposite conclusions depending on the initial assumptions behind the estimation. On one hand, the comparison between the projected optimal hotel capacities and the current ones imply that there is an over dimension. On the other hand, working under more conservative assumptions, the estimates show there is a room for capacity enlargement.

So, within the sample period 1990-2008, the average number of hotel rooms in Macedonia is 6 890, which is 1.5 time larger than the projected optimal needs based on ideal working conditions: 75% of average capacity occupancy rate and 1.7 persons per room. However, the second projection, based on the average capacity occupancy rate of 60% and 1.45 persons per room, produces results that are closer to the current number of hotel rooms in Macedonia. In addition, the calculations show that there is a possibility for increasing the existing number of hotel rooms for 18%. However, this conclusion applies only when the hotel capacities work with minimum cost-effectiveness rate of 60% and with an average occupancy of 1.2 persons per room.

## 5. Conclusions and recommendations

The tourism sector in Macedonia should be observed in a broad, macroeconomic framework as a specific market segment, whose dimensions and economic meaning can be interpreted comprehensively within the quantity and structure of tourism expenditure. That is the only way for creating an analytical framework for identifying all tourism impacts with a special emphasize on the economic effects.

Therefore, as a starting point, partial tourist products must be introduced until the moment when certain preconditions are created in the sense of strengthening the cooperation between all the key actors in the tourism industry in Macedonia. Although significant efforts have been made in promoting tourism potentials of Macedonia, yet the modest and limited budget is the biggest obstacle in achieving greater competitive advantages. As a result, the last Travel & Tourism Competitiveness Report for 2011 ranked Macedonia at the 76<sup>th</sup> place out of 139 countries.

Creating sufficient tourism supply which will meet the foreseen tourism demand is a challenge of every country that seeks a planned tourism development. The results of the undertaken estimates of the optimal number of beds and rooms in Macedonian hotels imply that the current occupancy rate is low. On the other hand, this can be interpreted as an over dimension of the existing hotel accommodation supply. The projected values can serve as a starting point for initiating more serious analysis, which may provoke the need for undertaking measures and activities for supporting and enhancing tourism development in Macedonia.

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