EXTENDED ABSTRACT

AN ANALYSIS OF SPANISH TOURISM MUNICIPALITIES EFFICIENCY

Elías Bendodo Benasayag
Universidad de Málaga

Manuel Ángel Fernández Gámez
Universidad de Málaga
mangel@uma.es

José Ramón Sánchez Serrano
Universidad de Málaga
joseramonsanchez@*uma.es*

1. INTRODUCTION

The objective of this study is to know which exogenous factors condition the efficiency of the municipalities with tourist orientation. This study is one of the few publications based on the efficiency of tourism municipalities. Unlike most of the research that assesses municipal efficiency in general, it is believed that this document contributes to related literature by offering ideas to relatively inefficient tourism municipalities about improving efficiency.

In recent years, and in the scope of the public sector, there has been a growing interest by introducing measures to encourage tourism development. Tourism is already a strategic venture in places where this activity is presented as one of the most promising aspects in its development model. In this context, local authorities constitute a very significant role in the provision of public services in the field of tourism. It is a sub-sector that has been assuming more powers over the years, which has led to an accumulation of functions and, therefore, to an increase in the expenditure producing a massive impact on the economy. Consequently, it seems essential to adopt municipal efficiency criteria in order to manage tourist policies, for example, minimizing costs, looking for opportunities and defining the priority of actions.

Studies on efficiency with respect to the management and allocation of resources to the municipalities is a growing and relevant field in the literature (Narbon-Perpina and De Witte, 2017;) Perez-Lopez, Prior and Zafra-Gomez, 2015; Selva and Sanz, 2015; Cordero et al 2016; Storto, 2016; Afonso and Fernandes, 2005). However, and to the extent of our knowledge, the analysis on the causes of the efficiency of the tourist municipalities

is embryonic and initial, and there are only a few experiences tested in Chinese districts. This fact implies more research on the subject (Tingting Yi and Liang, 2015).

Given that the existing conclusions on municipal efficiency are referred to general municipalities as a whole and that there is no such experience on tourist towns, the present work is aimed to give a response to the following research question: that is to say, whether exogenous factors which are essential for the municipal efficiency in general, are also vital and indispensable for municipalities with a strong tourist orientation, or on the contrary, if there are numerous exogenous factors in the tourist towns that can guide the implementation of public policies targeted to improve the efficiency of such municipalities.

In order to solve the abovementioned research question, this study has selected a comprised sample of municipalities in the province of Malaga. The province of Malaga is an ideal setting for our analysis because it presents some peculiarities that can bring unique results. In all the regions, there is a significant tourist activity and the tourism sector is the most decisive factor in the local economies of the province (Turismo y Planificacion Costa del Sol, 2018). Tourism is the prime generator of employment and wealth in all municipalities, which have become a destination capable of attracting more than 9 million tourists a year (SOPDE, 2016). The province boasts 103 municipalities, including entities of different sizes, with varying degrees of grouping in the provision of services, subject to different geographical and socio-cultural factors. We have submitted this sample, subject of study, to non-parametric frontier DEA (Data Envelopment Analysis) to measure municipal efficiency. Subsequently, and in order to detect exogenous variables which influence the levels of efficiency, we have developed a model of regression between the levels of efficiency obtained and the hypothetical exogenous variables.

2. METHODOLOGY

Since our purpose is to determine if the efficiency of the municipalities of the sample (EF) is influenced by exogenous variables selected in accordance with the existing literature, we will use the model that appears in (1).

$$EF_i = \beta_{0+1} MC_j \beta + \beta_2 PF_j + \beta_3 FG_j + \beta_4 FS_j + \beta_{5\,j} + \beta_6 GA_j + TA_j + e_j \quad (1)$$

where EF_j is the efficiency dependent variable calculated with DEA. Furthermore, MC_j represents the degree of clustering in the provision of services and it is captured through a nominal variable that takes the value 1 if the group is a member of a Group of Municipalities and 0 otherwise. PF_j is an index of tax pressure obtained from the ratio between the economic chapters 1 to 3 and the sum of economic chapters 1 to 5. FG_j refers to the geographical factor, taking the value 0 if the Community is a municipality located in the countryside and 1 if it is situated in the coastline. FS_j represents the impact of social factors as a proxy using the number of unemployment allowances. J, GA_j and TA_j capture the impact of the factors of economic development. The first, is related to the number of commercial establishments. The rest intends to capture other economic circumstances: GA_j takes the value 1 if the municipality is legally considered as a large touristic destination

and 0 otherwise). A large touristic area is any part or the whole of a municipality that due to one or various circumstances of economic interest, throughout the year, or part of it, justifies an exceptional treatment in terms of opening hours and days offered to the consumers of that municipality. According to the Andalusian regulations, large touristic areas mean a total area or part thereof in which, in certain periods of the year, the annual average of population is significantly higher than the number of residents, or where a large influx of travelers visit the place for tourist reasons. TA_j takes the value 1 if the municipality is legally declared as a tourist town of Andalusia and 0 otherwise. The acknowledgment of Tourist Municipality of Andalusia is regulated by Decree 72/2017, 13th June, to respond to the problems which some Andalusian municipalities as a result of the flow of tourists visiting the destination throughout the year. With that statement, the Junta de Andalucia shall be obliged to consider the municipality as a priority in the actions of management and promotion of their economic plans. Finally, e represents the residual error.

3. RESULTS

Results indicate that the estimated coefficient associated with the explanatory variable *MC* - which measures the degree of pooling of municipalities - is positive and statistically significant in three developed models (p-value < 0.01). Therefore, there is a direct relationship between levels of pooling and municipal efficiency. In addition, regression results also indicate that the relative variable subject to tax pressure (*PF*) is significant and is in direct relation with the municipal efficiency (p-value < 0.01). Moreover, the variables of economic development *GA* and *TA*, which makes reference to the situation of influx and acknowledgment of Tourist Municipality in Andalusia, have been significantly reflecting its (positive) direct relationship to the levels of efficiency of the municipalities (p-value < 0,05). Similarly, results reflect that geographical factors (*FG*), social factors (*FS*) and some aspect of economic development do not have a significant relation with the efficiency of municipalities.

Relationships detected between the analyzed efficiency and the exogenous variables allow to know aspects of great importance about inefficiency presenting tourist municipalities of the sample. On the one hand, the importance of the pooling services and the acknowledgment of the Tourist Municipality of Andalusia. The absence of the grouping of services, the lack of freedom of commercial schedules which marks the regulation of a great influx municipality and the essential actions of management and promotion of economic plans that promotes the acknowledgment of Tourist Town of Andalusia are therefore having impact on municipal efficiency. Moreover, we should highlight the moderating effect of the quality of municipal services on the impact of the tax pressure on efficiency, since in those tourist towns with commitment to quality tourism (SICTED), the tax burden is not related such efficiency.

4. CONCLUSIONS

According to the results, we have concluded that there are inefficiencies in the municipal tourist level and that these are due in part to exogenous factors, namely the degree of pooling, the tax pressure and the level of economic development. The phenomenon of

the pooling of services has been significant to explain the efficiency of the municipalities of special tourist orientation. The association has been associated with greater municipal efficiency. It also stands out for its novelty in the analysis, the positive effect that the variables of economic development which makes reference to those municipalities with large touristic and the acknowledgment as Tourist Towns have resulted in the efficiency of such. Therefore, an exceptional treatment in terms of opening hours and days for customers and tourists and relevant actions concerning land use and economic plans have been associated with greater municipal efficiency. Moreover, the results obtained on the tax burden variable have allowed us to understand that, in certain municipalities, a greater presence of tax resources as opposed to current transfers or capital income is associated with higher levels of efficiency. Specifically, this relationship has been significant only in the municipalities not subject to the System of Quality Tourism (SICTED).