

Tourist Performance Evaluation: a Novel Approach¹

La Misura della Performance Turistica: un Nuovo Approccio

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Riassunto: Il crescente processo di diversificazione di nuove mete turistiche, diverse dalle tradizionali e storiche destinazioni, capaci di offrire una esperienza di viaggio unica e rispondente alle attese del turista-consumatore, ha fatto registrare un aumento di interesse sul tema della competitività delle destinazioni e sulla necessità di gestire un territorio in chiave di marketing. In questo lavoro, seguendo una logica di “destination benchmarking”, vengono presentati due modelli di misurazione della competitività di una destinazione ricorrendo rispettivamente a misure di performance quantitative e qualitative. Viene inoltre riportata una applicazione rispettivamente, del primo e del secondo modello, alle 103 province italiane e ad alcune regioni del Mezzogiorno.

Keywords: Destination competitiveness, Tourist performance

1. Introduction

The trend followed by world tourism towards new-destination points to a change in the tourist needs: destinations not known some years ago have become destinations to explore since they are able to supply a total leisure experience. All this leads to a strong competition among area centres not on the single aspects of the tourist product but on the destination as a synthetic and central factor of the tourist system; that is the destination is an overall-product, a complex and integrated offer able to supply a tourist experience. As a consequence, in the last few years destination competitiveness and its measuring have registered an increasing interest in tourism literature (Kozak and Rimmington 1999; Ritchie and Crouch 2000; Alavi and Yasin 2000). In this paper, according to the destination benchmarking approach, the competitiveness among the Italian destinations is evaluated through non-financial performance measures using respectively quantitative (section 2) and qualitative (section3) performances. In particular, in the former case, the analysis will concern the Italian provinces while, in the latter some Italian South regions.

2. A Destination Tourist Competitiveness Evaluation: a Measure by Data Envelopment Analysis

If the territory is metaphorically seen as a firm then it can be hypothesized that a tourist area should be able to manage its input efficiently, otherwise, the territory material and

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human resources constitute the input of a virtual tourist “*production process*” and the output may be: arrivals, bed nights, value added, employment, customer satisfaction etc. As a consequence, the destination performance can be evaluated through an efficiency measure. A territory through the measure of its efficiency can have its performance evaluated, thus allowing the destination managers to check and identify some process dysfunctions with the aim to define strategic and operational actions. Following this hypothesis, being the production function not known, the efficiency of a destination can be evaluated against the main competitors. A destination will be efficient if all its input-output (respectively material and human resources and, tourist output) combinations are better than its identified “key competitors”. In view of the early considerations, the following “production function” is proposed:

$$\text{Tourist output} = f(\text{material capital, cultural heritage, human capital, labour}) \quad (1)$$

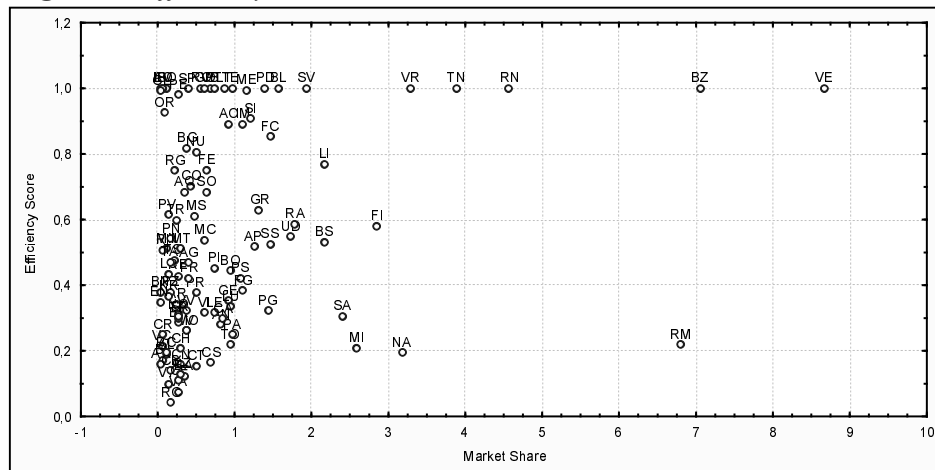
The tourist output is measured by a non-financial measure: the international and national bed nights. According to the destination concept and the empirical findings, but also due to data availability, as proxies for material capital, cultural heritage, human capital and labour the following were respectively chosen: number of bed in the hotels over population, number of bed in the complementary hospitality structures over population, the provincial State-owned artistic patrimony (museums, monuments and archaeological areas) over population, tourist school graduates over working age population and, the labour units (ULA) of the tourism sector over the total provincial ULA. Given the production process function (1), a measure of technical efficiency expresses the capability of the different destinations to transform the input (tourist resources) in output. For this purpose the data envelopment analysis (DEA) (Charnes et al. 1978) is adopted using the above multiple input and output. The model applies mathematical programming techniques to compare the efficiency of a set of decision making units (DMU). The method allows to combine for DMU multiple output and input into an overall measure of efficiency. Charnes et al. (1978) proposes that the efficiency score θ , of a decision making unit, under constant returns on scale, can be determined by solving the following output-oriented model:

$$\max_{\theta, \lambda} \theta \quad \text{st} \quad -\phi y_i + Y\lambda \geq 0; \quad x_i - X\lambda \geq 0; \quad \lambda \geq 0 \quad (2)$$

where θ is a scalar, λ is an $n \times 1$ vector of constants (n is the set of DMUs), x_i and y_i are input and output vectors by i -th DMU (i -th province in our application), Y is a $(q \times n)$ output matrix, X is a $(p \times n)$ input matrix. With $(1/\theta) = 1$ the DMU will be regarded as an efficient one while, with $(1/\theta) < 1$ it will be considered inefficient. Here, the technical efficiency of the 103 Italian provinces for the year 2001 is measured using the above multiple input and output. The DEA method allows to determine an efficiency score of the destination capability to transform its tourist resources in tourist output (output-efficiency). The empirical findings show among sea destinations the leader position of Rimini (RN) while among mountain destinations Trento (TN), Bolzano (BZ) and Verbania (VB). The other efficient destinations are typical business areas like Savona, Prato, Belluno, Padova, etc. Surprisingly, the artistic provinces like Roma (RM), Firenze (FI), Pisa (PI), with the exception of Venezia (VE) and Verona (VR), show an efficiency score smaller than 1. The scatterplott graph of the bed night market share and efficiency score allow to subdivide the provinces in four clusters: on the right top, with

high efficiency level and market share; the second on the left top, with a high efficiency level and low level of market share; the third on the left bottom, with low efficiency level and market share; the fourth at the right bottom with a low efficiency level and high level market share. Among the best practise there are Venezia (VE), Bolzano (BZ) and Rimini (RN). While provinces like Roma (RM), Milano (MI) and Napoli (NA) show an under-use of the productive capability in relationship to their tourist resources and “key competitors”(Figure 1). With DEA we have found a suitable way to combine different indicators on the ‘supply side’ to explain the capacity of provinces in trasforming their resources in tourist output. It follows that the best way to manage the various indicators is to insert them in a well defined theoretical background (i.e. the production function). Although many factors influence the levels and changes in tourist supply, we have underlined, conditioned by data availability, some relevant features of the production process of this particular “good”.

Figure 1: *Efficiency score and market share*



3. The ‘Tourist Well-being’: a Measure Through a New Approach

The destination competitiveness cannot be limited to quantitative performances, a benchmarking analysis has also to look at the tourists’ perception of the destination and their satisfaction. The destination performance is strongly interrelated with the destination perception, the satisfaction and the total leisure experience achieved by the tourist. Therefore, information feedback from tourists has to be regarded as a measure where to base the comparison against the competitors. More elements contribute to the construction of the above aspects, that can be synthesized in the wider concept of vacation “*tourist well-being*”, which is here explored by adopting the specific theoretical perspective of the “capability approach” proposed by Amartya Sen (1993). According to this approach the «well-being is best seen as an index of the person’s functionings». Where the «*functionings* represent part of the state of a person – in particular the various things that he or she manages to do or be in leading a life. The *capability* of a person reflects the alternative combinations of functionings the person can achieve, and from which he or she can choose one collection» (Sen 1993, pag. 31). This framework can be translated into tourism terms as “*vacation well-being*” achieved by tourists. Having the tourist chosen the vacation destination, in function of his income

and leisure time then, the achievable “vacation well-being” is a function of the available combined tourist commodities (natural and cultural resources; number and quality of the hospitality, restoration, accessibility to transportation systems, all the activities available at the destination and what tourist-consumer will do during the visit, tourist safety, resident behaviour, past vacation experiences etc.) that define the alternative of functionings: total leisure experience, mental escape and relaxation, pleasure in unrepeatable experiences, body well-being etc. (*capabilities*). In view of the early considerations, the following “*tourist well-being function*” is proposed:

$$\text{Tourist well-being} = v(f(\text{destination tourist commodities})) \quad (3)$$

The evaluation of tourist well-being takes the form of an assessment of the constitutive elements of a person’s being that are represented by functionings which just are commodities utilisation function. Using the data from a 2001 ACNielsen SITA survey on Italian tourist customs of 4600 observations, we apply the early theoretical background to measure the well-being achieved by the tourist during the vacation in some Italian South regions on the basis of the qualitative evaluation (items: very positive (1), positive (2), neither positive nor negative (3), negative (4), very negative (5)) given by the tourist on overall experience and single tourist commodities. In particular, following a “direct quantification method of qualitative data” (Zani 1997), through the weighted average value, the tourist well-being ranking of the Italian South regions - based on overall vacation experience - shows the leader position of Sicilia (1,69) followed from Campania (1,84), Sardegna (1,83), Puglia (1,90), Calabria (1,92) and Molise (2,26)². Though the empirical findings of two proposed models cannot be compared due to the different statistical units, we can outline that the majority South provinces achieves an efficiency score smaller than 1 (inefficiency destination) (section 2) in spite of, the relating regions show a positive “*tourist well-being*”. We are still attempting to find a strict operationalizing of tourist well-being, but here it’s important to focus the attention on the complementarity of the two performance measure to define a strategic tourism policy.

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² Abruzzo and Basilicata are not considered in the dataset.