

# Chapter 13

## Innovation in the Measurement of Tourism Competitiveness

**Jose Manuel Guaita Martinez**

 <https://orcid.org/0000-0002-7050-3389>

*Valencian International University, Spain*

**José María Martín Martín**

*International University of La Rioja, Spain*

**José Antonio Salinas Fernández**

*University of Granada, Spain*

### ABSTRACT

*The Travel & Tourism Competitiveness Index (TTCI), developed by the World Economic Forum (WEF), is a composite indicator that integrates a total of 90 simple variables organized into 14 pillars or key dimensions of the tourism destination competitiveness. The main problem presented by this index comes from the aggregation of variables expressed in different measures, the duplicity of information, and their non-weighting in the synthetic index. This chapter proposes a new methodology for the construction of the TTCI that solves the previous problems and allows, in addition, identifying which are the pillars or dimensions that determine the differences in tourism competitiveness between the countries. The results have allowed authors to more precisely classify 136 countries according to their level of tourism competitiveness in 2017. To improve the tourism competitiveness of the countries, it is necessary to carry out policies that act on these pillars and others identified in this chapter.*

### INTRODUCTION

Tourism Destination Competitiveness has been traditionally measured using indexes. One of the most popular ones is the Travel & Tourism Competitiveness Index (TTCI), which has been developed since 2007 by the World Economic Forum (WEF) and constitutes a useful tool to classify groups of countries according to their tourist performance (Croes & Kubickova, 2013). The methodology used in the

DOI: 10.4018/978-1-7998-1169-5.ch013

construction of the TTCI is based on the aggregation of 90 simple variables organized into 14 pillars or key dimensions representing competitiveness by means of an unweighted average (WEF, 2007). This method of calculation assigns the same amount of importance to every variable and it does not take into consideration the duplicity of information caused by their integration in the synthetic indicator. Therefore, because there is no weighting, the TTCI does not allow for the identification of the most influential dimensions in tourism competitiveness and given that they determine disparities among the studied countries, this index is not useful nor effective when designing policies to increase competitiveness.

Following these premises, we propose a new methodology to calculate the TTCI as the main goal of this paper. This new methodology is able to correct previous problems and allows us to classify more accurately a group of countries according to their level of tourism competitiveness. This methodology is based on the distance P2 of Pena (1977), which was originally used to measure social welfare, and that in the last decade has been used in many other fields of study, making it possible to construct synthetic indicators that measure social and economic development in a group of different geographical areas, quality of employment; or tourism and environmental sustainability.

Following the introduction, the paper is structured into four big sections. The first out of these, reviews the most recent literature on tourism destination competitiveness, while focusing the analysis on the most significant models that have been developed at empirical and conceptual level. The second section describes the methodology proposed for the construction of the new synthetic index of tourism competitiveness, paying special attention to the method of calculation and the advantages that this method has in comparison with others used to aggregate information. In the third section, we present the results of the synthetic index built following the DP2 method for a number of 136 countries, which are the countries included in the last edition published in 2017, in comparison with the TTCI carried out by the WEF. Likewise, we will perform an analysis of the variables -or partial indicators- that influence tourism competitiveness of those countries to a larger extent. The analysis will be carried out by studying the Ivanovic's Coefficient and evaluating the amount of relative information provided by each variable in the construction of the synthetic index. The last section is focused on underscoring the main conclusions drawn from this paper, while highlighting both the main implications of the results in the measurement of tourism destination competitiveness and the proposed course of action to follow in the key dimensions of competitiveness, which determines to a large extent the growth of tourism in the countries taken into consideration.

## **TOURISM DESTINATION COMPETITIVENESS AND ITS MEASUREMENT**

Tourism destination competitiveness has been widely studied in the scientific literature, although there is no agreement when it comes down to its definition (Mazanec, Wöber and Zins, 2007). A larger number of variables are related to the concept of tourism destination competitiveness, including on the one hand objective indicators such as the number of visitors, tourism/tourist expenditure; or employment. And on the other hand, variables that are measured in a subjective manner, such as the diversity/richness of the cultural heritage or the quality of the tourist experience (Dwyer & C. Kim, 2003). The several authors that have studied this issue have all considered tourism destination competitiveness from their own stands and thus, defined it differently. Buhalis (2000), supports a vision of competitiveness characterized by the long-term profitability of the tourism industry, while Hassan (2000) defines competitiveness as «the destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors».

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/innovation-in-the-measurement-of-tourism-competitiveness/240372](http://www.igi-global.com/chapter/innovation-in-the-measurement-of-tourism-competitiveness/240372)

## Related Content

---

### Evaluation of the Website Content of Hospitality Businesses: The Case of Central Antalya

Gozde Seval Ergun, Hakan Cetin and Sevkettir Yirik (2015). *International Journal of Social Ecology and Sustainable Development* (pp. 44-58).

[www.irma-international.org/article/evaluation-of-the-website-content-of-hospitality-businesses/124205](http://www.irma-international.org/article/evaluation-of-the-website-content-of-hospitality-businesses/124205)

### Investing in Sustainability: A Practice-Oriented Approach to Analyze IT-Investments in Sustainability Reporting Systems

Christoph Beckers, Oliver Marz and Lutz M. Kolbe (2013). *International Journal of Social Ecology and Sustainable Development* (pp. 99-120).

[www.irma-international.org/article/investing-sustainability-practice-oriented-approach/77913](http://www.irma-international.org/article/investing-sustainability-practice-oriented-approach/77913)

### Profiling Small and Medium Enterprises' Innovativeness During Periods of Economic Crisis: A Case Study From a Greek Region Using Strategic Groups

Ioannis Antoniadis, Elpidia Tryfon Samara and Thomai Karamitsou (2022). *Research Anthology on Business Continuity and Navigating Times of Crisis* (pp. 154-177).

[www.irma-international.org/chapter/profiling-small-and-medium-enterprises-innovativeness-during-periods-of-economic-crisis/297303](http://www.irma-international.org/chapter/profiling-small-and-medium-enterprises-innovativeness-during-periods-of-economic-crisis/297303)

### COVID-19 Shock and Subsequent Crisis: How It Was

Olga Ivanovna Pilipenko, Zoya Andreevna Pilipenko and Andrey Igorevich Pilipenko (2022). *Research Anthology on Business Continuity and Navigating Times of Crisis* (pp. 1504-1536).

[www.irma-international.org/chapter/covid-19-shock-and-subsequent-crisis/297370](http://www.irma-international.org/chapter/covid-19-shock-and-subsequent-crisis/297370)

### Business Models as Enablers of Ecosystemic Interaction: A Dynamic Capability Perspective

Julius Francis Gomes, Marika Iivari, Minna Pikkarainen and Petri Ahokangas (2018). *International Journal of Social Ecology and Sustainable Development* (pp. 1-13).

[www.irma-international.org/article/business-models-as-enablers-of-ecosystemic-interaction/206190](http://www.irma-international.org/article/business-models-as-enablers-of-ecosystemic-interaction/206190)