

Seasonal concentration of cruise tourism in the Mediterranean

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This research delves into analysing the seasonality of cruise tourism in the Mediterranean by using the Gini index as a measure of the annual seasonal concentration. In addition, the decomposition of this index is used in the field of cruise tourism for the first time in literature. This study specifically used the decomposition to evaluate the contribution degree of each port to the global seasonal concentration of each Mediterranean region. Having annual indicators on the degree of seasonal concentration could be a helpful tool for improving the efficiency of policies against seasonality. Moreover, a cluster analysis technique (bootstrapped bagged clustering) was applied to classify the ports into homogeneous groups according to their seasonal patterns given the significant heterogeneity revealed in the major regions of the Mediterranean. Specifically, the seasonality analysis was performed by (i) estimating the seasonal patterns of cruise tourism, (ii) classifying the ports into homogeneous groups, and (iii) assessing the seasonal concentration levels by ports and regions obtained from the elements of the Gini decomposition. Seasonal patterns were estimated using published data from Medcruise (2010-2014). The variable analysed was the number of cruise passengers by trimester in each port. As a result of this analysis, six clusters containing several ports, located in different regions but with similar seasonal patterns, were identified; these do not coincide with the usual regional division made of the Mediterranean. The decomposition of the Gini index applied in this study provided relative marginal effects which served to identify the ports less prone to seasonality, such as the ports of Tenerife and Madeira in West Mediterranean region; Cyprus, Heraklion and Alanya in East Mediterranean region; and Sochi in the Black Sea region. These ports are highlighted for having a greater magnitude of negative relative marginal effects. To conclude, the set of techniques used in this research form a methodology that allows for a detailed analysis of seasonality in the Mediterranean regions. Furthermore, this methodology can serve as a control and monitoring tool for measuring seasonal concentration levels in cruise tourism, allowing for policies against seasonality to be tailored in this segment.

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