

PARALLEL SESSION 5

SPATIAL AND TEMPORAL CONCENTRATION OF TOURISM DEMAND IN NORTHERN PORTUGAL: REGIONAL POLICY RECOMMENDATIONS TO PROMOTE TOURISM COMPETITION AND PORTFOLIO DIVERSITY

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Extended Abstract

Abstract

The northern region of Portugal, in the last years, has experienced a growing number of visitors from different countries, which may indicate the emergence of an overtourism phenomenon in some particular municipalities or specific spaces. This phenomenon may cause significant destruction of the living conditions of residents, landscapes, seascapes, air and water quality, causing economic inequalities and social exclusion. The concentration of tourism activity in different municipality regions can be measured with a well know concentration measured, the Herfindahl-Hirschman Index. Using as variables the number and nationality of visitors and their expenditures it is possible to follow the concentration of tourism visitors and expenditure, all over the 8 NUTIII regions located in the Northern of Portugal, and describe the routes of distribution of the tourism indicators from urban to rural areas following a more nature-oriented tourism. The results serve as a dipping compass for more oriented and well-targeted tourism policies.

Keywords: Overtourism, Northern Portugal, Spatial measurement, Herfindahl-Hirschman Index, Public policies, Outdoor tourism.

1 Introduction

Attention to the importance of tourism as a particularly efficient way of promoting regional development has increased significantly in recent years, in part due to tourism's ability to generate income and employment as well as synergies within other economic sectors (Ozturk, 2016). Portugal has a long tradition in tourism. However, the development of tourism between regions is unbalanced as a result of the country's highly insular and mountainous geomorphology and the unequal distribution of natural, socio-cultural and environmental resources. Nevertheless, factors such as a rich cultural heritage, a long coastline and a good natural environment encompass significant opportunities for the development and promotion of tourism in the North of Portugal (Andraz, Norte, & Gonçalves, 2015).

While confining green spaces with densely populated urban agglomerations are preferred locations for outdoor recreational activities by many residents, ecotourism participants are attracted to hilly regions endowed with wildlife, attractive landscapes and that offer opportunity for outdoor activities such as hiking, mountain biking, climbing or skiing (Pomfret & Bramwell, 2016). In this framework, the North of Portugal is a privileged space since it is a hilly region with a heterogeneous panorama. In fact, this region has 4 mountains: Serra do Gerês, Peneda, Marão and Soajo, as well as six prominent rivers (Minho, Lima, Neiva, Cávado, Ave and Douro), waterfalls and vineyards. Some of these elevations form natural parks, such as Peneda-Gerês, Montesinho and Alvão. In addition, the region incorporates four World Heritage Sites: Porto and Historic Center of Guimarães; Alto Douro Vinhateiro; and the Prehistoric Region and the Rock Art site in the Côa Valley. In this context, the Douro region was considered as a priority tourist attraction within the agenda of the National Strategic Tourism Plan and was also considered by the Regional Tourism Agenda as a priority area for the development of regional tourism.

In 2017, the Tourist Saturation Index for Portugal, an indicator of the social impact which allows to evaluate the relative importance of tourism and its capacity to support marginal increases on the tourism demand (Santos & Fernandes, 2011), and specifically for the North region, is quite high - it reached values of 2.33 and 1.37, respectively, meaning that the number of visitors has surpassed the number of residents. Regarding the NUTS III regions of the Northern Portugal, the results showed that 6, of the 8 NUTS III regions, presented concerning values (i.e., higher than 1). In particular, Alto Minho (1.55), Cávado (1.18), Área Metropolitana do Porto (1.81), Alto Tâmega (1.49), Douro (1.31) and Terras de Trás-os-Montes (1.22). The Ave and Tâmega e Sousa regions reached values of 0.65 and 0.39, respectively. For the period of 2014-2017, all regions presented a positive average growth rate of the Tourist Saturation Index, above the 10% average annual growth rate. Wherein the regions that showed high growth rates were Tâmega e Sousa (21.1%), Alto Minho (20.8%) and Cávado (14.4%), which values could be an indicator of the overtourism phenomenon.

The regional statistics of Turismo de Portugal for 2017 (Regional Statistical Yearbook) show, at the national level, a decrease of the average stay to 3.3 nights for the foreign market (-0.1 nights compared to 2016) and the maintenance of 2 nights for the stay of residents. The Portuguese region with the most number of overnight stays is Algarve, with 19 million, having grown 5.3% over the previous year. In Portugal, countries like Germany, Spain, France and the Netherlands, generated 25.3 million overnight stays, representing 61% of the total number of foreigners.

Total tourism revenues amounted to € 15.2 billion in 2017, an increase of 19.5% over the previous year. In the Northern region, and according to the same regional statistical yearbook, the average stay remained the same for both foreigners (2.1 nights) and residents (1.5 nights). It is the region with more stays of residents (3.2 million), which represented an increase of 3.6% between 2016 and 2017. The TOP 5 nationalities that visit the Northern region (Spain, France, Brazil, Germany and the United Kingdom) represents 60% of foreigners in the region and a total of more than 2.5 million overnight stays. Also noteworthy is the evolution of the number of tourists from Brazil (+ 31.7%) and the US (+ 31.1%). According to Turismo de Portugal - Travel BI, tourism revenues in the North Region amounted to € 430.3 million in 2017, representing an increase of 18.9% over 2016; and the room occupancy reached 64% in 2017, increasing by 3.3% (Turismo de Portugal, 2019).

Tourism demand, as it is known, is affected by the demographic trend. In addition, there is a tendency for more holiday periods and shorter ones due to the greater flexibility of weekly working hours and changes in the transport sector, for example, low-cost air travel and the evolution of the Internet reservation that takes less time in the preparation of holidays and fewer costs.

2 Literature Review

Regarding the abovementioned, the current enormous amount of tourism inbound flows led to the occurrence of a new type of tourism, whose economic and socio-cultural importance gave it the status of mass tourism. The analysis of tourism reflects a phenomenon of masses, both in terms of the number of people who practice it (visitors), of the agents associated with it (both public and private sectors) and of the spaces where it grows and develops (tourism destinations) (Benur & Bramwell, 2015). While some countries around the world focus their efforts on tourism promotion campaigns and seek to attract visitors through all possible strategies, others suffer from the overcrowding of some of their spaces and the dissatisfaction of its residents. The overtourism, the phenomenon of mass tourism, is a new concept, which embraces the study of the negative consequences of the tourism mass flows (Koens, Postma, & Papp, 2018). Nevertheless, the phenomenon already exists as a consequence of tourism crowding and its effects on the local and regional communities. Less careful control of tourism development and the spread of overtourism may lead to the loss of identity and authenticity and generate a significant risk to the future attractiveness and competitiveness of a particular touristic destination.

Bearing in mind the observed values, it is necessary that the reception of tourists in the North of Portugal follows a model of development related to special forms and alternatives of tourism, namely through a diversified and high-quality portfolio of production of tourist goods and services. Cultural, heritage, religious, agricultural, and gastronomic characteristics can be harnessed for this purpose. In particular, in order to mitigate the phenomenon of overtourism and its possible negative impacts on the territory and its populations, the solution may comprise the promotion (either public as private) of tourism offers of touristic activities, namely the ones related to outdoor tourism, in other less slaughtered regions (Keniger, Gaston, Irvine, & Fuller, 2013; Milano, Novelli, & Cheer, 2019; Perkumienė & Pranskūnienė, 2019). However, the trend towards to a more nature-oriented tourism is difficult to assess due to the lack of generally accepted definitions on the one hand and the behaviour of tourists, who in many cases choose a mixture of culture and recreation during the same vacation period (Boley & Green, 2016; Sandbrook, 2010).

3 Research Methodologies

The empirical evaluation of regional tourist inequalities is usually performed using well-known regional statistical measures, namely dispersion and concentration measures, such as the location quotient, the tourist density indices, the occupancy rates or the hotel density indices. Some of these measures are derived from descriptive statistics, while others have been specifically designed for regional and tourism analysis purposes. The Herfindahl-Hirschman Index (HHI), is probably the most used indicator to measure the level of concentration/specialization between companies. In addition, The HHI is also one of the most common indicators used to detect anti-competitive practices among companies. An increase in the value of the index is usually interpreted as an indicator of actions that can decrease the competition of the companies. Due to its enormous potential and versatility, its application has been extended to the tourism literature, to measure the level of concentration/competition between regions and over time (Cerqueti & Ausloos, 2015; Croes & Kubickova, 2013; Liu, Li, & Parkpian, 2018; Majewska, 2015). Considering the spacial level of subregions (municipalities or their communities, for example) within the North of Portugal, it is possible to use the index to calculate a major uniformity or a higher discrepancy among those subregions bearing in mind, for instance, the number of tourist arrivals, visitors by nationality, the expenditure made tourists or the practitioners of specific types of tourism activities.

The HHI is given by the formula $\sum_{i=1}^n s_i^2$, where n is the number of subregions considered within the North region and the s_i^2 is the square of the share of each subregion considering the indicator chosen to assess the touristic competition/concentration among subregions. Note, that the reason for squaring the regional share under analysis is to emphasize the weight of larger tourist destinations in the market. The index could range between 0, meaning a perfect uniformity among regions, and 1 meaning a perfect concentration which reflects high differences among regions. Lower levels of the HHI indicate a more diverse portfolio of tourism activities offered by the subregions. The higher the HHI the smaller the number of subregions with tourism concentration and the weaker the competition in concurring to the creation of businesses and jobs in the sector and, therefore, the level of income generated. The tourism attraction diversity of a northern subregion destination may be regarded as the inverse of HHI.

In this research work, the HHI addresses the spatial and temporal concentration regarding the market of origin of tourists in the North region of Portugal, considering the number and nationality of visitants, the nights spend and the expenditure made in accommodation in each subregion. In more detail, it will analyse the particular case of the number of outdoor activities/tourists in the subregions of the North of Portugal. For this last indicator, the HHI is used as a measure of the size of the particular tourism attraction type in a subregion in relation to the overall northern tourism industry. In this case, an increase in the index could be interpreted as a decrease in the attraction type diversity. The opposite happens if the index decreases. The current and official data of the National Statistics of Portugal (INE) will be considered for all 8 NUTIII regions (8 subregions) that belong to the North region of Portugal, over the period 2014-2017 (the period for each could be found the most updated statistics according to the last NUT revision, in Portugal).

4 Discussion and Results

The results show the number of visitors and their expenditure grew all over the regions in analysis in the last years. Moreover, the proportion of foreign guests in the tourism accommodation available on those regions also increased. A simple glance at the statistical data allows to observe that all the northern region of Portugal became more attractive. That is an undeniable fact. The present tourism public policies are achieving the attraction purpose. However, when analyzing the concentration of visitors (namely the foreign ones) and the receipts they generate on accommodation, after applying the HHI, it is possible to observe that the levels of concentration of visitors and their accommodation expenditure changed just slightly towards specific regions - the ones nearest the places with more visitors both in number as in accommodation receipts. More rural, desertified and elder areas continue to present low relative level of tourism activities when compared with more traditional touristic regions. Such results show the importance of promote more effective and targeted public policies, namely measures to attract nature-oriented tourism as the outdoor tourism.

5 Conclusions

The HHI allows to gain insights on the level of competition among regions over time and on their interactions, to recommend public policies for the sustainability of the tourism sector in the North of Portugal and to provide tools for the strategic management of private companies in this sector of activity. The North of Portugal offers a set of multiple and very distinct touristic solutions that are not yet well known and explored but which development may be a justifiable bet to diversify experiences and destinations – it is the case of the outdoor tourism that may create competition opportunities among regions and combat the overtourism concentrated in specific hotspot areas for tourists, such as coastal areas, gateway cities or higher hierarchy cities within the northern Portuguese region. The offer of outdoor tourism, regulated by suitable rules and supplied adequately by the specific public and private agents, is a solution not yet extensively study, analysed and scientifically researched.

In a context of tourism globalization, massification may be an inevitability for several hotspot tourism destinations. Nonetheless, if there is a proper policy of spatial planning, based on well-defined measures and indicators, like the one here proposed by the application of the HHI, there could be adequate management of it and the provision of effective mechanisms for environmental planning and management. Furthermore, due to the complexity of the tourist product (accommodation facilities, travel organizers, attractions and leisure activities), necessary to satisfy tourists' demands, not only produced by different private companies, but also public or semi-public institutions (roads, transportation, municipal services, museums & heritage services), a close public-private partnership is recommended to increase the competitiveness not only of individual companies but also of the destination as the conglomerate of all product components needed to welcome tourists.

Finally, effective policies for tourism in the North of Portugal may allow the generation of spillover effects which generate tourism sustainability avoiding or mitigating the negative impacts of overtourism on the territory and its communities, maintaining the interest in both national and international touristic flows and its long term economic profitability, social positive impact (which include the creation of jobs and the desertification of rural spaces) and environmental protection.

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References

- Andraz, J. M., Norte, N. M., & Gonçalves, H. S. (2015). Effects of tourism on regional asymmetries: Empirical evidence for Portugal. *Tourism Management*, 50, 257–267. <https://doi.org/10.1016/j.tourman.2015.03.004>
- Benur, A. M., & Bramwell, B. (2015). Tourism product development and product diversification in destinations. *Tourism Management*, 50, 213–224. <https://doi.org/10.1016/j.tourman.2015.02.005>
- Boley, B. B., & Green, G. T. (2016). Ecotourism and natural resource conservation: the 'potential' for a sustainable symbiotic relationship. *Journal of Ecotourism*, 15(1), 36–50. <https://doi.org/10.1080/14724049.2015.1094080>
- Cerqueti, R., & Ausloos, M. (2015). Statistical assessment of regional wealth inequalities: the Italian case. *Quality & Quantity*, 49(6), 2307–2323. <https://doi.org/10.1007/s11135-014-0111-y>
- Croes, R., & Kubickova, M. (2013). From potential to ability to compete: Towards a performance-based tourism competitiveness index. *Journal of Destination Marketing & Management*, 2(3), 146–154. <https://doi.org/10.1016/j.jdmm.2013.07.002>
- Keniger, L. E., Gaston, K. J., Irvine, K. N., & Fuller, R. A. (2013). What are the Benefits of Interacting with Nature? *International Journal of Environmental Research and Public Health*, 10(3), 913–935. <https://doi.org/10.3390/ijerph10030913>

- Koens, K., Postma, A., & Papp, B. (2018). Is Overtourism Overused? Understanding the Impact of Tourism in a City Context. *Sustainability*, 10(12), 4384. <https://doi.org/10.3390/su10124384>
- Liu, Y., Li, Y., & Parkpian, P. (2018). Inbound tourism in Thailand: Market form and scale differentiation in ASEAN source countries. *Tourism Management*, 64, 22–36. <https://doi.org/10.1016/j.tourman.2017.07.016>
- Majewska, J. (2015). Inter-regional agglomeration effects in tourism in Poland. *Tourism Geographies*, 17(3), 408–436. <https://doi.org/10.1080/14616688.2014.997279>
- Milano, C., Novelli, M., & Cheer, J. (2019). Overtourism and Tourismphobia: A Journey Through Four Decades of Tourism Development, Planning and Local Concerns. *Tourism Planning & Development*, 16(4), 353–357.
- Ozturk, I. (2016). The relationships among tourism development, energy demand, and growth factors in developed and developing countries. *International Journal of Sustainable Development & World Ecology*, 23(2), 122–131. <https://doi.org/10.1080/13504509.2015.1092000>
- Perkumienė, D., & Pranskūnienė, R. (2019). Overtourism: Between the Right to Travel and Residents' Rights. *Sustainability*, 11(7), 2138. <https://doi.org/10.3390/su11072138>
- Pomfret, G., & Bramwell, B. (2016). The characteristics and motivational decisions of outdoor adventure tourists: a review and analysis. *Current Issues in Tourism*, 19(14), 1447–1478. <https://doi.org/10.1080/13683500.2014.925430>
- Sandbrook, C. G. (2010). Local economic impact of different forms of nature-based tourism. *Conservation Letters*, 3(1), 21–28. <https://doi.org/10.1111/j.1755-263X.2009.00085.x>
- Santos, N. S., & Fernandes, P. O. (2011). Modelação e caracterização da procura turística: o caso da região Norte de Portugal. *TÉKHNE-Polytechnical Studies Review*, 9(16), 118–137.
- Turismo de Portugal. (2019). Travel BI - smarter decisions. Retrieved 17 June 2019, from Travel BI - smarter decisions website: <http://travelbi.turismodeportugal.pt/pt-pt/Paginas/HomePage.aspx>