

Title:

What Drives Tourism Demand Resilience in European Union Regions? A Spatial Econometric Analysis

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EXTENDED ABSTRACT

Tourism, a key economic driver for many nations, faces inherent risks from various external factors, including economic recessions, natural disasters, and pandemics. These events can heavily impact the sector's stability and its capacity for resilience (Pappas et al., 2023; Ritchie, 2004). World Travel & Tourism Council data (2023, 2024) indicate that, before the COVID-19 pandemic, the travel and tourism industries significantly contributed to the global GDP and job market, each holding a share of 10.3%. Europe, renowned for its long-standing prominence in tourism, led the way with 51% of the total global tourist arrivals in 2019, particularly through its EU member states. The COVID-19 pandemic brought unprecedented challenges to the sector, resulting in a decline of over 50% in its economic contribution and a loss of more than 20% of its workforce. However, initial figures for 2023 show promising signs of recovery, as the sector is close to reaching its pre-pandemic economic levels, with only a 5% shortfall.

Recent scholarly discourse in economic geography and regional studies has increasingly centered on the theme of regional resilience (Hu & Hassink, 2020). Concurrently, regional science has developed a robust interest in the realm of tourism, a result of the synergistic interaction between economic geography and tourism geography. Tourism is increasingly viewed as a significant contributor to economic development at the regional level (Bassil et al., 2023; Brouder, 2017; Calero & Turner, 2020). Particularly noteworthy is the growing academic focus on the interplay between tourism and regional resilience (Jang & Kim, 2022).

Cehan et al. (2023) present three predominant interpretations concerning the association between tourism and resilience. The first interpretation regards tourism as a system that reacts to challenges, whether they are of natural or human origin, by either showcasing resilience or requiring enhancement for resilience. The second interpretation portrays tourism as an economic venture that can boost the resilience of interconnected systems, thus establishing tourism as a critical contributor to resilience. The third interpretation views tourism in a more contentious role, as an external challenge, underscoring the need for resilience in other systems against potential negative impacts from tourism. When delving into the nexus of economic and tourism resilience at the regional level, research tends to diverge into two paths. One line of inquiry investigates the influence of tourism on regional economic resilience, often referred to as 'tourism-induced resilience' (Ibanescu et al., 2020). Conversely, the second line of research concentrates on 'tourism resilience' itself, exploring the adaptive responses of tourism to adverse events and the intrinsic ability of regions to restore their tourism demand after unexpected shock (Falk et al., 2022).

This paper contributes to the scholarly discourse on "tourism resilience". The concept of tourism resilience is generally understood as the tourism sector's response to negative shocks (Boto-García & Mayor, 2022; Falk et al., 2022). When considered in the context of regional tourism, resilience pertains to the ability of regions to rebound in terms of tourism demand following sudden shocks (Falk et al., 2022). This topic has garnered increasing attention, particularly as recent research highlights notable disparities in tourism resilience across different geographical regions (Boto-García & Mayor, 2022; Duro et al., 2022). The primary objective of this study is to discern and examine the principal factors that influence the performance of tourism resilience, especially during the resistance and recovery phases, in EU NUTS-2 regions. Additionally, this paper aims to deepen our understanding of the factors that contribute to tourism resilience, thereby facilitating the development of more effective strategies and practices within the tourism industries.

There has been limited focus on tourism resilience and its determinants in academic research. Analyzing Italian regions after the 2008 financial crisis, Cellini and Cuccia (2015) identified a positive correlation between the tourism resilience index and regional size. Similarly, Costantino et al. (2023) investigated this phenomenon in Italy from the perspectives of resistance and recovery, revealing that both the density of tourist activities and the Herfindahl–Hirschman index, indicating local economic specialization, slightly enhance destination resistance. In a wider European context, Pascariu et al. (2021) studied EU NUTS-2 regions, differentiating between 'sustained' and 'speedy' tourism resilience. Their results showed a significant positive correlation between sustained resilience and regional competitiveness, innovation, and specialization, while speedy resilience correlated mainly with innovation.

The resilience of the tourism sector to economic shocks is predicated on various factors, particularly those related to geographic context (for example, pull factors in receptive tourist destinations), as per Bernini et al. (2020). Our study examines 242 EU NUTS-2 regions, using tourism resilience as the dependent variable. Employing the approach of Giannakis and Bruggeman (2020), we calculate this variable relative to the EU average. The regional economic resilience indicator, following Martin et al. (2016), is divided into two dimensions: resistance, measured by the change in overnight stays in 2020, and recovery, assessed by the alteration in overnights in 2021 and 2022, compared to 2019. Furthermore, this study incorporates a range of independent variables, categorized into three distinct groups: (i) indicators derived from tourism demand, encompassing tourist intensity, the proportion of domestic and international tourism, tourism density, tourism intensity, average duration of stay, and seasonality; (ii) indicators stemming from tourism supply, including tourism capacity, diversity in tourism offerings, contribution of tourism to employment, and the presence of cultural and natural heritage sites; and (iii) a set of control variables, which comprise levels of innovation, urbanization, specialization of economy, and quality of governance. The data for this analysis is sourced from Eurostat (2024) and the EU Tourism Dashboard (European Commission, 2024).

The principal findings regarding tourism resilience in the resistance phase indicate that regions characterized by longer average stays and a higher proportion of domestic tourism demonstrate greater shock resistance. Conversely, regions heavily reliant on international tourism and with higher occupancy rates often show diminished resistance to fluctuations in tourism demand. From a supply perspective, factors like tourism employment and the presence of UNESCO heritage sites are inversely related to resilience in this phase. Additionally, aspects such as tourism intensity, density, capacity, diversity, and the extent of protected land areas do not appear to have a significant impact on resilience during the resistance phase. During the recovery phase of tourism resilience, it is noted that regions with a substantial international tourism base tend to rebound more quickly from shocks. Conversely, regions marked by intensive and dense tourism activities, combined with a high rate of domestic tourism, demonstrate a less robust recovery post-shock. On the supply side, attributes such as tourism capacity and the presence of UNESCO heritage sites are positively associated with resilience in this phase. Nevertheless, indicators like the average length of stay, seasonality of tourism, occupancy rates, and factors including tourism employment, diversity, and protected natural areas seem to play a minimal role in influencing resilience during the recovery phase.

The overarching findings of this research reveal that the variables pivotal to regional tourism resilience are distinct between the resistance and recovery phases. Furthermore, it is observed that tourism resilience within a specific region positively influences neighboring areas. The study makes a significant contribution to understanding the dynamics of tourism resilience in EU NUTS 2 regions. Its findings shed light on key factors that underpin the resilience of the tourism sector. This knowledge is crucial

for policymakers and industry professionals in developing targeted approaches to enhance the resilience of tourism and to lessen the impact of external disturbances on tourism industries.

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