# Discussing the Spatial Underpinnings of Tourism Policy and Planning in Romania\*

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<sup>\*</sup> Acknowledgments: The work was conducted under the research project 'Regional Geographical Studies in the view of Sustainable Development and Trans-sectoral Cooperation' of the Institute of Geography, Romanian Academy.



DOI: 10.24193/tras.67E.3 Published First Online: 28/10/2022

#### Abstract

The paper examines the spatial concepts and mechanisms that drive the reconfiguration of the tourism space and provide policy-relevant information. Mapping the spatial patterns of tourism supply and demand at finely-grained data over the last two decades, the analysis employs spatiotemporal and scaling methods to capture the interactions and dependencies among tourism concentrations.

The findings point to space-tourism realignments based on heterogeneous concentration patterns and trajectories of change, supply growth and expansion at the first level of contiguity, and diffused domestic vs. polarized international arrivals. The binary approach of tourism concentrations of supply and demand with varying location quotients enables the identification of both differences and similarities in terms of contextual and tourism development indicators. In support of context-sensitive policy interventions, we argue that space should be regarded as a central dimension of the tourism development policy. Providing a snapshot of the tourism concentrations in 2019, the study may count as a baseline reference for further analyses in post-pandemic times.

**Keywords:** spatial changes, accommodation infrastructure, tourist flows, tourism policy, Romania.

### 1. Introduction<sup>1</sup>

After the regime change in 1990, Romania embarked on profound structural changes to the national economy whereby tourism gained importance as a driver of economic diversification and regional development. Despite the high increase in tourism infrastructure (161.5% change rate of accommodation firms), domestic and international tourist arrivals grew only marginally (by 8.77% between 1990 and 2019). Consequently, Romania has more than a modest contribution to European tourism (0.4% of Europe international arrivals and 0.5% of receipts — well behind Poland, Hungary, Bulgaria, and comparable to Lithuania and Slovakia) (WTO International Tourism Highlights 2019 Edition). Recent cross-country analyses focused on European tourism label Romania as a 'non-tourism country' that scores low in every indicator related to sustainability, performance, and competitiveness (Romão *et al.*, 2017; Batista e Silva *et al.*, 2018). Placed outside the mainstream European tourism market, Romania is a revealing case study to illustrate the role of policy and planning to support tourism as a driver of development.

As part of the accession process to the European Union, a master plan was issued in 2006 to set the legislative framework for long-term sustainable development and management. Designed to guide tourism development for the next two decades (2006–2026), the master plan failed to bridge the gap between the policy goals and outcomes (Popescu et al., 2022). Seven years before the reference period ended, the strategy for tourism development was redesigned in 2019 pointing to institutional instability, poor administrative capacity, and financial shortages as the main factors that prevented the implementation of the master plan. The failure of the formal policy fueled the view that the restructuring of the tourism industry is mainly the result of uncoordinated private investments (Light and Dumbrăveanu, 1999) with tourism 'flourishing rather despite of government actions' (Hall and Page, 2009) and almost no state-sponsored promotion (Light, 2017) where many programs and initiatives were abandoned due to changes of interests and focus of the political decision-makers (Pop et al., 2017). The repositioning of tourism products, triggered by the shift from mass social tourism to mainly non-mass experiences, bears distinct geographical dimensions (Light and Dumbrăveanu, 1999) with the emergence of new tourism destinations (Light, 2017; Iorio and Corsale, 2014) and the articulation/disarticulation of tourism space (Benedek and Dezsi, 2004; Constantin and Reveiu, 2018; Cehan *et al.*, 2019).

However, revisiting the master plan based on content analysis (semantic clustering and relatedness of the key terms), Popescu *et al.* (2022) identify the neglect of 'space' and related terms (balanced territorial development, unevenness, and inequalities) as one of its main liabilities. The aim of this paper is to provide policy-makers with insights into the relevance of space and spatial analysis to restructure the tourism strategy, especially in anticipation of

<sup>1</sup> **Author credit statement:** CP conceptualization, methodology, preparation, writing original draft, editing, supervision; MP data curation, visualization (mapping). The data that support this study are openly available at the National Institute of Statistics Tempo online http://www.insse.ro/cms/.

further revisions of tourism strategies in the post-COVID19 era. Hence, the paper examines the emerging tourism concentrations of supply and demand, and the spatial changes that reconfigured the tourism industry to highlight their implications for strategic policy and planning. We first question the locational patterns pursued by tourism accommodation establishments along the time-space axis. These firms provide the core activities of the emerging concentrations; therefore, their spatial pattern helps the understanding of the relationships between territorial capabilities, tourism dynamics, and regional economies. Engaging with a space-time analysis, we assess the spatial inequalities of tourism concentrations with varying location quotients and the trajectories of change that contribute to reshaping the tourism space. Then, with the focus on explaining emerging spatialities of accommodation firms and tourist flows, we employ spatial scaling to zoom into the articulation of tourism change and space along the meso (NUTS3 - county) and micro (LAU2 – locality) scales of analysis. Finally, mapping the space-tourism realignments, we discuss the binary categories of tourism concentrations (with location quotients above and below the cut-off value of 1 in relation to contextual factors and development indicators to reveal the agglomeration externalities on tourism supply and demand. Our spatial analysis enables us to address policy implications that might guide the future of tourism in Romania.

The relevance of the paper is two-fold. From a conceptual point of view, the case of Romanian tourism links to a broader surge of concerns over tourism transformation and adaptation to the changing context in CEE countries (Majewska, 2015; Dávid and Tóth, 2012; Croes *et al.*, 2021). In this regard, our approach addresses the debates on the spatial underpinnings of tourism and their role in producing knowledge for policy and planning. From a practical point of view, we attend to the relevance of our findings for policy formulation by examining the spatial arrangements of tourism concentrations of supply and demand. Engaging with a spatial approach, we aim to bridge the gap between theory and practice by providing more in-depth insights to frame contextually sensitive policy interventions. We argue that the tourism policy can benefit from the integrated approach of tourism and space interactions and dependencies.

The paper proceeds as follows. In the next section, we discuss the theoretical and conceptual framework of spatial tourism changes. Then, we present the operationalization of our approach based on space-time analysis, scale as relation, and territorial context to assess the spatial patterns of tourism supply and demand. Section 4 discusses the results and the last section concludes the paper.

## Building on spatial concepts and mechanisms to provide tourism policy-relevant information

Abundant literature discusses the concepts that relate space to tourism and advocates the need to integrate space among the various dimensions and criteria of tourism policy. To start with, we should understand that the tourism space is not a fixed spatial entity (Miller, 2017). It is constantly produced and consumed through negotiated (re)production (Ateljevic, 2000), whereby places and spaces are invested with social meanings and

representations allowing the incorporation into the processes associated with tourism (Britton, 1991). Tourism features strong localized production and consumption with highly concentrated supply and demand (Carreras, 1995) and co-existing unstable and heterogeneous spatial patterns (Yang and Wong, 2013). Given the production and consumption dialectics, there is a widespread understanding that 'geography is the substance of tourism' (Dallen, 2018). Relying on the geographical tenets of space, place, and location, tourism is unraveled as spatially dynamic where change is intrinsic to its evolution. Historical processes, power relations, public policy, and resource management help understand how tourism works with localities and localities with tourism (Saarinen *et al.*, 2017). Central to the geographical analysis is how tourism develops, advances across space, and capitalizes on territorial resources and attributes.

One of the axioms of spatial thinking 'location matters' is epitomized in the 'first law of geography' invoked by Tobler (1970). Its basic statement 'everything is related to everything else, but near things are more related than distant things' opened new avenues of research regarding proximity, accessibility, interaction, and spatial patterns (Joo *et al.*, 2017; Walker, 2022; Foresman and Luscombe, 2017). This stream of research has been more recently reinforced by advancements in geographical information systems (Goodchild, 2004; Miller, 2004; Majewska 2015, 2017). Location is an economic variable that affects the geography of tourism and its focus on tourism activities across space (Xu *et al.*, 2021). The localization economies are typically defined as deriving from knowledge spillovers, labor market pooling, and vertical linkages that incentivize firms sharing similar inputs, technologies, and workforce to co-locate.

In such a context, proximity holds a central role in the geographical concentration of firms, especially because the tourism industry is strongly labor-intensive with a high potential for personal interactions that trigger knowledge spillovers (Kim *et al.*, 2021). In particular, this is appealing for low-resource firms that locate close to others seeking to benefit from resource spillover whereas high-resource firms prefer co-location with similar firms in the attempt to avoid the spillovers of resources (Kalnins and Chung, 2004). In the same vein, Salo *et al.* (2014) and Seul (2015) conclude that tourism firms choose to cooperate and compete with similar counterparts rather than with those that are differentiated in terms of performance. Grounded on location and proximity, the agglomeration of firms drives tourism growth through intra-sectoral externalities (Yang and Fik, 2014) due to localized production and consumption and space-time interconnections of goods and services (Majewska, 2017).

The benefits of agglomeration extend beyond the shared access to infrastructure, reduced consumer search costs, timely information externalities, and improved labor productivity (Urtasun and Gutiérrez, 2006; Chan *et al.*, 2012; Marco-Lajara *et al.*, 2016). The research focus translated to addressing the multiplier effects of tourism and the relationships between tourism concentration and local, and regional economies (Majewska, 2015; Yang and Fik, 2014; Bohlin *et al.*, 2020). The scale of backward linkages, the size, and type of tourism revenues, and the characteristics of economic structures shape the role of tourism in influencing regional and local development (Yang *et al.*, 2018; Bohlin *et al.*,

2020). Empirical evidence at the sub-national scale portrays tourism as a follower rather than a leader for economic development (Bohlin *et al.*, 2020). Its high sensitivity to overall economic evolution explains the concentration and growth of tourism in growing urban environments (Yang and Fik, 2014; Majewska, 2015).

Given the entanglements of tourism dynamics and territorial characteristics, an increasing number of studies focus on inter and intra-regional spillovers (Yang and Wong, 2012; Yang and Fik, 2014; Majewska, 2015, 2017; Kim et al., 2021; Rodriguez-Rangel et al., 2020). Defined as indirect or unintentional effects that tourism in one region has on neighboring regions, spillover effects are identified in regional tourism growth and tourist flows (Yang and Wong, 2012; Yang and Fik, 2014). From the supply side, the spatial concentration of tourism stirs positive agglomeration effects, such as productivity gains, knowledge diffusion, and social and business network formation (Majewska, 2017). Intra-regional spillovers are based on the heterogeneity and complementary of tourism supply while inter-regional spillovers enhance functional relationships with neighboring regions and stretch across the territory (Majewska and Truskolaski, 2019). Due to externalities and spatial interdependence, tourist flows spread to neighboring regions (Yang and Fik, 2014) with densifier effects on both tourism supply and demand. Agglomeration processes and positive spillover effects mean that a region potentially benefits from tourism growth in the neighboring regions (Majewska, 2017). It also means that cooperation and competition are strengthened in such a way that poor resource base may be overcome by the localization economies that support the tourism industry (Rodriguez-Rangel et al., 2020). Consequently, the regional tourism dynamics are related to resources and amenities as well as to the development path of neighboring regions (Romão *et al.*, 2017).

As a resource-seeker activity, tourism is distributed unevenly across space. However, it is considered a driver of regional development and a policy tool to reduce spatial disparities if supported by adequate policy frameworks (Hall and Page, 2009; Goh *et al.*, 2014; Saarinen *et al.*, 2017; Smith *et al.*, 2018; Bohlin *et al.*, 2020). Capitalizing on the benefits of tourism growth requires holistic and future-oriented policy measures that guide the industry's development path by reducing the negative externalities (Saarinen *et al.*, 2017). Conversely, the lack of a development strategy appears to affect the tourism industry in different circumstances and at different scales: Harilal *et al.* (2019) discuss the 'tourism development without policy' in Cameroon and point to the need for a national tourism policy supported by intense research on tourism and its role in development; Smith *et al.* (2018) analyze tourism consumption in the central district of Budapest where urban planning is downsized by random and unpredictable decision-making that jeopardize the integrated urban fabric of the city; Croes *et al.* (2021) invoke the role of policy to articulate tourism specialization, economic growth and human development in Poland as a strategy to propose a more appealing product for international tourists.

Spatial analyses provide relevant information for decision-makers and entrepreneurs (Yang and Fik, 2014; Saarinen *et al.*, 2017; Romão *et al.*, 2017; Bohlin *et al.*, 2020; Rodriguez-Rangel *et al.*, 2020) to improve the management of tourism destinations. Identifying and assessing the localization patterns of supply and demand is key to supporting

the sustainable development of tourism. For instance, the location of accommodation firms is essential for regional planning of infrastructure services (McNeill, 2008), market access for tourists, and the level of competition in a tourism destination (Yang et al., 2014). In such a context, the strategy to mitigate competition entails the differentiation of products and destination image building (Yang and Fik, 2014). For the spatial concentration of supply to intensify demand, diversification, and density are needed to generate profits and reduce the detrimental effects of competition (Majewska, 2017; Rodriguez-Rangel et al., 2020). The space-time assessment of the tourist flows helps make adequate management decisions grounded in tourism and territorial variability (Batista e Silva et al., 2018). Additionally, it represents a valuable input for tourism marketing (Rodriguez-Rangel et al., 2020) through collaborative efforts of proximate tourism regions to internalize the positive spatial spillovers and capitalize on spatial heterogeneity (Yang and Fik, 2014).

#### 3. The research methods

The empirical analysis is based on data issued by the National Institute of Statistics Tempo Online (a free access time series database) on the tourism industry. We use two-digit (55) NACE (EU Nomenclature of Economic Activities) data on accommodation establishments to identify and measure the spatial inequalities of tourism supply. The level of geographical agglomeration and tourism specialization is quantified by the Location Quotient (LQ) in 2002 and 2019 (the baseline year marks the upsurge of the process of tourism growth after the sharp decline in the 1990s, and the end year is the time reference before the outbreak of the pandemic that would further require the reassessment of spatial patterns and trajectories of tourism). The spatial unit of analysis is NUTS3 (EU Nomenclature of Units for Territorial Statistic) — 41 counties and the capital city of Bucharest. As our study aims to identify the spatial changes of tourism concentrations in connection with the policy framework, the meso level of analysis (county) is institutionally relevant to address policy questions of tourism dynamics and the design of strategic orientations (Romão *et al.*, 2017).

Linked to existing theoretical models of firm location, LQ is an estimator of concentration and specialization (Billings and Johnson, 2012; Guimaraes *et al.*, 2009) preferably at higher industry and spatial aggregations to enhance the accuracy of results. It is a method of quantifying the level of concentration of a particular industry in a region as compared to the nation, i.e., the ratio between a region and the national average in terms of employment or/and firms to identify the export-oriented industries. It has been employed in tourism studies to assess spatial inequalities in different development contexts (Capone, 2016; Majewska, 2015; Segarra-Ona *et al.*, 2016; Bohlin *et al.*, 2020; Kim *et al.*, 2021).

Using the Location Quotient with a cut-off value of 1, the next step of the analysis is to examine the time-space dynamics of tourism concentrations. Tourism is a time-space phenomenon, thus grasping the spatial-temporal relations enables us to capture the impact of spatial variation and temporal effect on the level and scale of tourism concentrations and the diversity of evolutionary trajectories (Hall and Page, 2009; Miller, 2017). The

graph used to visualize the evolution of tourism concentrations displays the LQ of firms in 2002 on the vertical axis and the percent change of LQ over the 2002–2019 period on the horizontal axis. The territorial units (counties) are plotted as circles whereby the size corresponds to the number of tourism firms. The four quadrants of the graph are useful to categorize various areas according to the level of tourism concentration and their trajectories of change. Keeping track of how the tourism concentrations 'move' inside the graph in time provides useful insights for designing adequate tourism policy.

Further, we search to extract more in-depth information on the tourism and space dynamics with potential explanatory and predictive results. To this end, we employ spatial scaling to shift the level of analysis from the meso to the micro-scale. We embed the data on accommodation establishments, tourist arrivals, and the territorial units, urban and rural, in GIS to visualize the combination of spatial and attribute values. Spatial patterns are manifestations of spatial processes that are implicitly engrained in the practice of geographical analysis (Miller, 2004; Klippel et al., 2011). Scale is a pivotal concept of geography and a 'metric of geographical differentiation' (Smith, 2000; Brenner, 2001). Therefore, spatial scaling is critical to provide accurate information (Jonas, 2006; Xu et al., 2021) on structures and change. We adhere to the understanding of scale as relation (Howitt, 1998) that articulates the dialectics of territory, economy, and culture. Mapping the tourism supply (accommodation establishments) and demand (tourist flows) at the micro-scale (LAU2 – locality) including 3,181 territorial units, we intend to add the scalar settings to our approach. Finally, we compare the identified tourism concentrations with LQ above and below the national average in terms of contextual and development indicators of supply and demand.

## 4. Results and discussion

# 4.1. Emerging tourism concentrations and their trajectories of change

The tourism supply displays a concentrated pattern which clearly distinguishes the tourism agglomerations at meso level. In 2002 one third of the counties scores a LQ higher than 1 suggesting stronger concentrations of tourism as compared to the national average. The concentration of accommodation firms in these counties is statistically evidenced by their significant share of 70.67% in the total number of firms. While in early transition, the number of hotels was prevailing, 2002 has marked a significant structural turn with urban and rural guesthouses surpassing the number of hotels (953 as against 835, respectively). If the total number of accommodation units grew by 151.71% between 2002 and 2019, the increase of urban and rural boarding houses was more than double during the same period (368.8%) with a strong impact on the regional reconfiguration of tourism. Their share in the total number of accommodation firms jumped from 28.5% to 53.1% between 2002 and 2019.

In 2019 all the pre-existing concentrations show the consolidation of the level of specialization, while five 'new-comers' joined the group of clustered agglomerations with LQ higher than the national average largely relying on the combination of mountain landscape

and cultural heritage. As a result, almost half of the counties host over-represented concentrations of firms which mirrors the increasing role of the tourism industry in more sub-regional economies. Three quarters of the accommodation firms (74.18%) are concentrated in these counties driven by agglomeration economies. Their weight for development is even more important when it comes to their contribution to the overall growth of tourism firms. About 70.85% of the recent growth is due to firms in tourism agglomerations with LQ higher than 1, meaning that the incentives for spatial concentration remained critical during the 2002–2019 period.

In these concentrations, capital formation including physical, financial, human, and social assets is a potential source of sub-regional dynamics. Tourism establishments and capacity are indicative of territorial capital that mirrors the connections between location, competitiveness, and development (Cojanu and Robu, 2019). Therefore, tourism concentrations are strengths that may help these areas to improve their position within an increasingly competitive framework. The inherited tourism destinations from the socialist time (the seaside, Prahova Valley) are challenged by the new ones in central Transylvania, the northern regions of Maramureş and Bucovina, and the Danube Delta. Overall, the distribution of tourism concentrations with LQ higher than 1 reveals a stable spatial pattern in 2002 and 2019. Even the dispersion of tourism concentrations to new spaces has not changed significantly the uneven geographical layout. The unbalanced distribution of tourism supply contributed to increasing territorial inequalities rather than reducing them, a finding that echoes previous studies (Light and Dumbrăveanu, 1999; Benedek and Dezsi, 2004; Iorio and Corsale, 2010; Constantin and Reveiu, 2018; Cehan *et al.*, 2019).

The variation of tourism concentration and specialization is a result of different area dynamics and temporal effects. Further, we grasp the time-space relations in order to identify typologies of tourism concentrations and capture the diversity of trajectories of change. According to the position of the tourism concentrations within the quadrants of the graph, four categories are distinguished (Figure 1).

Tourism firms in strong and advancing ('leading') agglomerations are more concentrated than average and the level of concentration is rising over time. Large concentrations (Braşov, Sibiu, Mureş, Maramureş, Neamţ) are high-performing and competitive with an increasing demand for labor in the future, while small but high-growth agglomerations (Mehedinţi, Sălaj, Gorj) are expected to become more dominant over time. Weak but emerging are under-represented concentrations at the county level but growing (Bihor, Bacău, Bistriţa Năsăud). They are considered 'emerging' strengths due to their potential contribution to the area's economic base. Strong but declining ('mature') agglomerations are more concentrated than average but face internal or external threats related to changes in market demand, rising competitors, quality of infrastructure, or labor training (Constanţa, Prahova, Covasna). Weak and declining are 'transforming' concentrations under-represented and decreasing which may indicate a gap in meeting the local demand and a lack of competitiveness (Giurgiu, Ilfov, Ialomiţa). Interestingly, Cluj, Iaşi, Timiş, and Bucureşti have smaller concentrations of tourism firms compared to the national average, although they are ranked high in terms of tourist inflows and revenues. In their case,

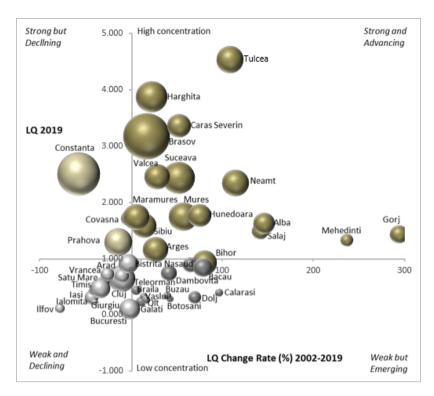


Figure 1: Tourism concentrations and trajectories of change, 2002-2019

**Source:** National Institute of Statistics, Tempo Online data series; by the authors

the potential of large-scale urbanization economies to play a significant growth-promoting effect is largely biased by the focus of tourism supply on rural areas.

The space-time analysis enabled us to capture the dynamism of tourism space. The observed heterogeneity of spatial concentrations and trajectories helps understand the location and change of tourism. However, we need to address more in-depth the interplay of spatiality, temporality, and relationality in approaching the pattern and intensity of spatial associations. For that, we employ spatial scaling to widen the scope of spatial analyses while improving the accuracy of results.

# 4.2. Mapping the tourism supply and demand

Shifting from the meso to micro-scale of analysis, data on accommodation establishments and tourist arrivals are embedded in GIS at the locality level (LAU2 – local administrative unit) to provide a more grounded view on the transformation of tourism space. Figure 2 shows the spatial patterns of the tourism supply in 2019. Although differentiated in terms of composition, size, and density, the tourism concentrations have consolidated in the same areas where the consumption of nature (mountains, seaside, and wilderness) enabled to address a potential market and reach the threshold of tourism specialization. In addition, the organizational characteristics of firms control the dynamics and the extent of

tourism concentrations. Two locational strategies were pursued by private investments. First, low-resource lodging establishments tended to agglomerate to get the advantage of resource spillovers and created new tourism concentrations. Location decisions created mostly undifferentiated tourism agglomerations of small-scale firms acting in a less dynamic market. Sharing place-specific externalities, the co-located firms are subject to spatial dependence grounded in similar productivity levels. Second, urban and rural guesthouses co-located with hotels in areas developed as major destinations prior to 1990 (Prahova Valley, Braşov). In this case, co-location is likely to enhance interactions (information sharing and demand spillover) and profitability gains due to higher competitive contexts and differentiated tourism supply and offer.

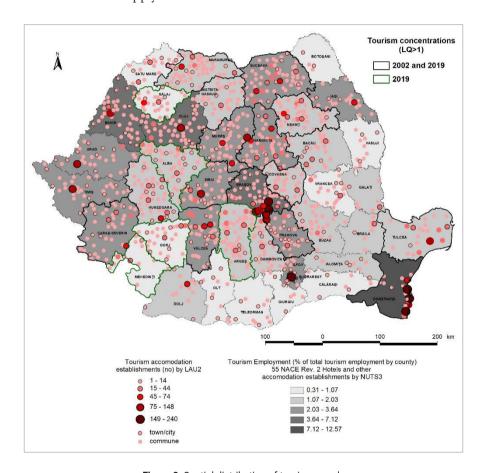


Figure 2: Spatial distribution of tourism supply

Source: National Institute of Statistics, Tempo Online; by the authors

Rural tourism with its emphasis on agrotourism created new destinations in particular regions, especially Transylvania with its rich multi-ethnic history (Saxon villages and fortified churches), Maramureş (wooden churches), Bucovina (painted monasteries), Vâlcea

and Harghita (spas), and the Danube Delta (wildlife and natural landscapes). Previous studies argue that the rural tourism concentrations share important structural weaknesses: the extension in areas other than those designated by the law on tourism planning as having tourism potential (Cehan *et al.*, 2019); the prevalence of family-run businesses offering basic (B&B) services with no necessary requirements for further job creation, but also with poor chances toward heightened demand or even a guarantee for sustaining demand at all (Iorio and Corsale, 2010); the positive albeit very low spatial association of tourism (accommodation firms) and hospitality (restaurants) (Constantin and Reveiu, 2018); the lack of positive effects of World Heritage sites on rural development whereby the brand by itself has not enough power to sustain tourist attractiveness unless endorsed by policy initiatives (Iaţu *et al.*, 2018).

Given that tourism is a place-oriented activity, spatial effects are expected due to interactions among tourism concentrations. The map shows that the spillover effects of agglomeration economies spur across tourism spaces and new concentrations emerge at the first level of contiguity (proximate areas) to those already identified as 'cores' of tourism supply. Assuming that geographical spillovers of tourism supply enhance the functional heterogeneity and complementarity of proximate tourism spaces ('interdependence of neighboring regions' according to Majewska (2017)), we need to address the patterns of tourist flows. Specifically, the spatial dependence of tourism supply and demand is of particular interest for our analysis.

In 2019, tourist arrivals numbered 13,374,943 million visitors, of which 20.06% were international. Compared to the identified patterns of supply distribution, the tourist arrivals exhibit a different spatial setup (Figure 3). First, we notice the competition between tourism concentrations with location quotients of accommodation establishments above and below the national average. More precisely, the counties with large-scale urbanization (Bucharest and regional growth poles of Iaşi, Cluj-Napoca, and Timişoara) are successful competitors to attract tourist flows, both domestic and international. The capital city and its metropolitan area is the major destination for international tourists accounting for 45.60% of total arrivals. In this case and in the case of other large cities, the hotels and urban guesthouses provide a diversified accommodation infrastructure that enables a wider reach of the tourism market. Hotels stand apart with their 19.1% share of the accommodation units and 69.3% of tourist flows. These differences are explained by their larger capacity (number of places) and the tourists' preferences for higher quality tourism services and products.

Another important finding refers to the partial overlapping of supply and demand patterns within the tourism concentrations with location quotients above the national average. Some of them display positive spatial associations between accommodation offer and tourist flows; others show a strong gap with supply exceeding largely the demand. This is especially the case of agrotourism guesthouses that account for 33.3% of the total accommodation units and attract 9.52% of tourist flows. When it comes to international arrivals, the gaps are even stronger. The majority of tourism concentrations receive less than 3% of arrivals of international tourists; only a few are more appealing (Harghita and Sibiu).

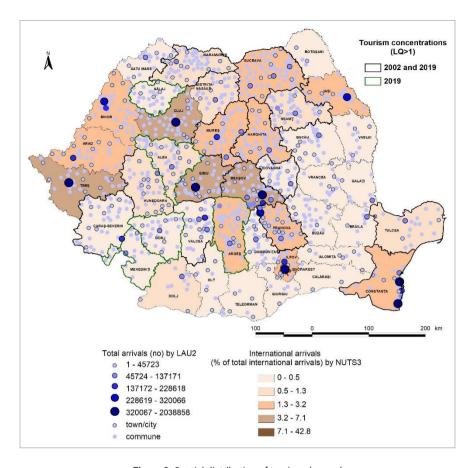


Figure 3: Spatial distribution of tourism demand

Source: National Institute of Statistics, Tempo Online; by the authors

Albeit with positive short-term effects on localized economies, we found that the shift of tourism supply from urban to rural enforces the non-linear relationships between agglomeration and growth in the long term. While tourism supply expanded to new agglomerations, the demand displayed divergent spatial patterns. Domestic tourists display a diffused pattern of travel that may potentially contribute to the balanced development of regional economies (Zhang *et al.*, 2011; Goh *et al.*, 2014). Conversely, international tourists are strongly polarized to higher than average economic development and large-scale urbanization areas due mainly to the high proportion of business travel. This assumption is supported by the dominant type of accommodation — the hotels — that receive between 72.92% and 91.08% of international tourists in concentrations with LQ>1 and LQ<1, respectively. In addition, leisure travel is mainly attracted to places of 'dissonant heritage' whereby legacy is appealing to international tourists while non-compliant with the efforts to reconstruct the cultural identity of post-communist Romania (Light, 2001; 2017).

A novel finding arises from the comparative approach of supply and demand, i.e., the temporal sequencing of tourism spillovers. Commonly, the literature devoted to tourism

externalities focused on the spatial dimension (Majewska, 2017; Yang and Fik, 2014; Yang and Wong, 2012; Kim *et al.*, 2021). We argue that supply and demand are time gap processes with differentiated temporalities grounded on interconnected and interdependent economic and cultural underpinnings. The 'reading' of the maps points to the observed time lag of tourism demand rooted in multiple and cumulative factors (uncoordinated small investments, fragmented offers promoted individually by entrepreneurs, inconsistent branding strategy of Romania as a tourism destination, poor cooperation between central and local administrations). Here, the absence of a formal tourism policy stands out as a lingering means of deterring tourism development.

### 5. Conclusions

This paper focused on the spatial changes as a means of explaining the spatialities of uneven tourism geographies, and the structured ways in which spatial patterns of supply and demand reflect sectoral repositioning and the particularities of the tourism policy context. Our approach is based on finely grained data on tourism firms over the last two decades attempting to examine the variant and changing roles of inequalities and proximities in shaping the spatial configuration of tourism. Drawing on spatiotemporal and scaling analyses enabled the bridging of meso and micro scales to organize information contained in tourism concentrations and their trajectories of change, size effect, and time dependent attributes.

Summing up, our spatial analyses point to some important findings to be considered when conceptualizing a tourism policy. Identifying the drivers of growth, assessing the locational patterns and trajectories of change, and comparing the spatial patterns of accommodation infrastructure and tourist flows contribute to the accumulation of knowledge regarding the complexity and dynamics of the tourism space.

The trajectories of change followed by the tourism concentrations provide relevant policy information. An area with a high LQ of tourism firms increasing over the given time period is becoming more concentrated than the average and high-performing with stronger labor demand. In this case, policymakers need to address the tourism industry both for the jobs it provides and the multiplier effect in related industries. On the contrary, a high but declining LQ tourism concentration is a threat to the local economy likely to lose a part of its export base. This is a warning that calls for planning and investment priorities to attract more businesses and support further development.

Scaling down the analysis from meso to micro level adds detailed information on spatial patterns, size, and density of tourism concentrations that may be used as input data to assist decision-making. The micro-scale analysis also reveals the expansion of tourism accommodation concentrations at the first level of contiguity; this piece of information, otherwise unavailable at meso-scale analysis, helps understand the rationale behind the location choice and the drivers of tourism agglomeration. From here, the examination of the suitability of local conditions for proposed developments may lead to well-grounded strategic decisions to enhance the management of tourism concentrations.

Our integrative approach to supply (accommodation infrastructure) and demand (tourist flows) enables us to reach some important findings. First, we notice different spatial patterns that present the supply side as being economically rooted in contrast with the demand side largely driven by cultural values and preferences. This difference should be addressed correctly by decision-makers in their attempt to give solutions to accommodate these gaps. By doing this, decision-makers should not lose sight of the dependence of both supply and demand on varying territorial attributes; therefore, planning and management should take account of tourism variables and their spatial patterns. Second, the diversity and density of accommodation supply play a positive role in the overall development and planning of tourism concentrations, while the space-time dynamics of tourist flows indicate the variation of development models and competition-cooperation frameworks between and within tourism concentrations. Third, our analysis points to both positive and negative externalities (the expansion of tourism concentrations at the first level of contiguity as against the absence of benefits of neighboring concentrations in terms of tourist flows). This finding drives us to conclude that supply and demand are time-gap processes that need to be addressed through timely marketing strategies and joint actions. Here, the setting up of destinations management frameworks holds much value in raising tourism competitiveness. Fourth, the comparative approach of the spatial patterns of supply and demand is useful to expose conflicts and inequalities that threaten the sustainable development of tourism of destinations and regions. Policy interventions are called to address the hotspots of overtourism or undertourism to rebalance the relationships between the environment, tourism, and local communities.

Taking a binary understanding of tourism agglomerations (with location quotients below and above the national average) we argue for contextually sensitive policies. The tourism concentrations with LQ>1 amass the major bulk of accommodation establishments and capacity as well as the arrivals of domestic tourists and nights spent. Located in less developed and less urbanized contexts, the LQ>1 tourism concentrations hold a poor impact on creating jobs and reducing social exclusion despite the higher level of tourism specialization. Although with a high share of tourism firms/total number of firms, the prominence of family-run tourism establishments in LQ>1 concentrations is reflected in the small average size in terms of employment (6.31 employed persons per firm as compared with 17.49 in concentrations with LQ below 1). Related to this, we mention that tourism employment is almost equally divided between the two groups of concentrations and that the average stays are very similar (2.06 in concentrations with LQ<1 and 2.35 in those with LQ>1).

Attracting only one-third of the international arrivals, the LQ>1 tourism concentrations show a limited capacity to reach the international market. Spearheaded mainly by rural tourism, these concentrations emerge despite the contingent marginality and remoteness commonly associated with the peripheries. Public investments and targeted and context-sensitive policy interventions are called to overcome the structural weaknesses of the peripheral/backward regions. The integration between tourism and rural development strategies alongside the joint promotion of spatially proximate destinations have strong

value here to enhance the quality and diversity of experience alongside the demand spillovers in the countryside. Finally, given the findings of our analysis, we advocate the need to consider space as a central dimension of the tourism development policy.

Engaging with spatial analysis, we came across various obstacles that limited the scope of our research. For instance, the unavailability of statistical data prevented us from gaining deeper insights into how the identified types of accommodation units (hotels, urban and rural guesthouses) contribute to structural characteristics of tourism concentrations in terms of intensity and heterogeneity, and their trajectories of change. Future research may relate to our insight into the differentiated temporality of supply and demand spill-overs. The time gap analysis based on modeling techniques at levels of destinations and regions would be theoretically inspiring and policy-relevant. This line of research could provide a more comprehensive understanding of the role of policy to drive tourism development and the relevance of spatial analyses therein.

## References:

- 1. Ateljevic, I., 'Circuits of Tourism: Stepping beyond the 'Production/Consumption' Dichotomy', 2000, *Tourism Geographies*, vol. 2, no. 4, pp. 369–388, https://doi.org/10.1080/146166800750035495.
- Batista e Silva, F., Herrera, M.A.M., Rosina, K., Ribeiro Barranco, R., Freire, S. and Schiavina, M., 'Analysing Spatiotemporal Patterns of Tourism in Europe at High-resolution with Conventional and Big Data Sources', 2018, *Tourism Management*, vol. 68, pp. 101–115, https://doi.org/10.1016/j.tourman.2018.02.020.
- 3. Benedek, J. and Dezsi S., 'The Role of Rural Tourism in the Economic Diversification of Rural Space in Romania', 2004, International Conference Europe at the Margins: EU Regional Policy, Peripherality and Rurality, April 15–16, 2004, Angers, France.
- 4. Billings, S.B. and Johnson, E.B., 'The Location Quotient as an Estimator of Industrial Concentration', 2012, *Regional Science and Urban Economics*, vol. 42, no. 4, pp. 642–647, https://doi.org/10.1016/j.regsciurbeco.2012.03.003.
- Bohlin, M., Brandt, D. and Elbe, J., 'Spatial Concentration of Tourism A Case of Urban Supremacy', 2020, *Tourism Planning & Development*, https://doi.org/10.1080/21568316.20 20.1855239.
- 6. Brenner, N., 'The Limits to Scale? Methodological Reflections on Scalar Structuration', 2001, *Progress in Human Geography*, vol. 25, no. 4, pp. 591–614.
- 7. Britton, S., 'Tourism, Capital and Place: Towards a Critical Geography of Tourism', 1991, Environment and Planning D: Society and Space, vol. 9, pp. 451–478.
- 8. Capone, F. (ed.), *Tourist Clusters, Destinations and Competitiveness. Theoretical Issues and Empirical Evidences*, Abingdon and New York: Routledge, 2016.
- 9. Carreras, C., 'Mega Events: Local Strategies and Global Tourists Attractions', in Montanari, A., Williams, A.W. (eds.), *European Tourism: Regions, Spaces and Restructuring*, Chichester: Willey, 1995, pp. 193–205.
- Cehan, A., Iaţu, C., Eva, M., Ibănescu, B. and Bulai, M., 'Territorial Dynamics of Tourism in Romania: A Long-term Perspective (1990–2016)', 2019, Human Geographies – Journal of Studies and Research in Human Geography, vol. 13, no. 1, pp. 23–44.

- 11. Chan, L.Y., Lin, L.H. and Wang, C.L., 'Industry-region Position and Economic Performance of Travel and Tourism Service Industry: An Agglomeration Perspective', 2012, *Asia Pacific Journal of Tourism Research*, vol. 17, no. 5, pp. 562–576.
- 12. Cojanu, V. and Robu, R., 'The Geography of Territorial Capital in the European Union: A Map and Several Policy Issues', 2019, *Transylvanian Review of Administrative Sciences*, no. 56E, pp. 23–40, DOI: 10.24193/tras.56E.2.
- 13. Constantin, D.L. and Reveiu, A., 'A Spatial Analysis of Tourism Infrastructure in Romania: Spotlight on Accommodation and Food Service Companies', 2018, *Region*, vol. 5, no. 1, pp. 1–16. DOI: 10.18335/region.v5i1.111.
- Croes, R., Ridderstaat, J., Bąk, M. and Zientara, P., 'Tourism Specialization, Economic Growth, Human Development and Transition Economies: The Case of Poland', 2021, *Tourism Management*, vol. 82, 104181.
- 15. Dallen, J.T., 'Geography: The Substance of Tourism', 2018, *Tourism Geographies*, vol. 20, no. 1, pp. 166–169, DOI: 10.1080/14616688.2017.1402948.
- Dávid, L. and Tóth, G., 'Analysing the Competitiveness of Tourism Regions in Hungary: New Findings', 2012, *Current Issues in Tourism*, vol. 15, no. 8, pp. 803–809, https://doi.org/10.108 0/13683500.2011.644267.
- 17. Foresman, T. and Luscombe, R., 'The Second Law of Geography for a Spatially Enabled Economy', 2017, *International Journal of Digital Earth*, vol. 10, no. 10, pp. 979–995.
- 18. Goh, C., Li, H. and Li, M., 'A Comparative Analysis of Domestic and International Tourism Spatial Distribution: Trends and Impacts', 2014, *Journal of China Tourism Research*, vol. 10, no. 4, pp. 388–413.
- 19. Goodchild, M.F., 'GIScience, Geography, Form and Process', 2004, *Annals of the Association of American Geographers*, vol. 94, no. 4, pp. 709–714, https://doi.org/10.1111/j.1467-8306.2004.00424.x.
- 20. Guimaraes, P., Figueiredo, O. and Woodward, D., 'Dartboard Tests for the Location Quotient', 2009, *Regional Science and Urban Economics*, vol. 39, no. 3, pp. 360–364, https://doi.org/10.1016/j.regsciurbeco.2008.12.003.
- 21. Hall, C.M. and Page, S.J., 'Progress in Tourism Management: From the Geography of Tourism to Geographies of Tourism A Review', 2009, *Tourism Management*, vol. 30, no. 1, pp. 3–16.
- 22. Harilal, V., Maloney Tichaawa, T. and Saarinen, J., 'Development without Policy: Tourism Planning and Research Needs in Cameroon, Central Africa', 2019, *Tourism Planning & Development*, vol. 16, no. 6, pp. 696–705, DOI: 10.1080/21568316.2018.1501732.
- 23. Howitt, R., 'Scale as Relation: Musical Metaphors of Geographical Scale', 1998, *Area*, vol. 30, no. 1, pp. 49–58.
- 24. Iaţu, C., Ibănescu, B.C., Stoleriu, O.M. and Munteanu, A., 'The WHS Designation A Factor of Sustainable Tourism Growth for Romanian Rural Areas?', 2018, *Sustainability*, vol. 10, no. 3, 626, https://doi.org/10.3390/su10030626.
- 25. Iorio, M. and Corsale, A., 'Community-based Tourism and Networking: Viscri, Romania', 2014, *Journal of Sustainable Tourism*, vol. 22, no. 2, pp. 234–255, DOI: 10.1080/096695 82.2013.802327.
- 26. Iorio, M. and Corsale, A., 'Rural Tourism and Livelihood Strategies in Romania', 2010, *Journal of Rural Studies*, vol. 26, no. 2, pp. 152–162.

- 27. Jonas, A.E.G., 'Pro Scale: Further Reflections on the 'Scale Debate' in Human Geography', 2006, *Transactions of Institute of British Geographers*, vol. 31, no. 3, pp. 399–406.
- 28. Joo, D., Woosnam, K.M., Shafer, C.S., Scott, D. and An, S., 'Considering Tobler's First Law of Geography in a Tourism Context', 2017, *Tourism Management*, vol. 62, pp. 350–359, http://dx.doi.org/10.1016/j.tourman.2017.03.021.
- Kalnins, A. and Chung, W., 'Resource-seeking Agglomeration: A Study of Market Entry in the Lodging Industry', 2004, *Strategic Management Journal*, vol. 25, no. 7, pp. 689–699, https://doi.org/10.1002/smj.403.
- 30. Kim, Y.R., Williams, A.M., Park, S. and Chen, J.L., 'Spatial Spillovers of Agglomeration Economies and Productivity in the Tourism Industry: The Case of the UK', 2021, *Tourism Management*, vol. 82, 104201, https://doi.org/10.1016/j.tourman.2020.104201.
- 31. Klippel, A., Hardisty, F. and Li, R., 'Interpreting Spatial Patterns: An Inquiry into Formal and Cognitive Aspects of Tobler's First Law of Geography', 2011, *Annals of the Association of American Geographers*, vol. 101, no. 5, pp. 1011–1031.
- 32. Light, D. and Dumbrăveanu, D., 'Romanian Tourism in the Post-communist Period', 1999, *Annals of Tourism Research*, vol. 26, no. 4, pp. 898–927.
- 33. Light, D., 'Facing the Future': Tourism and Identity-building in Post-socialist Romania', 2001, *Political Geography*, vol. 20, no. 8, pp. 1053–1074, https://doi.org/10.1016/S0962-6298 (01)00044-0.
- 34. Light, D., 'The Undead and Dark Tourism: Dracula Tourism in Romania', in Hooper, G. and Lennon, J.J. (eds.), *Dark Tourism: Practice and Interpretation*, Abingdon: Routledge, 2017, pp. 121–133.
- 35. Majewska, J. and Truskolaski, S., 'Cluster-mapping Procedure for Tourism Regions based on Geostatistics and Fuzzy Clustering: Example of Polish Districts', 2019, *Current Issues in Tourism*, vol. 22, no. 19, pp. 2365–2385.
- 36. Majewska, J., 'GPS-based Measurement of Geographic Spillovers in Tourism Example of Polish Districts', 2017, *Tourism Geographies*, vol. 19, no. 4, pp. 612–643, DOI: 10.1080/14616688.2017.1320581.
- 37. Majewska, J., 'Inter-regional Agglomeration Effects in Tourism in Poland', 2015, *Tourism Geographies*, vol. 17, no. 3, pp. 408–436.
- 38. Marco-Lajara, B., Claver-Cortés, E., Úbeda-García, M. and Zaragoza-Sáez, P.C., 'Hotel Performance and Agglomeration of Tourist Districts', 2016, *Regional Studies*, vol. 50, no. 6, pp. 1016–1035, DOI: 10.1080/00343404.2014.954535.
- 39. McNeill, D., 'The Hotel and the City', 2008, *Progress in Human Geography*, vol. 32, no. 3, pp. 383–398.
- Miller, H.J., 'Time-Geography and Space-Time Prism', in Richardson, D., Castree, N., Goodchild, M.F., Kobayashi, A., Liu, W. and Marston, R.A. (eds.), *The International Encyclopedia of Geography*, John Wiley & Sons, 2017, DOI: 10.1002/9781118786352.wbieg0431.
- 41. Miller, H.J., 'Tobler's First Law and Spatial Analysis', 2004, *Annals of the Association of American Geographers*, vol. 94, no. 2, pp. 284–289.
- 42. National Institute of Statistics, 'Tempo Online', [Online] available at http://www.insse.ro/cms/, accessed on December 12, 2021.
- 43. Pop, C., Coros, M.M. and Balint, C., 'Romanian Rural Tourism: A Survey of Accommodation Facilities', 2017, *Studia UBB Negotia*, vol. 62, no. 2, pp. 71–126, doi:10.24193/subbnegotia.2017.2.05.

- 44. Popescu, C., Popescu, D. and Pop, I., 'Revisiting the Master Plan for Tourism Development Content Analysis', in Pamfilie, R., Dinu, V., Vasiliu, C., Plesea, D. and Tachiciu, L. (eds.), Proceedings of 8th BASIQ International Conference on New Trends in Sustainable Business and Consumption, Graz, Austria, May 25–27, 2022, Bucharest: ASE, pp. 351–358, DOI: 10.24818/BASIQ/2022/08/047.
- 45. Rodriguez-Rangel, M.C., Sánchez-Rivero, M. and Ramajo-Hernández, J., 'Spatial Intensity in Tourism Accommodation: Modelling Differences in Trends for Several Types through Poisson Models', 2020, *International Journal of Geo-Information*, vol. 9, no. 473, DOI: 10.3390/ ijgi9080473.
- 46. Romão, J., Guerreiro, J. and Rodrigues, P.M.M., 'Territory and Sustainable Tourism Development: A Space-Time Analysis on European Regions', 2017, *Region*, vol. 4, no. 3, pp. 1–17, DOI: 10.18335/region.v4i3.142.
- 47. Saarinen, J., Rogerson, C.M. and Hall, C.M., 'Geographies of Tourism Development and Planning', 2017, *Tourism Geographies*, vol. 19, no. 3, pp. 307–317, DOI: 10.1080/1461668 8.2017.1307442.
- 48. Salo, A., Garriga, A., Rigall-I-Torrent, R., Vila, M. and Fluvia, M., 'Do Implicit Prices for Hotels and Second Homes Show Differences in Tourists' Valuation for Public Attributes for Each Type of Accommodation Facility?', 2014, *International Journal of Hospitality Management*, vol. 36, pp. 120–129.
- 49. Segarra-Ona, M., Peiro-Signes, A. and Verma, R., 'How Does Concentration Affect Hotels' Performance? An Empirical Study of USA Panel Data', in Capone, F. (ed.), *Tourist Clusters, Destinations and Competitiveness. Theoretical Issues and Empirical Evidences*, London: Routledge, 2016, pp. 124–135.
- 50. Seul, K.L. and Soo, Cheong (Shawn), J., 'Conditional Agglomeration Externalities in Lodging Markets', 2015, *Journal of Hospitality & Tourism Research*, vol. 39, no. 4, pp. 540–559.
- 51. Smith, M.K., Egedy, T., Csizmady, A., Jancsik, A., Olt, G. and Michalkó, G., 'Non-planning and Tourism Consumption in Budapest's Inner City', 2018, *Tourism Geographies*, vol. 20, no. 3, pp. 524–548, DOI: 10.1080/14616688.2017.1387809.
- 52. Smith, N., 'Scale', in Johnston, R.J., Gregory, D., Pratt, G. and Watts, M. (eds), *The Dictionary of Human Geography*, 4<sup>th</sup> edition, Cambridge: Blackwell Publishers, 2000, pp. 724–727.
- 53. Tobler, W.R., 'A Computer Movie Simulating Urban Growth in the Detroit Region', 1970, *Economic Geography*, vol. 46, pp. 234–240, http://dx.doi.org/10.2307/143141.
- 54. Urtasun, A. and Gutiérrez, I., 'Tourism Agglomeration and Its Impact on Social Welfare: An Empirical Approach to the Spanish Case', 2006, *Tourism Management*, vol. 27, no. 5, pp. 901–912.
- 55. Walker, R.T., 'Geography, Von Thünen and Tobler's First Law: Tracing the Evolution of a Concept', 2022, *Geographical Review*, vol. 112, no. 4, pp. 591–607.
- 56. WTO, International Tourism Highlights 2019 Edition, [Online] available at https://www.eunwto.org/doi/pdf/10.18111/9789284421152, accessed on May 19, 2022.
- 57. Xu, Y., Li, J., Xue, J., Park, S. and Li, Q., 'Tourism Geography through the Lens of Time Use: A Computational Framework using Fine-grained Mobile Phone Data', 2021, *Annals of the American Association of Geographers*, vol. 111, no. 5, pp. 1420–1444.
- 58. Yang, Y. and Fik, T., 'Spatial Effects in Regional Tourism Growth', 2014, *Annals of Tourism Research*, vol. 46, pp. 144–162, DOI: 10.1016/j.annals.2014.03.007.

- 59. Yang, Y. and Wong, K.K.F., 'A Spatial Econometric Approach to Model Spillover Effects in Tourism Flows', 2012, *Journal of Travel Research*, vol. 51, no. 6, pp. 768–778, DOI: 10.1177/0047287512437855.
- 60. Yang, Y. and Wong, K.K.F., 'Spatial Distribution of Tourist Flows to China's Cities', 2013, *Tourism Geographies*, vol. 15, no. 2, pp. 338–363, DOI: 10.1080/14616688.2012.675511.
- Yang, Y., Fik, T.J. and Altschuler, B., 'Explaining Regional Economic Multipliers of Tourism: Does Cross-regional Heterogeneity Exist?', 2018, *Asia Pacific Journal of Tourism Research*, vol. 23, no. 1, pp. 15–23, https://doi.org/10.1080/10941665.2017.1394335.
- 62. Yang, Y., Luo, H. and Law, R., 'Theoretical, Empirical and Operational Models in Hotel Location Research', 2014, *International Journal of Hospitality Management*, vol. 36, pp. 209–220.
- 63. Zhang, Y., Xu, J.H. and Zhuang, P.J., 'The Spatial Relationship of Tourist Distribution in Chinese Cities', 2011, *Tourism Geographies*, vol. 13, no. 1, pp. 75–90.