

# International Conference on Business and Economics - Hellenic Open University

Vol 4, No 1 (2024)

Proceedings of the ICBE-HOU 2024



## Regional disparities of cultural tourism in Greece

*Panayiotis Drakakis*

### To cite this article:

Drakakis, P. (2025). Regional disparities of cultural tourism in Greece. *International Conference on Business and Economics - Hellenic Open University*, 4(1). Retrieved from <https://eproceedings.epublishing.ekt.gr/index.php/ICBE-HOU/article/view/8113>

# Regional disparities of cultural tourism in Greece

Panayiotis Drakakis\*

---

## **Abstract**

Cultural tourism, a major form of alternative or special interest tourism is regarded as having the capacity to expand the spatial and temporal dispersion of tourism flows. However, the literature regarding the spatial inequalities of cultural tourism activity is mainly dedicated to its supply side, while that on the demand side is limited. This paper attempts to supplement the small body of relevant literature by examining regional disparities of cultural tourism demand in Greece. Moreover, it seeks to set its spatial inequalities against those of tourism demand. To this end, Gini coefficients of cultural tourism demand and tourism demand indicators are employed and compared. The results indicate that cultural tourism demand does not reduce spatial inequalities but, conversely, enhances them both in tourism and economic terms. Furthermore, cultural tourism disparities are even more sizeable than those of total tourism, implying that it possesses features of mass tourism (high concentration of visitor flows). The above cast doubt on its capacity to act as a form of alternative tourism, unless strategic policies are implemented.

**JEL Classifications:** R12, Z32

**Keywords:** Cultural tourism, regional tourism disparities, balanced regional development, Gini coefficient, Greece

---

---

\* Corresponding author. Hellenic Open University, Patra, Greece. Email: drakakis.panagiotis@ac.eap.gr

## **1 Introduction**

Cultural tourism constitutes a major form of alternative or special interest tourism, and a broad sector of the tourism industry. It can be used as a tool for regional, local, and urban development (Abankina, 2013; Alberti & Giusti, 2012; Gumede, 2019; Murphy & Boyle, 2006), as well as for sustainable development (Lerario, 2022; Loulanski & Loulanski, 2011). As an alternative form of tourism, it is also considered to have the capacity to expand the spatial (Guedes & Jimenez, 2015) and temporal (Cisneros-Martínez & Fernández-Morales, 2015; Zhang et al., 2022) dispersion of tourism flows.

However, the literature regarding the spatial distribution and inequalities of cultural tourism is mainly dedicated to its supply side (e.g. Dippon & Moskaliuk, 2020; Li et al., 2008; Wang et al., 2021; Yan et al., 2023). On the contrary, the relevant literature on the demand side is rather limited. This may be attributed to the broad scope of cultural tourism – including types such as heritage, ethnic, event and festival, religious, and creative tourism, and cultural thematic routes (Csapó, 2012). This creates difficulties in quantifying the full size of cultural tourism demand and, hence, in the availability of statistical data (Petrei et al., 2020). As such, the proposition that cultural tourism ultimately reduces spatial inequalities and, therefore, contributes to balanced regional development (BRD), has not been substantially examined.

This paper seeks to enhance the small body of relevant literature and address this research gap by examining regional disparities of cultural tourism demand in Greece, a prominent cultural tourism destination due to its wealth of cultural heritage and attractions. More specifically, the main objective of this study is to establish if this form of tourism has the capacity to mitigate spatial inequalities. Additionally, it aims to ascertain whether its regional disparities are smaller than those of total tourism demand. It should be noted that cultural tourism demand is delimited to admissions to museums and archaeological and historical sites as data for other cultural attractions, such as events or thematic routes, are not available.

The rest of the paper is structured as follows: the next section outlines the literature regarding spatial inequalities in tourism and cultural tourism activity, and considers the research gap and questions; the third describes the method and the data used for analysing regional disparities in our study; and Section 4 presents the main results, with the discussion and the conclusion following.

## **2 Literature review**

### **2.1 Spatial inequalities in tourism activity**

Several empirical studies in tourism literature have investigated the spatial inequalities in tourism activity from both its supply and demand side (see Drakakis (2024) for a detailed review of the methods and variables used). The findings of these studies have led to two opposing views. On one hand, some authors contend that tourism reduces disparities among regions and thus promotes BRD. Others challenge the above argument, pointing to the fact that tourism activity (supply and demand) is often concentrated in economically

robust and well-established tourist regions, thereby increasing divergence.

The first argument is corroborated by empirical studies in developed countries such as Israel (Krakover, 2004) and Portugal (Soukiazis & Proença, 2008), but also in developing countries like China (Goh et al., 2014, 2015; Huang et al., 2021; Li et al., 2015, 2016; Wen, 2015; Wen & Sinha, 2009; Zhang et al., 2020), and Brazil (Haddad et al., 2013; Ribeiro et al., 2023). Most of these studies also stress the capacity of domestic tourism in declining spatial inequalities (Goh et al., 2014, 2015; Haddad et al., 2013; Krakover, 2004; Li et al., 2015, 2016; Ribeiro et al., 2023; Zhang et al., 2020). From a policy perspective, therefore, domestic tourism is a more powerful tool than inbound tourism for achieving BRD.

The latter position is also backed by empirical studies in developed and developing countries alike. With respect to the former, studies supporting that tourism enhances spatial disparities have emerged from the United Kingdom (Williams & Shaw, 1995), Finland (Toivonen, 2002), Sweden (Bohlin et al., 2016), Croatia (Curić et al., 2012; Payne et al., 2023), and Greece (Drakakis, 2022, 2024; Gaki et al., 2022). In developing countries, the above is evidenced in Peru (O'Hare & Barrett, 1999), South Africa (Rogerson, 2014), North Macedonia (Iliev, 2018), Romania (Cehan et al., 2019) and Turkey (Khan, 2018; Seckelmann, 2002; Tosun et al., 2003; Yüncü et al., 2017). Again, the importance of domestic tourism in harnessing disparities is pointed out by some studies (Drakakis, 2022, 2024; Seckelmann, 2002; Tosun et al., 2003).

## **2.2 Spatial inequalities in cultural tourism activity**

Research on the spatial inequalities or distribution of cultural tourism primarily focuses on its supply side. More specifically, several studies examine the geographic distribution of tangible cultural heritage, such as UNESCO World Cultural Heritage Sites (Li et al., 2008; Yongqi et al., 2021), industrial heritage sites (Fan & Sun, 2024; Yan et al., 2023; Zhang et al., 2023), and architectural heritage sites (Wang et al., 2021) in relation to tourism development. Other authors, furthermore, investigate the spatial distribution patterns of intangible cultural heritage, especially in China (Chang et al., 2023; Chen et al., 2023; Dippon & Moskaliuk, 2020; Dong et al., 2023; Kuang et al., 2023; Li et al., 2023). Guedes and Jiménez (2015), lastly, analyse tour operator packages that include cultural attractions in mainland Portugal, and argue that they reduce, to some extent, spatial tourism inequalities.

On the other hand, the demand side of cultural tourism has received comparatively little attention. Petrei et al. (2020) analyse the spatial distribution of tourism activity (beds and arrivals at accommodation establishments) and cultural tourism activity (cultural attractions and admissions) at the NUTS II level (20 regions) in Italy. They find that the concentration of admissions is very high, with a Gini coefficient at 0.61. Moreover, they compare arrivals with admissions, per 1000 inhabitants, at the municipal level and distinguish “municipalities with cultural prevalence” (have a greater number of admissions) and “municipalities with touristic prevalence” (have a greater number of arrivals).

In another study in Italy, Borowiecki and Castiglione (2014) investigate the relationship between tourism flows and participation in cultural and non-cultural (leisure) activities. Though the spatial distribution or inequalities of cultural tourism were not the focus of

this study, its breakdown of admissions for all activities indicates that they are mainly concentrated in the northern provinces. However, as mentioned above, their analysis is not limited to cultural tourism, but also accounts for attendance at other leisure activities.

### **2.3 Research gap and questions**

Based on the above, we can argue that the literature regarding spatial inequalities of tourism is more comprehensive than that of cultural tourism as it entails several empirical studies supporting both views (that tourism reduces / enhances disparities), examining inequalities from both the supply and demand side. In contrast, the relevant literature on cultural tourism is lacking, since it is mostly devoted to its supply side. Moreover, it remains largely unexplored whether this form of tourism decreases spatial inequalities and can, therefore, contribute to BRD. Petrei et al. (2020) analyse the regional distribution of admissions to cultural attractions but do not delve into the induced disparities and their implication to BRD.

In a bid to address this gap in the research, this study examines the cultural tourism inequalities in Greece, a country abundantly endowed with cultural heritage and attractions, receiving millions of cultural visitors each year. As the extant literature predominantly focuses on the supply side of cultural tourism, the study is deliberately focused on the demand side. As such, the first research question (RQ) is:

**RQ1:** Does cultural tourism demand reduce regional disparities?

Greece is also a touristically developed country, relying heavily on mass tourism, which is often criticised for creating significant spatial inequalities (e.g. Drakakis, 2022; Tosun et al., 2003). It would be interesting, therefore, to investigate if cultural tourism, as a form of alternative tourism, has a more balanced regional distribution of tourism flows than total tourism. The second RQ is, hence:

**RQ2:** Are disparities in cultural tourism demand smaller than those in tourism demand?

## **3 Methodology**

Tourism studies have employed a number of coefficients and indices in order to examine the spatial inequalities of tourism activity. Among these, the Gini coefficient is the most prevalent (e.g. Goh et al., 2015; Li et al., 2015; Papatheodorou & Arvanitis, 2014), measuring total inequality among regions. Other notable measurements include the Theil entropy (Wang et al., 2015) and the Mean Log Deviation (MLD) index (Drakakis, 2024; Goh et al., 2014), which allow for decomposing total inequality into between-group (inter-regional) and within-group (intra-regional) inequalities, and the Gini-Hirschman coefficient (Gaki et al., 2022), which measures the rate of spatial concentration, thus indirectly examining spatial inequalities. This study employs the Gini coefficient since it seeks to investigate and analyse the (inter) regional disparities of cultural tourism demand, and subsequently compare them with those of tourism demand. As such, it adopts the Gini coefficient as presented by Wen and Tisdell (1996), Wen and Sinha (2009), Li et al. (2015) and Drakakis (2022), which is calculated using the formula below:

$$G = 1 + \left(\frac{1}{n}\right) - \left(\frac{2}{n \times n \times \bar{y}}\right) \times (y_1 + 2y_2 + 3y_3 + \dots + ny_n)$$

where  $G$  represents the Gini coefficient,  $n$  is the number of Greek regions ( $n = 13$ ),  $\bar{y}$  is the mean of observations, and  $y_1, y_2, y_3, \dots, y_n$  denote individual observations of the relevant variable  $y$  in descending order of size. The coefficient values range from zero, representing perfect equality, to one, indicating complete inequality. Therefore, a higher value demonstrates a greater degree of inequality.

Cultural tourism demand data were drawn from the Hellenic Statistical Authority (ELSTAT). It publishes visitation data (visitors / admissions) and receipts for a) museums<sup>1</sup> and b) archaeological and historical sites. Unfortunately, data on other types of cultural tourism, such as events or thematic routes, are not available. Admissions to cultural attractions are used as a proxy for cultural tourism demand, as do other relevant studies (Borowiecki & Castiglione, 2014; Petrei et al., 2020). Receipts, in contrast, were not used as a proxy as they do not take into account visitors with free admission tickets, who constitute a substantial percentage of total visitors (ELSTAT, 2024a), and would also bias the results as cultural attractions charge different admission fees<sup>2</sup>. The data on admissions (or visitors), which pertain to the 1998–2023 period, were retrieved from ELSTAT's website in July 2024 (ELSTAT, 2024b).

Regarding tourism demand, all available data on domestic, inbound, and total hotel guest nights at NUTS II (regions) level were retrieved from ELSTAT's website in August 2024 (ELSTAT, 2024c). These figures refer to the 2003–2023 period, and though not the same as those for cultural tourism demand, they are close enough to make the comparison. Hotel guest nights are thus employed as a proxy for tourism demand, as is often the case in relevant studies (e.g. Krakover, 2004; Papatheodorou & Arvanitis, 2014). On the contrary, guest nights at rooms for rent and campsites (also published by ELSTAT) were not used as a proxy, as the data for the former are only reported since 2014, while campsites, primarily situated in coastal areas, would have biased the results. Also, it is essential to point out that tourism revenues, published by the Institute of the Greek Tourism Confederation (INSETE), could not serve as an additional proxy for tourism demand, since these data only exist for recent years (2016 onwards) and are only reported for inbound tourists.

Therefore, spatiotemporal data of admissions to museums, to archaeological and historical sites, and total admissions, as well as hotel guest nights (domestic, inbound, total) were used as values of variable  $y$  in the above formula and as proxies for (indicators of) cultural tourism demand and tourism demand, respectively. Admissions to cultural attractions were firstly allotted to each of the 13 (NUTS II) Greek regions (hotel guest nights were available at the NUTS II level). Then, the Gini coefficient was calculated by sorting the observations of variable  $y$  for the 13 regions in descending order of size and assigning them weights ranging from one to 13. Microsoft Excel was used for data processing and calculations.

---

<sup>1</sup>Admissions and receipts for museums refer not only to museums of cultural heritage (archaeological, historical, ecclesiastical, art, folklore, etc.) but also to monasteries, galleries, palaces, towers, and mansions / houses of historical figures, which serve as museums and are open to the public.

<sup>2</sup> For example, the entrance fee for the Acropolis of Athens is almost double that for Ancient Olympia.

## 4 Results

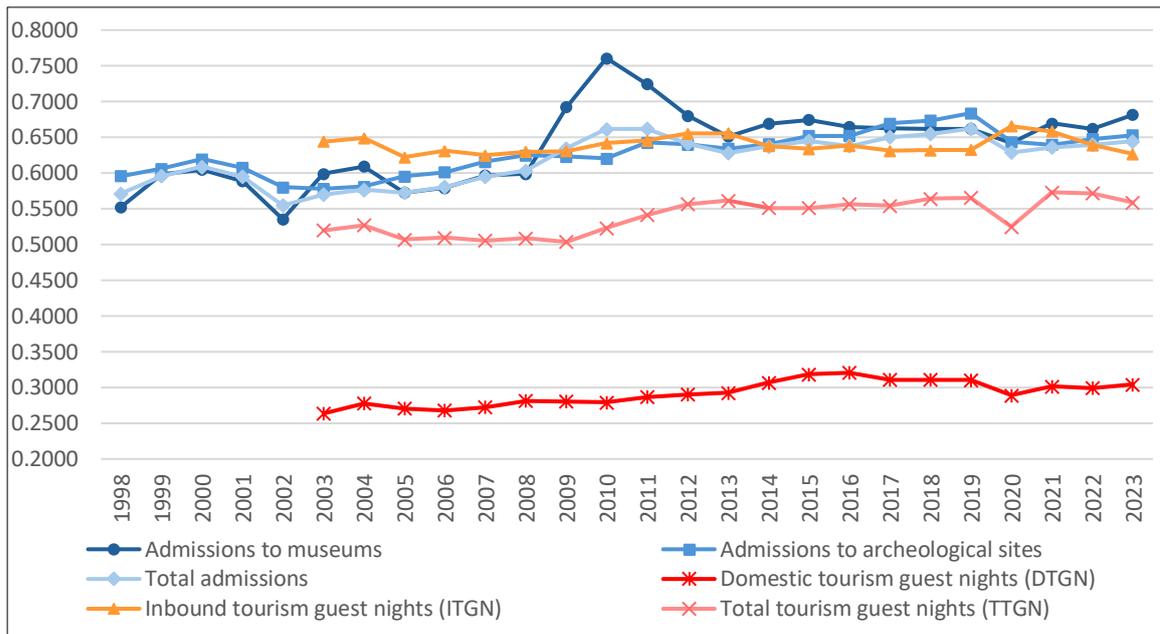
The values and the evolution of the Gini coefficient in all indicators of cultural tourism demand (admissions to museums, admissions to archaeological and historical sites, total admissions) and tourism demand (domestic tourism guest nights (DTGN), inbound tourism guest nights (ITGN), total tourism guest nights (TTGN)) are presented in Table 1 and Figure 1. Concerning cultural tourism demand indicators, we see that the values of Gini coefficients are relatively high in all cases, ranging from 0.5354 in 2002 to 0.7607 in 2010 – these being in admissions to museums. Moreover, all indicators display an upward trend during the study period (see Figure 1). In particular, the Gini coefficient for admissions to museums increased by a steady average annual rate of 0.84%, followed by an increase in that of total admissions (0.48%), and admissions to sites (0.37%). The above indicate that regional disparities in cultural tourism demand are not only substantially large but have also steadily intensified over the years.

**Table 1: Gini coefficients of cultural tourism demand and tourism demand indicators**

Year	Cultural tourism demand indicators			Tourism demand indicators		
	Admissions to museums	Admissions to sites	Total admissions	Domestic tourism guest nights (DTGN)	Inbound tourism guest nights (ITGN)	Total tourism guest nights (TTGN)
1998	0.5524	0.5958	0.5711	N / A	N / A	N / A
1999	0.5979	0.6062	0.5958	N / A	N / A	N / A
2000	0.6046	0.6195	0.6087	N / A	N / A	N / A
2001	0.5888	0.6075	0.5951	N / A	N / A	N / A
2002	0.5354	0.5801	0.5547	N / A	N / A	N / A
2003	0.5989	0.5780	0.5701	0.2636	0.6440	0.5201
2004	0.6092	0.5813	0.5766	0.2777	0.6488	0.5271
2005	0.5725	0.5954	0.5724	0.2706	0.6223	0.5071
2006	0.5792	0.6013	0.5806	0.2678	0.6312	0.5097
2007	0.5969	0.6161	0.5948	0.2726	0.6251	0.5058
2008	0.5991	0.6248	0.6035	0.2814	0.6296	0.5086
2009	0.6923	0.6232	0.6346	0.2807	0.6308	0.5036
2010	0.7607	0.6202	0.6614	0.2792	0.6417	0.5230
2011	0.7243	0.6428	0.6618	0.2869	0.6454	0.5414
2012	0.6802	0.6400	0.6412	0.2904	0.6551	0.5567
2013	0.6514	0.6343	0.6280	0.2926	0.6556	0.5614
2014	0.6692	0.6405	0.6372	0.3067	0.6377	0.5512
2015	0.6746	0.6521	0.6450	0.3184	0.6337	0.5513
2016	0.6647	0.6522	0.6377	0.3206	0.6383	0.5565
2017	0.6625	0.6694	0.6503	0.3108	0.6310	0.5544
2018	0.6620	0.6738	0.6548	0.3108	0.6321	0.5641
2019	0.6618	0.6837	0.6622	0.3103	0.6325	0.5653
2020	0.6424	0.6437	0.6288	0.2890	0.6656	0.5246
2021	0.6694	0.6394	0.6360	0.3016	0.6582	0.5732
2022	0.6618	0.6478	0.6396	0.2994	0.6391	0.5715
2023	0.6816	0.6528	0.6444	0.3040	0.6265	0.5586

Source: Calculated from the Hellenic Statistical Authority.

**Figure 1: Gini coefficients of cultural tourism demand and tourism demand indicators**



Source: Calculated from the Hellenic Statistical Authority.

The relatively high values of Gini coefficients in cultural tourism demand indicators are largely due to the fact that around half of the admissions to cultural attractions are concentrated in Attica (see Table 2). This region, and especially the capital, Athens, is home to iconic cultural attractions like the Acropolis of Athens, the Acropolis Museum, the Ancient Agora, the Temple of Olympian Zeus, and the Temple of Poseidon at Cape Sounion. These landmarks attract millions of tourists annually who seek to witness Greece’s ancient cultural heritage up close. Moreover, if we take into consideration the next top three regions (Crete, South Aegean, and Peloponnese in the case of total admissions and admissions to sites, and Central Macedonia, South Aegean, and Crete in the case of admissions to museums), this concentration reaches 80.72%, 83.81% and 83.85% in 2023, respectively. Hence, cultural tourism demand is highly concentrated in a small number of regions.

The uneven distribution of cultural tourism demand is not the result of a corresponding distribution of cultural offerings. The latter is more balanced as can be seen from Table 2<sup>3</sup>. Therefore, the share of admissions in several regions is disproportionate to their share of cultural attractions. Attica, for example, may have fewer cultural resources than other regions but enjoys an excessively high share in admissions due to their cultural significance.

<sup>3</sup>The corresponding Gini coefficients are: 0.2573 for museums, 0.2719 for archaeological and historical sites, and 0.2416 for total cultural attractions.

**Table 2: Regional distribution (in %) of cultural attractions and admissions in 2023**

Region	Admissions to cultural attractions			Cultural attractions		
	Total	Museums	Sites	Total	Museums	Sites
Attica	45.11 (1)	53.17 (1)	41.64 (1)	12.28 (2)	13.11 (2)	11.32 (4)
Crete	13.36 (2)	8.24 (4)	15.57 (2)	9.36 (4)	6.56 (7)	12.58 (2)
South Aegean	11.39 (3)	10.65 (3)	11.71 (4)	15.50 (1)	18.03 (1)	12.58 (2)
Peloponnese	10.86 (4)	1.53 (8)	14.89 (3)	11.40 (3)	9.84 (3)	13.21 (1)
Central Macedonia	5.67 (5)	11.79 (2)	3.03 (7)	7.60 (6)	7.65 (5)	7.55 (7)
Central Greece	4.14 (6)	5.32 (5)	3.63 (6)	6.14 (8)	8.74 (4)	3.14 (11)
Western Greece	3.73 (7)	2.56 (7)	4.23 (5)	6.73 (7)	5.46 (8)	8.18 (6)
Ionian Islands	2.91 (8)	2.72 (6)	2.99 (8)	4.97 (9)	4.92 (11)	5.03 (9)
Epirus	0.85 (9)	1.24 (9)	0.68 (11)	4.97 (9)	3.83 (12)	6.29 (8)
Eastern Macedonia and Thrace	0.80 (10)	0.88 (10)	0.77 (9)	4.39 (11)	5.46 (8)	3.14 (11)
North Aegean	0.76 (11)	0.85 (11)	0.72 (10)	8.19 (5)	7.10 (6)	9.43 (5)
Thessaly	0.28 (12)	0.63 (12)	0.12 (12)	4.09 (13)	3.83 (12)	4.40 (10)
Western Macedonia	0.14 (13)	0.40 (13)	0.02 (13)	4.39 (11)	5.46 (8)	3.14 (11)

**Note:** Ranking position of regions in parenthesis.

**Source:** Calculated from the Hellenic Statistical Authority.

**Table 3: Average and median values of Gini coefficients**

Indicators	Average values		Median values	
	1998–2023	2003–2023	1998–2023	2003–2023
Admissions to museums	0.6382	0.6531	0.6566	0.6620
Admissions to sites	0.6278	0.6339	0.6295	0.6400
Total admissions	0.6187	0.6267	0.6317	0.6372
Domestic tourism guest nights (DTGN)	–	0.2921	–	0.2904
Inbound tourism guest nights (ITGN)	–	0.6393	–	0.6377
Total tourism guest nights (TTGN)	–	0.5388	–	0.5463

**Source:** Calculated from the Hellenic Statistical Authority.

On the other hand, regions such as Epirus, Eastern Macedonia and Thrace, the North Aegean, Thessaly, and Western Macedonia perform poorly in visitor numbers despite having a relatively higher share in cultural points of interest. Therefore, regional disparities in cultural tourism activity are demand-driven, and not a matter of supply.

Regarding the tourism demand indicators, we see from Table 1 and Figure 1 that the Gini coefficient values are relatively high in the case of ITGN (ranging from 0.6223 to 0.6656). These are steadily larger than those of TTGN (ranging from 0.5035 to 0.5732), while those of DTGN have consistently the lowest values (from 0.2636 to 0.3206). Furthermore, all indicators, except for ITGN, demonstrate an increasing trend at a steady average annual rate of 0.71% (DTGN) and 0.36% (TTGN); ITGN eased by -0.14%. Hence, aside from inbound tourism, which still creates substantial disparities, it can be argued that spatial tourism inequalities have deepened – as in the case of cultural tourism inequalities – over time.

It is interesting, lastly, to compare the Gini coefficients of cultural tourism demand and tourism demand indicators. Figure 1 clearly shows that the Gini coefficients of the former are consistently larger than those of DTGN and TTGN, but this is not the case for ITGN. A calculation of their average and median values for 1998–2023 and 2003–2023 (see Table 3)<sup>4</sup> also provided inconclusive outcomes, as the average and median values of cultural tourism demand indicators surpass those of DTGN and TTGN – as expected – but not that of ITGN in all cases. However, when total demand indicators (total admissions and TTGN) are compared, we clearly see that all values are higher for cultural tourism. We can deduce, therefore, that cultural tourism demand induces larger disparities than tourism demand.

## 5 Conclusion and implications

### 5.1 Discussion

Contrary to expectations for alternative tourism, and to the empirical study of Guedes and Jiménez (2015) – which, however, does not examine the demand side – cultural tourism in Greece does not reduce spatial inequalities in tourism flows. Our study, though, is in line with Petrei et al. (2020) who estimate the Gini coefficient of admissions at 0.61, only for the year 2015, suggesting that cultural tourism disparities are very high. This estimate is very close to the average and median values for total admissions calculated in our case (see Table 3). Furthermore, the evolution of the Gini coefficients in this study indicates that regional disparities in cultural tourism are not only significant but have also widened over time.

**Table 4: GDP per capita indices as compared to Greece (=100)**

Regions	Average value for 2000–2021 <sup>1</sup>	Categories <sup>2</sup>
Attica	133.52	More developed regions (GDP per capita higher than 90% of national average)
South Aegean	108.91	
Ionian Islands	94.10	
Central Greece	93.49	
Western Macedonia	92.01	
Crete	86.55	“Intermediary” regions (GDP per capita between 75% and 90% of national average)
Peloponnese	81.97	
Central Macedonia	78.98	
Thessaly	75.77	
North Aegean	74.61	Less developed regions (GDP per capita lower than 75% of national average)
Western Greece	74.53	
Epirus	71.82	
Eastern Macedonia and Thrace	71.31	

<sup>1</sup>Period for which GDP per capita data are available.

<sup>2</sup>The thresholds for categorising the regions were based on the EU’s 2014–2020 Cohesion Policy.

**Source:** Calculated from the Hellenic Statistical Authority.

<sup>4</sup> As the available data refer to different periods, the average and median values of Gini coefficients for cultural tourism demand indicators were also calculated for the 2003–2023 period.

Total admissions are, moreover, highly concentrated (over 80%) in Attica and the South Aegean regions, which are categorised as “more developed regions” according to their GDP per capita indices (see Table 4), and in “intermediary” regions (Crete and Peloponnese). As such, it can be argued that cultural tourism demand contributes to both economic divergence and convergence. However, all the “less developed regions” fall behind in attracting visitors (see Tables 2 and 4), suggesting that it ultimately adds to regional economic disparities. Therefore, with respect to RQ1, we can maintain that cultural tourism demand does not reduce spatial inequalities but, conversely, enhances them both in tourism and economic terms.

Regarding RQ2, the results demonstrate that disparities in cultural tourism demand are larger than those in tourism demand. This implies that cultural tourism in Greece, in its current spatial pattern, has acquired attributes of mass tourism (i.e. high spatial concentration of tourists). This aligns with Jovicic (2016), who claims that from the beginning of the 1990s cultural tourism transformed from an alternative form of tourism to a mass tourism product, depicting certain characteristics of the latter – e.g. large numbers of (package) tourists, high spatial concentration of visitors, increased pressures on the physical and socio-cultural environment.

The findings, therefore, suggest that cultural tourism has become “mass cultural tourism”, as indicated by Richards (2018) in his review of cultural tourism research. This phenomenon often puts pressure on cultural attractions and threatens local sustainability, especially at UNESCO World Heritage Sites (Imon, 2017) and historic city centres (García-Hernández, 2017). This study attests to substantial regional disparities as another aspect of mass cultural tourism, which, moreover, hinders BRD.

## **5.2 Policy implications**

Most studies in cultural tourism research approach spatial inequalities from the supply side, mainly by analysing the spatial distribution of cultural attractions / sites. This study, however, advocates that examining spatial disparities from the demand side provides regional / tourism policymakers with a better perception of its potential to contribute to or hamper BRD. In our case, the significant regional disparities in cultural tourism demand call for strategic policies at the national / regional level, aiming to encourage a more balanced distribution of this activity and to ensure that its benefits extend to the less visited / developed regions.

Decentralised promotion, for example, as pursued by Finland and Sweden (Renko et al., 2022), can help to this end. In particular, marketing efforts and jurisdictions should be shifted to lesser-known regions with significant cultural and heritage assets, encouraging tourists to explore beyond the famous attractions. Also, the development of thematic cultural tourism routes, such as the Cultural Routes of the Council of Europe that cross through Greece (Council of Europe, 2020), can be a valuable tool for addressing regional disparities. New routes, based on shared historical periods (e.g. Ancient Greece, Byzantine era) or cultural themes (e.g. Greek mythology, Venetian castles) can link famous attractions with less-visited sites, promoting a more even distribution of visitors. Lastly, support for local cultural events (cultural festivals, historical anniversaries, etc.) can draw

visitors to cultural points of interest in less-visited regions and simultaneously provide a more comprehensive cultural experience.

### **5.3 Conclusion**

This paper adds to the existing body of literature by examining the spatial disparities of cultural tourism on the demand side, an area that has received little research focus and attention. This allows for a more comprehensive understanding of its capacity, as a form of alternative tourism, to mitigate spatial inequalities and promote BRD. The findings of the study suggest that in a prominent cultural tourism destination like Greece, it not only fails to alleviate spatial disparities but, instead, intensifies them from both the tourism and economic aspects. Furthermore, cultural tourism disparities are even more sizeable than those of total tourism, implying that it possesses features of mass tourism (high concentration of visitor flows). The above cast doubt on its capacity to act as a form of alternative tourism, unless strategic policies are implemented.

Undoubtedly, this study has its delimitations and limitations, which need to be mentioned. In particular, cultural tourism demand was delimited to admissions to museums, and archaeological and historical sites, as receipts do not account for visitors with free admission tickets and would, additionally, bias the results. Moreover, statistical data are not available for other types of cultural tourism, such as cultural events or thematic routes. It is highly possible, however, that tourists with other cultural preferences would visit museums, archaeological sites and historical monuments for a more holistic cultural experience during their stay. Also, tourism demand was delimited to hotel guest nights; since respective data for rooms for rent are too recent, while those for campsites would lead to biased results. Most of the relevant studies, however, use guest nights at hotels as a proxy for tourism demand. Furthermore, tourism revenues could not serve as an additional proxy, as these data are only available since 2016 and pertain solely to inbound tourists.

In closing, future studies on the demand side of cultural tourism are needed in other countries to ascertain its (in)effectiveness to mitigate spatial inequalities, encouraging the debate on whether it can ultimately contribute to BRD. Since this study only examines (inter) regional disparities, it would, moreover, be worthwhile to delve into whether total inequality in cultural tourism is primarily caused by inter- or intra-regional disparities, and their subsequent impact on BRD. These studies could expand the analysis to include other types of cultural tourism demand (cultural events, thematic routes, ethnic tourism, creative tourism, etc.), providing that there is data availability. Empirical studies could also investigate if there is a positive relationship between cultural tourism demand and tourism demand disparities, suggesting that the former provoke the latter, and vice versa. Regarding Greece, it would be interesting to examine the temporal disparities of cultural tourism flows to ascertain its relationship to another feature of mass tourism, that of seasonality.

## References

- Abankina, T. (2013). Regional development models using cultural heritage resources. *International Journal of Culture, Tourism and Hospitality Research*, 7(1), 3–10. <https://doi.org/10.1108/17506181311301318>
- Alberti, F. G., & Giusti, J. D. (2012). Cultural heritage, tourism and regional competitiveness: The Motor Valley cluster. *City, Culture and Society*, 3(4), 261–273. <https://doi.org/10.1016/j.ccs.2012.11.003>
- Bohlin, M., Brandt, D., & Elbe, J. (2016). Tourism as a vehicle for regional development in peripheral areas – myth or reality? A longitudinal case study of Swedish regions. *European Planning Studies*, 24(10), 1788–1805. <https://doi.org/10.1080/09654313.2016.1194807>
- Borowiecki, K. J., & Castiglione, C. (2014). Cultural participation and tourism flows: An empirical investigation of Italian provinces. *Tourism Economics*, 20(2), 241–262. <https://doi.org/10.5367/te.2013.0278>
- Cehan, A., Iașu, C., Eva, M., Ibănescu, B.-C., & Bulai, M. (2019). Territorial dynamics of tourism in Romania: A longterm perspective (1990–2016). *Human Geographies: Journal of Studies and Research in Human Geography*, 13(1), 23–44. <http://dx.doi.org/10.5719/hgeo.2019.131.2>
- Chang, B., Ding, X., Xi, J., Zhang, R., & Lv, X. (2023). Spatial-temporal distribution pattern and tourism utilization potential of intangible cultural heritage resources in the Yellow River Basin. *Sustainability*, 15(3), Article 2611. <https://doi.org/10.3390/su15032611>
- Chen, M., Wang, J., Sun, J., Ye, F., & Zhang, H. (2023). Spatio-temporal distribution characteristics of intangible cultural heritage and tourism response in the Beijing–Hangzhou Grand Canal Basin in China. *Sustainability*, 15(13), Article 10348. <https://doi.org/10.3390/su151310348>
- Cisneros-Martínez, J. D., & Fernández-Morales, A. (2013). Cultural tourism as tourist segment for reducing seasonality in a coastal area: The case study of Andalusia. *Current Issues in Tourism*, 18(8), 765–784. <https://doi.org/10.1080/13683500.2013.861810>
- Council of Europe (2020). *Cultural routes of the Council of Europe crossing through Greece*. Council of Europe. <https://rm.coe.int/cultural-routes-of-the-council-of-europe-crossing-greece-eng-gr/1680a6eab6>
- Csapó, J. (2012). The role and importance of cultural tourism in modern tourism industry. In M. Kasimoğlu & H. Aydin (Eds.), *Strategies for tourism industry – Micro and macro perspectives* (pp. 201–232). InTech.
- Curić, Z., Glamuzina, N., & Opačić, V. T. (2012). Contemporary issues in the regional development of tourism in Croatia. *Hrvatski Geografski Glasnik*, 74(1), 19–40. <https://doi.org/10.21861/HGG.2012.74.01.02>
- Dippon, P., & Moskaliuk, J. (2020). Sharing intangible cultural heritage: disparities of distribution. *Journal of Heritage Tourism*, 15(4), 450–471. <https://doi.org/10.1080/1743873X.2019.1682003>
- Dong, B., Bai, K., Sun, X., Wang, M., & Liu, Y. (2023). Spatial distribution and tourism competition of intangible cultural heritage: Take Guizhou, China as an example. *Heritage Science*, 11, Article 64. <https://doi.org/10.1186/s40494-023-00905-8>
- Drakakis, P. (2022). Does tourism contribute to balanced regional development? Evidence from Greece. *Transcending borders in tourism through innovation and cultural heritage - Proceedings of the 8th IACuDiT International Conference* (pp. 185–201). Springer. [https://doi.org/10.1007/978-3-030-92491-1\\_11](https://doi.org/10.1007/978-3-030-92491-1_11). In V. Katsoni & A. C. Șerban (Eds.).

- Drakakis, P. (2024). Inter- and intra-regional tourism disparities in Greece: Trends and impacts for balanced regional development. *Anatolia*. Advance online publication. <https://doi.org/10.1080/13032917.2024.2363810>
- Fan, X., & Sun, L. (2024). Geographic distribution characteristics and influencing factors for industrial heritage sites in Italy based on GIS. *Sustainability*, *16*(5), Article 2085. <https://doi.org/10.3390/su16052085>
- Gaki, E., Arsenos, P., Balomenou, C., Poulaki, P., & Lagou, M. (2022). The impact of financial crisis on tourism disparities: The case of Greek regions. *Journal of Hospitality & Tourism*, *20*(2), 47–70.
- García-Hernández, M., de la Calle-Vaquero, M., & Yubero, C. (2017). Cultural heritage and urban tourism: Historic city centres under pressure. *Sustainability*, *9*(8), Article 1346. <https://doi.org/10.3390/su9081346>
- Goh, C., Li, H., & Li, M. (2014). A comparative analysis of domestic tourism and international tourism spatial distribution: Trends and impacts. *Journal of China Tourism Research*, *10*(4), 388–413. <https://doi.org/10.1080/19388160.2014.906933>
- Goh, C., Li, H., & Zhang, Q. (2015). Achieving balanced regional development in China: Is domestic or international tourism more efficacious? *Tourism Economics*, *21*(2), 369–386. <https://doi.org/10.5367/te.2013.0353>
- Guedes, A. S., & Jiménez, M. I. M. (2015). Spatial patterns of cultural tourism in Portugal. *Tourism Management Perspectives*, *16*, 107–115. <https://doi.org/10.1016/j.tmp.2015.07.010>
- Gumede, T. K. (2019). Heritage tourism as a strategy for the local economic development in KwaZulu-Natal, South Africa. *African Journal of Hospitality, Tourism and Leisure*, *8*(3). [https://www.ajhtl.com/uploads/7/1/6/3/7163688/article\\_2\\_vol\\_8\\_3\\_2019.pdf](https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_2_vol_8_3_2019.pdf)
- Haddad, E. A., Porsse, A. A., & Rabahy, W. (2013). Domestic tourism and regional inequality in Brazil. *Tourism Economics*, *19*(1), 173–186. <https://doi.org/10.5367/te.2013.0185>
- Hellenic Statistical Authority (ELSTAT) (2024a). *Survey on museums and archaeological sites attendance – December 2023*. Piraeus: Hellenic Statistical Authority.
- Hellenic Statistical Authority (ELSTAT). (2024b, April 16). *Museums and archaeological sites (visitors, receipts), December 2023*. Retrieved July 26, 2024, from <https://www.statistics.gr/en/statistics/-/publication/SCI21/2023-M12>
- Hellenic Statistical Authority (ELSTAT). (2024c, July 18). *Hotels, rooms for rent and tourist campsites*. Retrieved August 2, 2024, from <https://www.statistics.gr/en/statistics/-/publication/STO12/2023>
- Huang, Y., Guo, Q., & Xiao, M. (2021). The unbalanced development and trends of China's regional tourism. *National Accounting Review*, *3*(1), 69–85. <https://doi.org/10.3934/NAR.2021003>
- Iliev, D. (2018). Regional inequalities and contemporary problems in regional tourism development: A case of Macedonia. *Anatolia*, *29*(3), 368–378. <https://doi.org/10.1080/13032917.2017.1422770>
- Imon, S. S. (2017). Cultural heritage management under tourism pressure. *Worldwide Hospitality and Tourism Themes*, *9*(3), 335–348. <https://doi.org/10.1108/WHATT-02-2017-0007>
- Jovicic, D. (2016). Cultural tourism in the context of relations between mass and alternative tourism. *Current Issues in Tourism*, *19*(6), 605–612. <https://doi.org/10.1080/13683500.2014.932759>
- Khan, A.A. (2018). The spatial distribution and relationship of tourist flow in Turkey. *European Journal of Tourism Research*, *19*, 40–55. <https://doi.org/10.54055/ejtr.v19i.324>

- Krakover, S. (2004). Tourism development – centres versus peripheries: The Israeli experience during the 1990s. *International Journal of Tourism Research*, 6(2), 97–111. <https://doi.org/10.1002/jtr.473>
- Kuang, R., Zuo, Y., Gao, S., Yin, P., Wang, Y., Zhang, Z., Cai, S., & Li, N. (2023). Research on the spatial distribution characteristics and influencing factors of Central China's intangible cultural heritage. *Sustainability*, 15(7), Article 5751. <https://doi.org/10.3390/su15075751>
- Lerario, A. (2022). The role of built heritage for Sustainable Development Goals: From statement to action. *Heritage*, 5(3), 2444–2463. <https://doi.org/10.3390/heritage5030127>
- Loulanski, T., & Loulanski, V. (2011). The sustainable integration of cultural heritage and tourism: A meta-study. *Journal of Sustainable Tourism*, 19(7), 837–862. <https://doi.org/10.1080/09669582.2011.553286>
- Li, H., Chen, J. L., Li, G., & Goh, C. (2016). Tourism and regional income inequality: Evidence from China. *Annals of Tourism Research*, 58(1), 81–99. <https://doi.org/10.1016/j.annals.2016.02.001>
- Li, H., Goh, C., Qiu, H. Z., & Meng, F. (2015). Effect of tourism on balanced regional development: A dynamic panel data analysis in coastal and inland China. *Asia Pacific Journal of Tourism Research*, 20(6), 694–713. <https://doi.org/10.1080/10941665.2014.930055>
- Li, M., Wu, B., & Cai, L. (2008). Tourism development of World Heritage Sites in China: A geographic perspective. *Tourism Management*, 29(2), 308–319. <https://doi.org/10.1016/j.tourman.2007.03.013>
- Li, X., Yang, M., Long, L., Liu, M., Liu, H., & Liu, J. (2023). Geographical distribution and Influencing factors of intangible cultural heritage in the Three Gorges Reservoir Area. *Sustainability*, 15(4), Article 3025. <https://doi.org/10.3390/su15043025>
- Murphy, C., & Boyle, E. (2006). Testing a conceptual model of cultural tourism development in the post-industrial city: A case study of Glasgow. *Tourism and Hospitality Research*, 6(2), 111–128. <https://doi.org/10.1057/palgrave.thr.6040050>
- O'Hare, G., & Barrett, H. (1999). Regional inequalities in the Peruvian tourist industry. *The Geographical Journal*, 165(1), 47–61. <https://doi.org/10.2307/3060510>
- Papatheodorou, A., & Arvanitis, P. (2014). Tourism and the economic crisis in Greece – Regional perspectives. *Région et Développement*, 39, 183–203. <https://regionetdeveloppement.univ-tln.fr/wp-content/uploads/9-Papatheodorou.pdf>
- Payne, J. E., Nazlioglu, S., & Mervar, A. (2023). Regional tourism convergence: A disaggregated analysis of Croatia. *Applied Economics*, 55(52), 6149–6169. <https://doi.org/10.1080/00036846.2022.2141460>
- Petrei, F., Cavallo, L., & Santoro, M. T. (2020). Cultural tourism: An integrated analysis based on official data. *Quality & Quantity*, 54, 1705–1724. <https://doi.org/10.1007/s11135-019-00929-y>
- Renko, V., Johannisson, J., Kangas, A., & Blomgren, R. (2022). Pursuing decentralisation: Regional cultural policies in Finland and Sweden. *International Journal of Cultural Policy*, 28(3), 342–358. <https://doi.org/10.1080/10286632.2021.1941915>
- Ribeiro, L. C., Dos Santos, G. F., & Takasago, M. (2023). Does domestic tourism reduce regional inequalities in Brazil? *Current issues in Tourism*, 26(20), 3255–3260. <https://doi.org/10.1080/13683500.2022.2126965>
- Richards, G. (2018). Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management*, 36, 12–21. <https://doi.org/10.1016/j.jhtm.2018.03.005>

- Rogerson, C. M. (2014). The uneven geography of tourism in South Africa. *African Journal of Hospitality, Tourism & Leisure*, 3(1). [http://www.ajhtl.com/uploads/7/1/6/3/7163688/article\\_29\\_vol\\_3\\_1\\_june\\_2014.pdf](http://www.ajhtl.com/uploads/7/1/6/3/7163688/article_29_vol_3_1_june_2014.pdf)
- Seckelmann, A. (2002). Domestic tourism – A chance for regional development in Turkey? *Tourism Management*, 23(1), 85–92. [https://doi.org/10.1016/S0261-5177\(01\)00066-8](https://doi.org/10.1016/S0261-5177(01)00066-8)
- Soukiazis, E., & Proença, S. (2008). Tourism as an alternative source of regional growth in Portugal: A panel data analysis at NUTS II and III levels. *Portuguese Economic Journal*, 7(1), 43–61. <https://doi.org/10.1007/s10258-007-0022-0>
- Toivonen, T. (2002). Regional development of Finnish tourism at the end of the 1990s: Some considerations. *Tourism and Hospitality Research*, 3(4), 331–342. <https://doi.org/10.1177/146735840200300405>
- Tosun, C., Timothy, D.J., & Öztürk, Y. (2003). Tourism growth, national development and regional inequality in Turkey. *Journal of Sustainable Tourism*, 11(2–3), 133–161. <https://doi.org/10.1080/09669580308667200>
- Wang, K., Yi, J., & Wang, Y. (2015). Research Note: An analysis of the spatio-temporal disparities of inbound tourism development in China, 1991–2010. *Tourism Economics*, 21(4), 889–897. <https://doi.org/10.5367/te.2014.0375>
- Wang, X., Zhang, J., Cenci, J., & Becue, V. (2021). Spatial distribution characteristics and influencing factors of the world architectural heritage. *Heritage*, 4, 2942–2959. <https://doi.org/10.3390/heritage4040164>
- Wen, J. J. (2015). Spatial distribution of tourism in China: A time series analysis. *The Journal of MacroTrends in Social Science*, 1(1), 18–29.
- Wen, J. J., & Sinha, C. (2009). The spatial distribution of tourism in China: Trends and impacts. *Asia Pacific Journal of Tourism Research*, 14(1), 93–104. <https://doi.org/10.1080/10941660902756776>
- Wen, J. J., & Tisdell, C. (1996). Spatial distribution of tourism in China: Economic and other influences. *Tourism Economics*, 2(3), 235–250. <https://doi.org/10.1177/135481669600200303>
- Williams, A. M., & Shaw, G. (1995). Tourism and regional development: Polarization and new forms of production in the United Kingdom. *Tijdschriftvooreconomischeensocialegeografie*, 86(1), 50–63. <https://doi.org/10.1111/j.1467-9663.1995.tb01828.x>
- Yan, M., Li, Q., & Zhang, J. (2023). Rethinking industrial heritage tourism resources in the EU: A spatial perspective. *Land*, 12(8), Article 1510. <https://doi.org/10.3390/land12081510>
- Yongqi, L., Ruixia, Y., Pu, W., Anlin, Y., & Guolong, C. (2021). A quantitative description of the spatial–temporal distribution and evolution pattern of world cultural heritage. *Heritage Science*, 9, Article 80. <https://doi.org/10.1186/s40494-021-00549-6>
- Yüncü, D., Günay, S., & Kantar, Y.M. (2017). Spatial relationship of tourist distribution in Turkey. In A. Saufi, I. R. Andilolo, N. Othman, & A. A. Lew (Eds.), *Balancing development and sustainability in tourism destinations – Proceedings of the Tourism Outlook Conference 2015* (pp. 353–366). Springer. [https://doi.org/10.1007/978-981-10-1718-6\\_32](https://doi.org/10.1007/978-981-10-1718-6_32)
- Zhang, C., Weng, S., & Bao, J. (2020). The changes in the geographical patterns of China's tourism in 1978–2018: Characteristics and underlying factors. *Journal of Geographical Sciences*, 30(3), 487–507. <https://doi.org/10.1007/s11442-020-1739-2>
- Zhang, J., Yu, Z., Miao, C., Li, Y., & Qiao, S. (2022). Cultural tourism weakens seasonality: Empirical analysis of Chinese tourism cities. *Land*, 11(2), Article 308. <https://doi.org/10.3390/land11020308>

Zhang, Y., Yang, M., Li, Z., Li, W., Lu, C., Li, Z., Li, H., & Zhai, F. (2023). Study on the spatial distribution characteristics and influencing factors in the reuse of National Industrial Heritage Sites in China. *Sustainability*, 15(24), Article 16685. <https://doi.org/10.3390/su152416685>