Pressure from tourism hardest for religious World Heritage Sites and those in forest and coastal areas

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Abstract (500 words without references)

World Heritage Sites are well-known attractions. A large number of visitors can pose a threat to the cultural heritage and conflict with the task of conservation. An inscription to the UNESCO World Heritage List may spur increased interest for a site. However, little is known about which types of World Heritage sites are most threatened by tourism and how long it takes until a tourism threat occurs, as assessed by the state of conservation experts.

The aim of this study is to investigate empirically tourism as a threat to UNESCO World Heritage Sites, given their characteristics and location. By use of a duration model, the point in time when the first threat occurs is estimated. Two measures of tourism threat are considered: One relating to demand defined as “Impacts of tourism/visitor/recreation" and the other to supply "Major visitor accommodation and associated infrastructure". Several characteristics of the site, including kind and location are taken into account. In addition, a random effects probit model is estimated to account for the repeated probability of tourism threats.

This study contributes to the development of a new measure of the impact of tourism on World Heritage sites. This measure relates the time from inscription to the occurrence. Data for the analysis include 29,000 site-year observations for 1,200 sites from 1978 onwards.

Empirical evidence reveals that threats to tourism demand and supply are rare events, occurring in only 2.7 and 1.3 of observations, respectively. Only 167 out of 1,200 World
Heritage sites are affected by a demand threat and 85 by the supply. The Cultural World Heritage Site with the highest number of tourism threats is Colonial City of Santo Domingo, with 20 negative assessments since its inscription. Among the natural sites the Galápagos Islands is most affected with 24. On average, it takes between 22 and 24 years for a tourism threat to be identified.

Estimates using the Cox proportional hazard model show that the risk of a tourism threat is highest for cultural World Heritage Sites in Asia, religious sites and cultural landscapes. The estimates for mixed and natural sites reveal that sites characterised by forests have the highest hazard ratio, followed by marine and coastal areas. The lowest hazard ratio of a tourism threat can be observed for cultural sites in Europe and North America, while the highest hazard ratio is observed for sites in Asia in terms of tourism demand and in Arab countries in terms of accommodation supply.

The results are robust with respect to the alternative indicator of a tourism threat, which is accommodation supply, with the exception of cultural cities. The finding that European and North American sites are the least at risk of tourism casts doubt on the possibly exaggerated debate on over-visitation before the Covid-19 pandemic.

References


