

Tourism Development and Economic Growth: A Bibliometric Analysis

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Abstract. Tourism plays a vital role in the global economy and job market, and extensive research has been conducted on its economic benefits. Bibliometric tools provide a powerful way to analyse trends and research emphases in academic literature and gain deeper insights into this relationship. Focusing on articles from 2008 to 2023 sourced from the Web of Science database, this paper aims to delineate the trajectory of research on tourism development and economic growth and explore institutional, country and author contributions. This bibliometric analysis of 738 documents focused on tourism development and economic growth reveals an exponential publication growth since 2018. Additionally, keyword and co-occurrence analyses reveal emerging themes such as environmental concerns and tourism as an industry. However, its exclusive reliance on bibliometric data may overlook other valuable insights and forms of research dissemination, suggesting the need for future research to explore more comprehensive evaluation methodologies.

Keywords: Tourism, Economic Growth, Bibliometric Analysis.

1 Introduction

Tourism has recently become one of the fastest-growing sectors in the global economy [1, 2]. Moreover, it is considered a tool for the growth of regional economies and a variable impacting socio-economic development [3]. It holds considerable sway in developing nations, fostering processes such as job creation, mitigation of unemployment rates, and introducing new sources of tax revenue [2, 4], thereby enhancing destination competitiveness [5]. In 2022, the travel and tourism sector contributed 7.6% to the global Gross Domestic Product (GDP), creating 22 million new jobs worldwide [6].

Given the importance of tourism in the global economy, there is a vast amount of literature on the impacts of the tourism sector on countries' economies, showing that this sector creates economic benefits [2, 7]. These studies have highlighted many current topics addressed in the prevailing research literature. While each study has shed light on the examined field, a more thorough analysis of this literature using rigorous bibliometric tools may unveil further insights that have not been fully comprehended or assessed previously [8].

Due to the notable scholarly attention and increasing volume of literature surrounding the intersection of tourism and economic growth, bibliometric tools can be potent instruments for pinpointing established and emerging domains within academic research on this relationship. These tools can also facilitate the identification of research collectives and individual scholars, shedding light on how various schools of thought may have evolved based on institutional affiliations and authorial attributes [8, 9].

Considering the crucial role of bibliometric tools in comprehending the dynamics of academic research, this analysis is focused on articles published between 2008 and 2023, sourced from the Web of Science (WoS) database; due to its extensive utilisation within academia, it stands out as one of the primary databases for gathering vast amounts of data [8], the aim is to comprehend the different currents and trajectories of articles published concerning the relation between tourism development and economic growth over successive years. Furthermore, it aims to delineate the evolution and alterations in research emphases and explore the extent of institutional, country, and author contributions to scientific publications within this thematic domain.

This paper is structured into four distinct sections. Following the introduction, the first section provides a comprehensive explanation of the research methodology, including a detailed description of the methods employed and the criteria used to include and exclude papers in the analysis. The second section presents a detailed examination of the data and results obtained from the research, alongside the bibliometric analysis conducted using the Bibliometrix R software. The third section will involve a discussion of the results, including a comparative analysis with other researchers' findings and identifying potential research trends within the field. Finally, the concluding section summarises the key findings, underscores the significance of the study, and delineates possible directions for future research endeavours.

2 Research Methodology

The bibliometric analysis utilises quantitative methods to classify bibliometric data and construct representative summaries. It is a valuable approach for analysing the performances of journals, institutes, and authors, as well as the characteristics of research fields [10, 11]. Through bibliometric analysis, it is possible to evaluate the performance and impact of research and its contributors. This is achieved by scrutinising various metrics such as the number of publications, citations, and the performance of institutions and authors involved in the research landscape [8, 12, 13].

Donthu [12] explored bibliometric analysis techniques, categorising them into two main types: performance analysis and science mapping. The first one, as described in the preceding paragraph, focuses on the contributions of research elements, while the science mapping concentrates on the relationships among these elements. This includes methods such as citation analysis, co-citation analysis, co-word analysis and co-authorship analysis [13, 14].

This study examined both performance and science mapping, focused on the evolution over the years of publications, the number of publications, the journals with the most significant contributions to this field, the most productive authors, the most cited

authors, the articles with the highest citation counts, geographic and institutional contributions, prevalent keywords, and their trends over time.

To collect the data, the search was conducted using “all fields” and “all databases” in the Web of Science (WoS) database. This platform was chosen because it is one of the most important and widely used in the study area.

The terms used to search the data were “Tourism”, “Economic Growth”, “Tourism Development”, and “Casualty Analysis”. These terms were combined in five ways: “Tourism AND Economic growth”, “Tourism Development AND Economic Growth”, “Economic Growth AND Casualty Analysis”, “Tourism Development AND Casualty Analysis”, and “Tourism AND Economic Growth AND Casualty the results of the search are shown in Table 1.

Table 1. Initial search results.

Search Keywords	Search Results
Tourism AND Economic Growth	8631
Tourism Development AND Economic Growth	5209
Economic Growth AND Casualty Analysis	64
Tourism Development AND Casualty Analysis	25
Tourism AND Economic Growth AND Casualty Analysis	5

Source: Own elaboration

The results from the search that included the term "Casualty Analysis" were not considered as they significantly reduced the sample size and did not justify the analysis. It was decided to focus the analysis on tourism development and economic growth, as this was the aim of the study. Next, the refinement of the 5209 results found was carried out by filtering only in the categories of Environmental Sciences, Economics, Environmental Studies, Management, Regional Urban Planning, Social Sciences, Mathematics, Sociology, and Social Issues. Additionally, refinement by language was conducted, selecting only English, resulting in a sample of 3124 results. Subsequently, further refinement was performed by selecting the following research areas: Environmental Sciences Ecology, Business Economics, Social Sciences Other Topics, Mathematics, and Social Issues. Regarding the meso topics, only "Hospitality, Leisure, Sports & Tourism" and "Economics" were selected, while in the micro issues, only "Tourism" and "Economic Growth" were chosen. From this refinement, 1048 results emerged, from which only articles from 2008 to 2023 were selected, resulting in 738 documents.

Subsequently, the database was extracted from WoS in RIS format, which was later analysed using the Bibliometrix software within the Biblioshiny platform.

3 Bibliometric Analysis

The 738 documents, with an average age of 5.12 years, came from 185 different sources, with 1861 authors and an average of 3.08 co-authors per document. Out of the total documents, 78 were produced by single authors and 32.11% were co-authored

internationally. Regarding citations per document, the average is 22.14, with 30,921 citations in the sample.

Figure 1 shows the annual productions in the field. The annual growth rate of publications is 17.14%. Evidently, from 2018, there was an exponential growth in publications in this area, rising from 38 papers published in 2018 to 69 papers published in 2019. Although there are two peaks of publications in 2021 (113 publications) and 2023, the highest number was reached in 2023, with 118 papers published, following a slight decline in 2022.

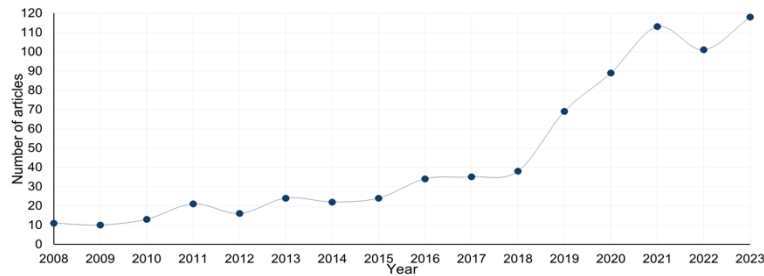


Fig. 1. Articles published annually.

Source: Own elaboration.

The sources that contribute the most to research in tourism development and economic growth are shown in Figure 2. These top 10 sources have published 378 articles, representing approximately 51% of all published articles in the field. It is noticeable that the journal Sustainability is the most significant contributor to the publication of this topic, with a considerable lead over the other journals.

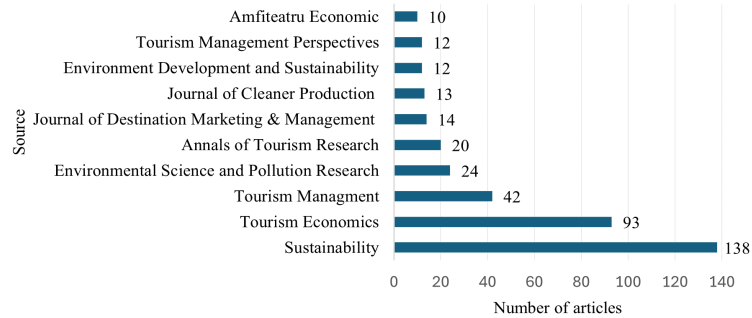


Fig. 2. Top 10 most relevant sources.

Source: Own elaboration.

Table 2 presents the ranking of the top 10 most relevant affiliations in terms of published works in the field of tourism and economic growth, providing a detailed insight into the performance of these organisations in producing studies in this domain. By observing the listed affiliations, it is possible to identify research centres actively dedicated to studying tourism development and economic growth.

Table 2. Top 10 most relevant affiliations.

Affiliation	Location	N° of articles
Bucharest University of Economic Studies	Romania	29
Eastern Mediterranean University	Cyprus	28
Zhejiang University	China	26
Juraj Dobrila University of Pula	Croatia	24
University Central Florida	USA	24
Institute of Geographical Sci and Nat Resources Research	China	22
Nanchang University	China	17
University of Extremadura	Spain	17
University of Malaga	Spain	17
University of South Pacific	Fiji	16

Source: Own elaboration.

Regarding the countries with the highest production of articles, it was noticeable that China, followed by the United States of America, was the leading country in publications, with China experiencing exponential growth from 2018 onwards. These countries are also ranked in the same order and at the top of the most cited countries, emphasising their significance in shaping research and knowledge in this area.

Analysing the impact of publications based on the number of citations is a common method used in bibliometric analysis, as it helps to identify influential publications within a particular research field, which means that publications with a high number of citations are considered influential, as they have been widely recognised and cited by other researchers [4, 12].

Table 3 provides a detailed overview of the top 10 most cited works in tourism and economic growth. By analysing this table, it is possible to identify the most significant and influential contributions in this research domain. Additionally, as seen in Figure 2 and analysing Table 3, the journal "Tourism Management" is a prominent source of research, indicating that it not only ranks highly among relevant sources but also stands out as the most cited journal in the field, with the highest number of relevant and influential works. This suggests that researchers consider the journal a reliable platform for publishing their work and that the academic community values the contributions published in this journal.

Regarding the authors' impact, it is possible to observe that author Kumar, R. has the highest H-index level. In contrast, author Lee, C. has the highest number of citations, as previously noted (Table 4). Through analysis of this index, it becomes evident that impact cannot be assessed exclusively by the number of citations but should be combined with the number of publications, resulting in an H-index value.

Table 3. Top 10 most globally cited documents.

Author	Title	Journal	TC
Lee C.	Tourism development and economic growth: A closer look at panels.	Tourism Management	537
Getz D.	Progress and prospects for event tourism research.	Tourism Management	469
Lee J.	Investigating the influence of tourism on economic growth and carbon emissions: Evidence from panel analysis of the European Union.	Tourism Management	400
Seetanah B.	Assessing the dynamic economic impact of tourism for island economies.	Annals of Tourism Research	258
Shahzad S.	Tourism-led growth hypothesis in the top ten tourist destinations: New evidence using the quantile-on-quantile approach.	Tourism Management	219
Azam M.	Effect of tourism on environmental pollution: Further evidence from Malaysia, Singapore and Thailand.	Journal of Cleaner Production	200
Dogru T.	Is tourism an engine for economic recovery? Theory and empirical evidence.	Tourism Management	193
Payne J.	Research note: The Tourism–Growth Nexus in Croatia.	Tourism Economics	174
Chou M.	Does tourism development promote economic growth in transition countries? A panel data analysis.	Economic Modelling	172
Holzner M.	Tourism and economic development: The beach disease?	Tourism Management	163

Source: Own elaboration.

The H-index is a metric that considers the quantity of papers a researcher has produced and the quality of those papers, as measured by the number of citations they've received [14]. This index is widely used to assess the significance and impact of a researcher's work, and it's a way to measure not just how much research someone has done but also how influential that research has been, helping to balance out the effect of a few highly cited papers on overall productivity measures [12, 14, 15, 16]

Table 4. Author's impact.

Author	H index	TC	Nº of Papers
Kumar R.	10	347	12
Katircioglu S.	6	140	8
Wang Y.	6	216	14
Lee C.	5	578	5
Paramati S.	5	161	5

Source: Own elaboration.

When observing the most frequently used keywords by the authors in Figure 3, as expected, tourism and economic growth are found to be the most common, followed by terms related to sustainability and development. Notably, "China" appears among the most used terms, which can be attributed to the significant volume of articles produced in or utilising data from this country. Additionally, the presence of the keyword "Granger causality" is observed, which can be explained by its widespread use as a methodology when seeking to understand the causal relationship between two variables, in this case, tourism development and economic growth [2, 3, 17, 18, 19, 20, 28].

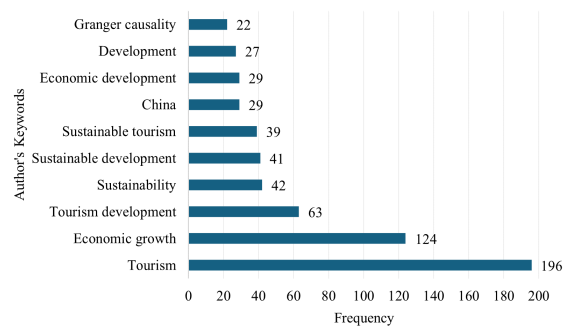


Fig. 3. Top 10 most used author's keywords.

Source: Own elaboration.

Analysing the co-occurrence of author's keywords among different authors, in Figure 4, two main clusters exist. The blue cluster, dominated by the term "tourism", is associated with other terms related to various types of tourism, sustainability, and environmental themes. The red cluster, where the term "economic growth" predominates, is linked to several econometric methodologies, tourism demand, and terms related to economics and finance. Additionally, two potential new clusters are observed: one related to environmental issues and another addressing tourism as an industry. Through this, it is possible to perceive some emerging themes in tourism development and economic growth.

Given the increasing importance of this sector in scientific research [9, 21, 22, 23, 24, 25, 26, 27], this study aimed to evaluate the existing literature from 2008 to 2023 through bibliometric analysis to understand trends, major themes addressed, most relevant sources of information and the impact of publications in this specific field and provide an overview of the state of research in tourism and economic growth, identifying knowledge gaps and areas for potential future investigation.

It was found that since 2018, there has been an exponential growth in publications in the field of tourism development and economic growth, as other authors had previously found [8, 9, 28]. Based on the Journal Citation Reports, it's evident that the most relevant sources and the journals publishing the most cited articles are those with a high journal citation indicator in quartiles 1 and 2. This demonstrates their superior performance compared to other journals within the same field. Also, according to the Scimago Journal & Country Rank, the journals that contribute the most to the publication of these articles are highly ranked in their publishing field (tourism, leisure, and hospitality management), which justifies the results obtained in terms of citations and scientific production.

In terms of authors' impact in this research field, it was discovered that while author Lee, C. has the highest number of citations, Kumar, R. holds the highest H-index score, therefore confirming the influence in the studied field, as noted by León-Gómez [8]. A large portion of the citations obtained by author Lee, C. originated from a single article, which explains why he is not the most influential author with a lower H-index value.

When analysing the most frequently used author's keywords, the co-occurrence of author keywords, and thematic evolution, it is possible to identify knowledge gaps and areas of emerging investigation, as demonstrated by Brida [9]. Two potential new clusters could indicate future lines of scientific inquiry in this area, which is interesting given the growing importance these dimensions have gained in this century. For instance, it would be interesting to explore tourism as an industry and conduct research on the economic significance of tourism as an industry at local, regional, and global levels.

Furthermore, it is observed that themes have evolved and been influenced by significant global events. For example, the emphasis on economic issues after 2008 may be justified by the global financial crisis that affected the world. The evolution of these concepts into sustainability concepts between 2013 and 2017 may have occurred, as Brida [9] affirmed, due to the UN's establishment of the Sustainable Development Goals in 2015. The rise of emphasis on terms such as economic growth or tourist arrivals between 2018 and 2023 can be explained by the emergence of a pandemic that led to a drastic reduction in travel and tourism, consequently impacting the economic growth of countries [29], which triggered interest in scientific research produced during this period.

This shows that this bibliometric analysis reveals trends in research topics, methodologies, and publication patterns over time. This can help researchers identify gaps in the existing literature, potential collaborators and journals that can be a reliable platform for publishing their work and that the academic community values. This analysis also helps to highlight areas where additional research funding could be needed, which

can be helpful for the strategic decision-making of academic institutions, funding agencies and policymakers.

Like any other study, bibliometric analysis has its limitations. One such limitation is the exclusive reliance on bibliometric data, which may need to provide a comprehensive view of tourism development and economic growth research. Other essential studies or insights could be captured in these results. Future research could explore methodologies for evaluating the quality and impact of research outputs in this field more comprehensively, overlooking other forms of research dissemination, such as policy reports or industry publications, which could offer valuable insights into the practical applications of research in tourism development and economic growth.

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