

2022


Tourism Observatories for measuring the COVID-19 impact on tourism

Georgia Zouni Dr.
University of Piraeus, gzouni@gmail.com

Stavros Hatzimarinakis
Hellenic Open University, chatzimarinakis.stavros@ac.eap.gr

Sotirios Varelas
University of Piraeus, sotirivarelas@gmail.com

Follow this and additional works at: <https://digitalcommons.usf.edu/jsr>

 Part of the [Business Administration, Management, and Operations Commons](#), [Marketing Commons](#), [Strategic Management Policy Commons](#), [Tourism Commons](#), and the [Tourism and Travel Commons](#)

Recommended Citation

Zouni, Georgia Dr.; Hatzimarinakis, Stavros; and Varelas, Sotirios (2022) "Tourism Observatories for measuring the COVID-19 impact on tourism," *Journal of Sustainability and Resilience*: Vol. 2 : Iss. 1 , Article 2.

Available at: <https://digitalcommons.usf.edu/jsr/vol2/iss1/2>

This Article is brought to you for free and open access by the M3 Center at the University of South Florida Sarasota-Manatee at Digital Commons @ University of South Florida. It has been accepted for inclusion in Journal of Sustainability and Resilience by an authorized editor of Digital Commons @ University of South Florida. For more information, please contact scholarcommons@usf.edu.

Publisher's Note: Journal of Sustainability and Resilience (JSR) (ISSN:2744-3620) is published bi-annually by the Sustainability and Resilience Institute (SRI) of New Zealand. The opinions expressed in this paper are those of the authors and do not necessarily reflect the official policy of SRI. SRI remains neutral about jurisdictional claims in published maps and institutional affiliations.

Tourism Observatories for measuring the Covid-19 impact on tourism

Georgia Zouni *¹ , Stavros Hatzimarinakis ²  and Sotirios Varelas ³ 

¹ University of Piraeus, Greece. Email: gzouni@gmail.com

² Hellenic Open University, Greece. Email: chatzimarinkis.stavros@ac.eap.gr

³ University of Piraeus, Greece. Email: sotirsvarelas@gmail.com

* Corresponding author

Received: 20/12/2021

Revised: 03/01/2022

Accepted: 15/01/2022

Published: 14/02/2022

Abstract: Coronavirus pandemic (Covid-19) began at the end of 2019 and since then has led to a period of global transformations and changes for all aspects of the economy, tourism included. A fundamental action to mitigate the socio-economic impacts of Covid-19 and accelerate recovery is the setup of local sustainable tourism observatories (UNWTO, 2020). This paper proposes a system theory-based framework for measuring the Covid-19 impact on tourism at regional and local level, using a mixed qualitative and quantitative methodology combined with the UNWTO and United Nations' recommendations for Covid-19 Tourism Recovery.

Keywords: Covid-19, destination management, impact measurement, recovery, tourism observatories, tourism system.

1. Introduction

In Tourism, accurate, relevant, and real-time information is fundamental not only for successful development but for the vitality of destinations and organisations. The development of efficient tools to collect, manage and make available data and information about the supply and the demand, is crucial for the development of marketing strategies, the evaluation of the management performance and the measurement of impact on the destination economy in general (IRTS, 2008).

The Covid-19 pandemic has affected large-scale changes and affected the travel and hospitality tourism industry, turning it into the most affected area (Kalyankar, 2020). According to the World Tourism Organisation (UNWTO, 2020), a fundamental action to mitigate the socioeconomic impacts of Covid-19 and

accelerate recovery is the setup of national and local sustainable tourism observatories to measure all dimensions of tourism (UNWTO, 2020, p.6), as “evidence based decisions and strategies are key, particularly in moments of crisis. Invest in data, analysis and partnerships that allow for close, short-term monitoring of tourism development and impact”.

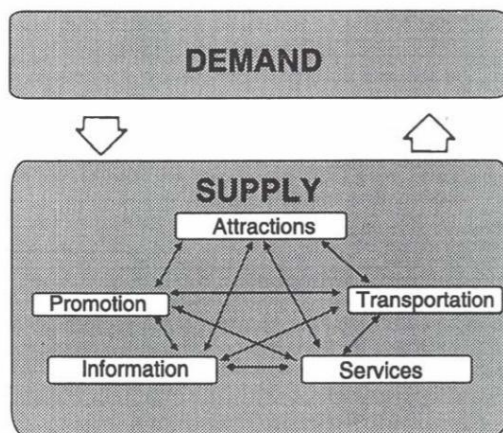
Moreover, several tourism academics (Brando, 2007; Nacca et al., 2010) emphasize the importance of establishing Tourism Observatories at regional and local levels, citing (i) a lack of statistical data, mainly on a regional level; (ii) an uneven distribution of updated information in the field, resulting in a lack of reliable material for investors to analyze, particularly SMEs; (iii) the need for more data regarding competition i.e., of the competitiveness and systematic evolution of all market sectors;

(iv) and, lastly, the difficulty of visualizing the interactions between the various tourism subsectors (Scuttari et al. 2020).

2. Methods

Tourism Observatories at regional and local level should be designed to support policy makers, businesses, and researchers to recover from Covid-19 crisis by: (a) analysing the impact of the Covid-19 pandemic in tourism, examining both tourists and tourism professionals over time, (b) providing reliable, comparable, and up-to-date data about tourism flows, expenditures, and travel behavior (tourism demand); (c) identifying trends and developments in the tourism related sectors (tourism supply); and (d) facilitating evidence-based policy making in tourism via a web-based application and a Data Warehouse (DW) management system.

Figure 1. Tourism System



Source: Gunn (1972).

The approach of the measurements proposed should follow a mixed qualitative and quantitative methodology consisted of the most advanced and internationally accepted conceptual and methodological frameworks (TSA: RMF, 2008; IRTS, 2008) for measuring and monitoring tourism, combined with the UNWTO's recommendations for Covid-19 Tourism

Recovery (2020) and the UN Secretary-General's report on Responding to the socio-economic impacts of Covid-19 (2020).

The framework must follow methodologically the system theory in tourism (Gunn, 1972), as observed in Figure 1, that proposes that Demand and Supply objects or elements in a tourism system interact with each other to achieve a specific goal.

3. Results

Several analyses should be conducted to better gather the data, both from the demand (i.e., visitors and their activities) and supply side, to measure the impacts of Covid-19 on tourism.

Analysis of COVID-19 impact on Tourism Supply

This concerns the regular selection of data from administrative registers, aiming at an analytical recording and monitoring of establishments of the region of analyses, which will be classified according to their relation to tourism (i.e., enterprises engaged in tourism characteristic activities, tourism connected activities and other activities). The objective is to obtain an overall view of the local economic activity, highlighting the tourism related supply (i.e., accommodation establishments per type and related room-bed capacity, food and beverage serving services, rental services of vehicles, travel agencies, retail trade) as well as local peculiarities. The database will provide a quantitative analysis at the most possible disaggregated level (i.e., per code of economic activity) in terms of a) the structure of local economic activity, b) the per economic activity evolution over time, monitoring modifications and trends corresponding to demand variations and general market conditions (i.e., lock downs) regarding the opening (of new) and closure of enterprises as well as shifts in activities, and c) the legal form of enterprises.

Breakdown may be achieved at an 8-digit (CPA, 2008) level. Estimates of corresponding turnover and number of employees per activity may be achieved with top-down approaches in cases where data at the required NUTS (Nomenclature of territorial units for statistics) level is not available. Focus will be given to enterprises engaged in tourism characteristic activities, internationally comparable and destination specific, according to IRTS (2008) and TSA (TSA: RMF, 2008) specifications.

Indicative tourism supply data to measure Covid-19 impact to be collected are: (a) UN Secretary-General's report on Responding to the socio-economic impacts of Covid-19 proposes to start by analysing the health system itself during the Covid-19 crisis. Possible indicators in line with World Tourism Organisation and World Health Organisation could be essential health services, from primary care level to hospital level, post-hospital patient management; (b) the top concerns for businesses are the same for the immediate and long term such

as economic and political uncertainty and travel restrictions, visa regulations, pricing, marketing, and staffing; and (c) the most important action that businesses reported in relation to the global Covid-19 outbreak, such as cancellation policies, improving quality, forming new partnerships, and adjusting marketing and product offering.

Analysis of COVID-19 impact on Tourism Demand

The goal of the study of demand is to characterize the pattern and behavior of the tourists who visit the destination and estimate crucial aspects of the economic impact their consumption generates. The data obtained will shed light on the travel behavior of the visitors during and after Covid-19, their opinions and perceptions, highlights complaints and suggestions and will identify which tourism destination elements should be modified. It finally will help to determine new travel patterns imposed or arose from the pandemic as well as new or altered demand for products, activities and experiences.

Table 1. Supply and Demand variants of COVID-19 impact on Tourism

Covid-19 impact on Tourism Supply variants	Covid-19 impact on Tourism Demand variants
Number of and structure per legal form of entities	Numbers/Types of visitors
Number of and structure per economic activities (according to available level of breakdown)	Demographic information of the visitors
Turnover per economic activity	Visitors' travel behavior and flows
Covid-19 supply related data	Visitors spending behavior and economic impact to local economies
Own source.	Destination perceptions, attitudes, preferences and satisfaction
	Covid-19 demand related data

Indicative tourism demand data to measure Covid-19 impact be collected are: 1. numbers and types of visitors (tourists, same-day visitors); 2. demographic information of the visitors (age, nationality, education); 3. visitors' travel behavior and flows (arrivals, overnights, seasonality); 4. visitors spending behavior and economic impact of their visit to local economies (accommodation, food and beverage); 5. destination perceptions, attitudes, preferences and satisfaction; 6. Covid-19 related data (avoiding traveling abroad, traveling with their own vehicle, safety and health issues).

Table 1 summarises the proposed Supply and Demand variants of Covid-19 impact on Tourism.

4. Conclusion

Tourism Observatories that integrate Covid-19 measures will serve as a think-tank which enables the destination tourism stakeholders to sustainably tackle the challenges of Covid-19 crisis and its impacts. In that way such bodies will be a leading authority in delivering information that benefits the whole tourism value chain and, as a result, the industry, so it will greatly contribute to overcome the negative impacts of Covid-19 and to consolidate the destination. Specifically, the Tourism Observatory will positively impact tourism recovery via (a) delivering a clear, actual and regular picture of the impact Covid-19 crisis' on Destination's tourism via gathering and disseminating information generated among stakeholders, and (b) monitoring results of recovery actions that can also support managers in performing successfully towards sustainable tourism.

Implication and Future research

This is the first study to highlight the importance of integrating Covid-19 measures in Tourism Observatories, that will serve as a think-tank which enables the

decision-making during and after the pandemic. Such Observatories intend to deliver a clear and regular picture of the impact Covid-19 crisis on any destination's tourism via informing and disseminating information generated among stakeholders, providing to the operators support instruments for the qualification, innovation and differentiation of the business, promoting creativity and the promotion of competitive intelligence systems. This approach, however, is subject to several limitations, regarding mainly to the timely availability of secondary data, the degree of cooperation-commitment of data producers and finally due to budget limitations. Future research should incorporate a regression model for the prediction of future visitor flows and impacts, taking into account the Covid status of both visitors' country of origin and destination, based on data from previous years.

Publisher's Note: The views and opinions expressed in this article are those of the authors and do not necessarily reflect the Sustainability and Resilience Institute New Zealand official policy. The institute remains neutral about jurisdictional claims in published maps and institutional affiliations.



© 2021 by the authors. The article is submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

References

- Brandão, A. F. (2007). *Os observatórios do turismo como meios de apoio à gestão e à competitividade*. Universidade de Aveiro.
- Kalyankar, M. M. D. (2020). Impact of Covid-19 Pandemic on the Tourism Sector. *Purakala UGC CARE Journal*, 31(8), 611-617.
- Nacca, A., Di Maula, R., & Andreoli, A. (2010). The Italian National Tourism Observatory: Governance and statistical issues. Regional example: Umbria's Observatory.

- Proceedings of the 10th International Forum on Tourism Statistics.*
- OECD (2020). Evaluating the Initial Impact of Covid-19 Containment Measures on Economic Activity. Retrieved from www.oecd.org/coronavirus/policy-responses/evaluatingthe-initial-impact-of-Covid-19-containment-measures-oneconomic-activity-b1f6b68b
- Scuttari, A., Ferraretto, V., Dibiasi, A., Isetti, G., Erschbamer, G., Habicher, D., & de Rachewiltz, M. (2020). *The Sustainable Tourism Observatory of South Tyrol (STOST): first annual progress report.* Retrieved from <https://webassets.eurac.edu/31538/1622109401-instoenreport-2020.pdf>
- United Nations (2020). *Global Solidarity: Responding to the socio-economic impacts of Covid-19.* United Nations.
- United Nations Statistics Division, Statistical Office of the European Communities, Organisation for Economic Co-operation and Development and World Tourism Organization (2008). *2008 Tourism Satellite Account: Recommended methodological framework.* UNWTO (referred to as TSA: RMF, 2008). Retrieved from https://unstats.un.org/unsd/publication/seriesm/seriesm_83rev1e.pdf
- World Tourism Organization (2008). *2008 International recommendations for tourism statistics.* UNWTO (referred to as IRTS, 2008). Retrieved from https://unstats.un.org/unsd/publication/seriesm/seriesm_83rev1e.pdf
- World Tourism Organization (2020). *Supporting Jobs and Economies through Travel and Tourism – A Call for Action to Mitigate the Socio-Economic Impact of Covid-19 and Accelerate Recovery.* UNWTO.

Author profile



Dr Georgia Zouni is a Lecturer of Tourism Marketing at the University of Piraeus, Greece. She has extensive experience as Tourism Expert working in international/national/regional tourism projects (research, strategy, marketing, ect.) including MED Interreg Programs, DG Regio programs, EC DG REFORM Projects for Technical, ect. Her research interests focus on destination marketing, destination experience, tourism satisfaction and digital marketing.

Author profile



Dr Stavros Hatzimarinakis holds a PhD in Tourism Satellite Accounts (University of Patras). He has research experience in tourism related laboratories of the University of the Aegean (Lidl) and of the University of Patras (La.Re.T.S.A.), as well as in EU funded tourism projects. He teaches courses related to tourism economics in the Hellenic Open University and the University of Piraeus. His current research activities are focused mainly on the measurement of food and beverage tourism consumption structure and the development of tourism monitoring tools.

Author profile



Dr Sotirios Varelas is Assistant Professor at the field of Hospitality Strategic Management in the Tourism Studies Department at the University of Piraeus. He is a post doctorate researcher at the field of virtual - augmented reality and gamification on tourism in the Department of Informatics and Telecommunications at the University of Peloponnese. He has cooperated with many research centers such as the Regional Development Institute, the Laboratory of Policy Evaluation and Development Programs, and the Research Center of the University of Piraeus.