

6th INTERNATIONAL THEMATIC MONOGRAPH

**MODERN MANAGEMENT TOOLS
AND ECONOMY OF TOURISM SECTOR
IN PRESENT ERA**

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Preface

International Thematic Monograph: *Modern Management Tools and Economy of Tourism Sector in Present Era – 2021/2022* is the sixth annual publication of this kind published by the Association of Economists and Managers of the Balkans in cooperation with the Faculty of Tourism and Hospitality, Ohrid, North Macedonia.

Presented thematic monograph characterizes the following facts:

- **23 members of its Editorial Board come from 6 different countries** of the Balkans region: 6 from Serbia, 6 from Montenegro, 5 from Croatia, 4 from North Macedonia, one from Slovenia, and one from Bosnia and Herzegovina;
- Out of more than **60 chapters** that have been submitted for publication, it has **37 double-blind peer-reviewed chapters** accepted and published in English on more than **650 pages**;
- All chapters have been scanned with Crosscheck (powered by Turnitin) and have ORCID iD integration;
- It gathered **93 authors** from **12 different countries**: Albania, Bosnia and Herzegovina, China, Croatia, Czech Republic, Italy, Montenegro, North Macedonia, Serbia, Slovak Republic, Slovenia, Slovenia who come from different faculties, universities, colleges, scientific institutes, enterprises, ministries and associations – listed at the next page;
- **43% of all listed authors originate from abroad**;
- In a review process of a thematic monograph their contribution gave **79 highly esteemed reviewers all with PhDs**;
- Among listed **peer reviewers 50,63% of them are international by country of origin**;
- The average **grade of all published chapters** obtained according to all reviews is **74,68** out of 100.

Best Chapter Award Candidates of the 6th International Thematic Monograph: *Modern Management Tools and Economy of Tourism Sector in Present Era* are:

- Milena Lazić, Aleksandra Bradić-Martinović, chapter title – *Analysis of tourism demand in selected WB countries during the COVID-19 pandemic*;
- Sandra Milanović, Miljana Talić, Žarko Rađenović, chapter title – *Social entrepreneurial intention factors of tourism management students*;
- Vera Mirović, Branimir Kalaš, Nataša Pavlović, chapter title – *Is the tourism-led growth hypothesis valid for Višegrad group countries?*;
- Jani Bekő, Darja Boršič, chapter title – *Purchasing power parity under tourism price indices: an analysis for euro area*;
- Mateja Jerman, chapter title – *Performance of the Slovenian hotel companies in times of COVID-19*.

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According to given criteria, i.e. usefulness and accuracy of the review; depth and scope of the review, i.e. not length, but rather coverage; timeliness of the review; the extent to which the review is constructive; and the submitter's average feedback to the usefulness and tone of the reviewer

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We would like to express our sincere gratitude to all colleagues who participated in a process of publishing this thematic monograph and with great honor would like to invite **you all to start preparing chapters for our 2022/2023 annual edition.**

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The Publishers



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Fueling Novel and Sustainable Tourism Ecosystems through Resource Orchestration

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Abstract: *This study aims to extend the conceptualization of resource integration in service ecosystems by defining and empirically analyzing the orchestration of multi-actor collaboration for value co-creation in the tourism eco-system. Current knowledge on the emergence of service ecosystems is extended by focusing on and conceptualizing the resource integration efforts of resource orchestrators and connectors. It adopts a qualitative in-depth case study approach to explore, in a real-life situation, how resource orchestration through multi-actor collaboration for value co-creation occurs in complex service ecosystems, such as hospitality or tourism services. The analysis is built on multiple sources of information to integrate investigations conducted through direct observation and questioning. A new approach is synthesized, which shifts away from the understanding of resource orchestration as a firm-level activity for initiating and managing innovation processes to a key process for driving and managing the emergence of multidimensional and multilevel value co-creation structures.*

1. INTRODUCTION

Management research has focused on how multiple actors, such as firms, the public, governments, and not-for-profit organizations, co-create and capture value through the integration and orchestration of resources. Resource integration can be defined as the purposeful use of available resources by actors to co-create value for themselves and others through collaboration with other actors in service ecosystems. This perspective emphasizes the actor-to-actor relationship, encapsulated in service ecosystems. The service ecosystem perspective provides a processual, systemic, and institutional view on value creation by suggesting that value is co-created among multiple institutionally guided actors. This is enabled through network interaction and successful resource integration (matching, resourcing, and valuing;) that occur at different levels of aggregation in a larger, complex, and dynamic social context (Caridà et al., 2019; Koskela-Huotari, 2018; Koskela-Huotari and Vargo, 2016). Actors at the macro, meso, and micro levels can intentionally influence resource integration, how service ecosystems evolve, and thus, the resultant value-in-context. The success of resource integration by multiple actors implies direction and coordination of joint efforts, which is called resource orchestration.

Recently, the need has emerged for orchestrating resources to drive intended resource integration practices for value co-creation. This is due to: i) the ability of multiple actors to enact complementary roles by accessing and integrating different sets of resources and by co-creating and extracting different categories of value (e.g., economics, social, cultural, and environmental); ii)

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the asymmetrical nature of relationships (both social and business) where actors signal to one another both what they can offer and what they are trying to achieve in terms of the captured value-in-context (Findsrud and Dehling, 2019); and iii) the spread of digital platforms that facilitate new opportunities for multi-actor collaboration (Edvardsson and Tronvoll, 2019) by optimizing and shaping the ability of actors to interact, match, integrate, and operate with additional resources for co-creating and sharing value. Accordingly, digital platforms provide coordinating mechanisms for large-scale collaborations (Edvardsson and Tronvoll, 2019), which are needed to transform existing service ecosystems and/or shape new ones. This is accomplished by refining resource integration patterns and the distinct configurations of previously unconnected actors, resources, activities, and values to fuel novel and sustainable service ecosystems: in other words, to adopt the service ecosystem approach.

According to Koskela-Huotari (2018), value co-creation is an emergent outcome of institutionally concerted actions and interactions of multiple actors within the service ecosystem: new or changed resource integration practices emerge, and the ecosystem remains in development (Koskela-Huotari et al., 2016; Vargo et al., 2015). Interactional and relational aspects are central and “consequently, interactions and relationships must be established to enable the integration of resources between actors” (Eriksson and Hellström, 2021: 458).

Such a conceptualization highlights the need to orchestrate multi-actor resource integration activities at the micro, meso, and macro levels as well as the need to frame the different orchestrator roles actors can intentionally enact to fuel novel and sustainable service ecosystems (Hurmelinna-Laukkanen and Nätti, 2018; Chandler and Vargo, 2011).

An orchestrating actor makes use of not only the resources and capabilities that multiple actors can provide, but also balances the interdependencies between the macro, meso, and micro levels in an ecosystem, which both enables and inhibits value co-creation. When actors are interdependent and operate at different levels of aggregation in the ecosystem, the lack of orchestrating activities may cause misalignment between their interests and the integration of available resources. This results in a decline in the well-being of at least one of the actors, and in reduced value co-creation. This means that an in-depth focus on different levels of interaction is needed to understand resource orchestration in practice and how it affects the evolution of the service ecosystem (Plé and Chumpitaz Cáceres, 2010).

Many scholars have called for empirical studies on resource integration and value creation in ecosystems, focusing on the process and outcome of multiple actor collaboration in practice (Caridà et al., 2019; Skylar et al., 2019; Taillard et al., 2016). However, to our knowledge, few scholars have explicitly conducted empirical studies on resource orchestration or the orchestrating roles of multi-actors in large and complex service ecosystems. Furthermore, despite increasing debate on resource orchestration in innovation networks and service ecosystems, the discussion on how contextual issues affect the resource orchestration process is still underexplored and requires both conceptual development and empirically grounded analysis (Hurmelinna-Laukkanen and Nätti, 2018; Pikkarainen et al., 2017; Valkokari et al., 2017).

The study aims to expand the conceptualization of resource integration and service ecosystems by defining and empirically analyzing the orchestration of multiple actors working together to create shared value. In particular, the study focuses on the Italian tourism ecosystem emerging from the National Strategic Plan for Tourism (2017-2022). For this purpose, the actors, the

dynamics of resource integration and the orchestration issues at each level of the ecosystem are analyzed in-depth: At the micro level, Civita di Bagnoregio is studied; at the meso level, we focus on the Italian Villages project (2017-2018); and the macro level is studied through the analysis of the Italian National Strategic Plan for Tourism (2017-2022).

This study fills the literature gap and enhances our understanding of service ecosystems in action by paying attention to actors who orchestrate the exchange of complementary resources within the ecosystem and how the orchestrating roles of different actors enable the development of new emergent service ecosystems.

2. CONCEPTUAL FRAMEWORK

Our conceptual framework is grounded in the extant research on resource orchestration from an ecosystem perspective and on service ecosystems (Hurmelinna-Laukkanen and Nätti, 2018; Pikkarainen et al., 2017). It is based on two main pillars: first, the idea that service ecosystems emerge from both a bottom-up and top-down process which is orchestrated by different social forces in their ongoing efforts for the maintenance, disruption, and change of institutions—that is, their institutionalization; second, that service ecosystems possess path dependencies which provide stability through continuity and repetitiveness (Vargo et al., 2015; Koskela-Huotari et al., 2016).

We assume that the service ecosystem is “a relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional arrangements and mutual value creation through service exchange” based on four interdependent concepts: value proposition, actors, resources, and institutional arrangements. A *value proposition* is an invitation from one orchestrating actor to others to join forces in value co-creation (Vargo and Lusch, 2016: 10-11; Vargo et al., 2015). *Actors* are individuals or organizations with agency, intentions, prior experiences, and expectations of intended value outcomes. Actors are both resource integrators (who combine resources to form a whole) and resource orchestrators (who coordinate the combination of resources through multi-actor collaboration in a situation that produces intended outcomes—value-in-context), who require institutions (platforms, structures and processes) and institutional arrangements (norms, rules, conventions and practices) to enable social coordination. *Resources* are a source of agency for actors when co-creating value. The realized value depends on the resource integration process and, specifically, on the alignment between the phases of matching, resourcing, and valuing — that is, on how resources are integrated and operated on in specific contexts with specific intentions (Edvardsson and Tronvoll, 2013; Caridà et al., 2019).

Institutions are rules, norms, and beliefs that enable or constrain action and make social life predictable and meaningful. Institutionalization, disruption, and change of institutions form a central process of service innovation, which is needed for the development of service ecosystems (Vargo et al., 2015). Both institutions and institutional arrangements influence the wider service context that guides the action and interactions of actors for service exchange and value determination (Vargo et al., 2015; Edvardsson et al., 2011; Scott, 2014; Vargo and Lusch, 2016).

The service ecosystem conceptualization captures the complex and dynamic dimension of service-for-service networks and markets. It implies the inclusiveness of different stakeholders and the convergence of their different interests in the pursuit of the well-being of both individuals and the overall social system.

The service ecosystem emerges through an interactive, dynamic, and recursive process of formation and reformation of the social context that determines what is valuable and what is not (Lusch et al., 2007; Vargo et al., 2015; Vargo and Akaka, 2012). Service ecosystems are characterized by dynamism and self-adjusting properties and are centered on the combinatorial evolution of social forces, including the roles, actions, and interactions of actors that are orchestrated and enforced by the institutions and their arrangements. Such social forces also contribute to the formation and reformation of the institutions and the institutional arrangements by building, interpreting and modifying them.

Orchestrating refers to activities that support value co-creation processes “by influencing the integration of necessary resources between firms and their customers. Such activities include, but are not limited to, inspiring and facilitating the interaction between actors in the value process”. It is a dynamic and evolving activity that influences the network and its members (Hurmelinna-Laukkanen and Nätti, 2018; Gidhagen et al., 2011; Paquin and Howard-Grenville, 2013).

Understanding the resource orchestration process in complex service ecosystems requires moving away from a narrow, micro-level focus to include contextual issues shaping different orchestrators. Thus, the interdependencies between different levels in service ecosystems influence the whole resource integration process and, thus, the evolving value co-creation path and outcomes (Pikkarainen et al., 2017).

Accordingly, we assume that: i) different orchestrating roles refer to the orchestrator conducting specific orchestration activities in a specific way, ii) in the same service ecosystem, multiple actors can perform many orchestrating roles, at the same and different levels, to actively pursue their self-interests and values, iii) the service ecosystem is continuously being formed and re-formed. It is the co-created outcomes of systemic human actions that are shaped and driven by orchestrating actors through the ongoing emergence of new value propositions and the institutionalization of new solutions, and iv) both human and non-human (including technology and institutions) actors can orchestrate multi-actor collaboration for value co-creation. According to Edvardsson and Tronvoll (2019), the central role of this platform is to manage the contributions of multiple networked actors collaborating to create something novel and useful: in other words, the effective orchestration of the interdependencies among actors.

The above conceptual framing synthesizes a shift in view away from understanding resource orchestration as a relevant activity enhanced by a leading organization (hub, focal firm, or focal organization) for initiating and managing innovation processes, to that of a key process that influences and is influenced by multiple social forces in the service ecosystem. This includes multiple non-human and human actors that, with or without orchestration by a hub firm, act at different levels of aggregation (Chandler and Vargo, 2011) to mobilize and boost base levels of dispersed resources (knowledge, skills, cultural, and social, among others) to ensure the stability and sustainability of the service ecosystem.

In the light of the recent model proposed by Hurmelinna-Laukkanen and Nätti (2018) and Pikkarainen et al. (2017), and to better understand resource orchestration, we analyze and contextualize the multiple roles that collaborating actors may enact over time in the same service ecosystem. It represents a useful schema to match and bridge theory and practice. Accordingly, Table 1 provides a synthesis of these orchestrating roles and related activities codified on the basis of this model; it allows us to investigate the resource orchestration process in light of the service

ecosystem to better understand what actors do and how they contribute to the formation and reformation of the service ecosystem by adopting certain roles and social positions.

Following the ecosystem lens and recent research, our study moves away from the perspective of the hub firm (Dhanaraj and Parkhe, 2006; Hurmelinna-Laukkanen and Nätti, 2018; Pikkariainen et al., 2017). Our aim is to extend the scope and concept of the resource orchestration process to the broader perspective of the social context and thus of the multiple actors, who will actively pursue their own self-interests and value creation. The social context, through its institutions and institutional arrangements, drives resource orchestration to i) enable resource access and knowledge mobility, ii) promote the institutionalization, scalability, and reproducibility of the innovation practice, iii) foster value co-creation and value extraction, and iv) ensure the stability and self-sustainability of the service ecosystem.

Table 1. Roles and activities of Orchestrating Actors

Orchestrating Actor Types	Orchestrating Actor Roles
<p>Controlling approach Player-orchestrators: For profit, competitive actors are interested in improving their competitive advantages and profitability by leveraging networks that they coordinate.</p>	<ul style="list-style-type: none"> • Architect: mobilization network members, agenda setting, and coordination. • Judges: taking control of plans while determining, monitoring, and adapting performance standards for each participant. • Gatekeeper: extracting knowledge used in the innovation process from outside the network and disseminating it among network members. • Conductor: acquiring and spreading information to strengthen their core competences as focal actors, while allocating further tasks to other network members.
<p>Controlling approach/ Support and discreet influence approach Non-Players-Facilitator-orchestrators: Boundary-spanning actors interested in the development within and of the network by ensuring the wide dispersion of innovative ideas and cooperation. They have a strong relational position and connections while focusing on common interests in the matter and viability of the network rather than financial gain for themselves.</p>	<ul style="list-style-type: none"> • Representative: sharing knowledge about the network to outsiders and evaluating what can be shared considering innovation appropriability. • Coordinator: managing the interaction between network members to ensure stability and coordination-related activities. • Auctioneer: Agenda setting, creating, and promoting a joint vision in the network. • Developer: developing and strengthening (in) tangible assets as knowledge mobility.
<p>Support and discreet influence approach Sponsor-orchestrators: Commercially oriented actors are interested in improving their financial situation by building on the development of the competitiveness of network actors that is promoted by ensuring joint benefit and cooperation. They rely both on resources and strong relational positions in networks and offer resources and connections to the network members, but with the expectation that their efforts and investment will be rewarded later.</p>	<ul style="list-style-type: none"> • Promoter: getting network members to work toward the same goals, including those that may initially be unattractive • Leader: motivating and fostering voluntary collaboration and clarifying the roles of network members to boost network stability and knowledge mobility.

Source: Adapted by Hurmelinna-Laukkanen and Nätti (2018) and Pikkariainen et al. (2017)

3. THE ITALIAN HOSPITALITY AND TOURISM SERVICE ECOSYSTEM

The study focuses on the: i) “Italian National Strategic Plan for Tourism (2017-2022)” (macro level of relations); ii) “Italian Villages project 2017-2018” (meso level); and iii) Civita di Bag-noregio pilot project “Home of the Artist” (micro level).

These projects aim to enhance the self-sustainability of small Italian villages by supporting their local economies, creating new resources, and fostering long-term investment in cultural,

social, and urban restoration. They arise from a collaborative process involving the Italian Ministry of Cultural Heritage and Tourism (MiBACT), the Italian National Association of Municipalities (ANCI), specific Italian Municipalities, and Airbnb.

These narratives are grounded in the pilot project “Home of the Artist,” launched in Civita di Bagnoregio in March 2017. The success of this project inspired the establishment and spread of novel collaborative practices in other Italian regions involving Airbnb, Italian Municipalities, and other actors (private companies, local/national authorities, hosts, and travelers, among others). The following tables (Tables 2, 3, 4) describe the service ecosystem context according to the multilevel perspective (micro, meso and macro level). They briefly illustrate the institutions and the institutional arrangements that frame the social roles and actions of multiple actors, including the evolving path and resultant value-in-context of the service ecosystem.

According to the general framework defined by the Italian National Strategic Plan for Tourism (2017-2022), in 2017, Civita di Bagnoregio began launching new collaborations between public (municipalities, local authorities, and associations, among others) and private actors (Airbnb, citizens, host and the community) at the national level (The Airbnb Italian Village Project) through collaboration between Airbnb, the MiBACT, and the ANCI. To better clarify the process driving the emergence of novel and sustainable service ecosystems (Koskela-Huotari, 2018; Vargo et al., 2015), the following illustration provides a brief overview of the social context of Civita di Bagnoregio. It: i) explains the reasons why Civita was chosen by Airbnb to test its pilot project, ii) identifies the key elements boosting the scalability and stability of this collaboration and, finally, iii) clarifies the circular causality leading to the emergence of new service levels in the ecosystem.

Table 2. The Macro Level - Italian National Strategic Plan for Tourism (2017-2022)
 Italian Travel Itinerary

<p>General description: The Italian National Strategic Plan for tourism involves ongoing cooperation between stakeholders in the tourism sector, arising from a participatory process established by the Ministry of Cultural Heritage and Activities and Tourism (MiBACT) via the Directorate General for Tourism. The new Strategic Plan for Tourism Development (Piano Strategico del Turismo) 2017-2022 develops a wide array of ideas and proposals, also acquired via digital tools.</p> <p>Project Aim: The plan provides Italy with a unified vision of tourism and culture, leveraging technological and organizational innovation, skill enhancement, and service quality, all increasingly integrated with the sustainable use of resources and their physical and cultural accessibility. It overcomes current fragmentation and ensures synergy between regional tourism plans by integrating interregional and national actions and projects. Accordingly, it provides a framework within which both institutions and operators can share a long-term vision, medium-term objectives, and lines of action that ensure the interoperability, joint decision-making, and co-responsibility of the actors’ service system.</p> <p>Actors: Main actors: Directorate General of Tourism of the MiBACT who coordinates public and private stakeholders and services for all citizens and tourists. Other actors: Standing Committee on Tourism Promotion in Italy, operators, stakeholders, government authorities at various levels, citizens, and tourists. Enabling tools: the participatory platform; inter-institutional forums; tools to monitor the progress of the plan.</p> <p>Project working method: The competent central government and regional administrations, together with all Italian tourism operators (public and private), contribute to the definition of the plan and its subsequent phases, through direct and digital collaboration. The collaborative process, coordinated by the Directorate General of Tourism of the MiBACT, took place through direct meetings, round table discussions, and online tools. These activities enabled close collaboration between the MiBACT and the other relevant stakeholders (regions, central government, local authorities, economic actors, and other associations) to analyze the needs of the tourism sector, share the decision-making process and jointly implement relevant actions to broaden the tourism supply models, thereby encouraging the emergence of new models geared towards sustainability, digital innovation, quality accommodation/services, and adaptation to the new trends of the demand.</p>

Project principles:

The driving principles of the plan are integration, institutional cooperation, and participation.

Integration involves the ability to integrate territorial resources to create more efficient tourism policies and models of governance that are rooted in coordination and interrelationships.

Institutional cooperation and participation comprise the close and equal exchange between the cited actors who have collective or corporate interests in tourism policies.

Source: Authors' elaboration

Table 3. The Meso Level - The Airbnb Italian Village Project

General Description:

2017 was termed by the MiBACT as the Year of Villages, after which Airbnb collaborated with the Italian Ministry of Culture and Heritage Activities (MiBACT) and the National Association of Italian Municipalities (ANCI) to support tourism in small villages.

The Airbnb Italian Village project was launched on October 6, 2017 to promote more than 40 villages throughout the country, with at least two in each region. This was achieved through a range of different programs to enhance cultural heritage, urban redevelopment through the reuse of disused and abandoned areas, and the innovation and reshaping of tourism and hospitality by increasing social cohesion through the active and systematic involvement of the local communities and socio-economic systems (e.g., tourism firms, voluntary associations).

Project Aim:

According to the Italian National Strategic Plan for tourism, *the Italian Villages Project* aims to promote areas off the beaten track to travelers from around the world and support the development of sustainable tourism practices in local communities outside Italy's major cities (including small Italian towns).

The project aims to improve the quality of the urban surroundings, cultural supply and services, and to create a system of cities of art and villages: *"Home sharing isn't a new concept for rural hosts, in fact, locals have been opening up their homes for decades. By using technology, we can now play a major part in helping to revitalize these villages, empowering locals to share their communities, their culture, and their heritage, while boosting the local economy"* (Joe Gebbia, Airbnb Co-Founder).

Actors:

Main actors:

- i) Airbnb coordinates public and private stakeholders and leverages the Airbnb ecosystem to promote the self-sustainability of small village communities by improving home-sharing practices and services that enhance their local economies, together with the creation of new resources and their long-term investment in cultural, social and urban restoration projects.
- ii) Officials and citizens collaborate with Airbnb to globally promote small towns.
- iii) Hosts encourage guests to see local sites, eat in local restaurants, and make local connections.

Other actors: MiBACT, ANCI, stakeholders and government authorities at various levels, citizens (voluntary associations, etc.) and tourists.

Enabling tools:

- i) Airbnb platform allowing hosts to put their hometown on a global map.
- ii) Inter-institutional working teams
- iii) Airbnb social media campaigns

Project working method:

The partnership between Airbnb, the institutions, and the local community allowed the development of two effective areas of intervention:

1. Restoration and economic valorization of historical and important public buildings: A multidisciplinary working team including private companies, Italian and international architects, and artists are selected and coordinated by Airbnb to restore disused and abandoned buildings to make sure that local specificities are enhanced. According to the working practices adopted by the pilot project developed in 2017 in Civita di Bagno Regio (Casa d'Artista), all proceeds, including the rent paid by guests and the Airbnb fee, are used to fund property maintenance and other cultural and social projects.
2. Creation of a digital ecosystem to internationally promote 40 small villages: Twenty villages, one in each Italian region, are promoted internationally on a dedicated platform (<http://italianvillages.byairbnb.com>). The website connects hosts living in these villages by sharing their homes on Airbnb with travelers who are interested in discovering a less familiar part of Italy. Another 20 small villages are promoted internationally through an ad hoc social communication plan involving the social media platform Airbnb.

The digital ecosystem is based on the integrated use of multiple social media tools such as blogs (Airbnb blog, nerds' blog, public policy blog, among others), mobile apps (Airbnb, Android, and iOS), and social networks (Twitter, Facebook, Google+ YouTube, LinkedIn, Flickr, GitHub, Vimeo, Instagram, and Pinterest) to globally increase the visibility of the small villages. Both the dedicated website and the social campaign informs villagers and the local community through texts and images. Furthermore, they include a series of utilities (including historical guides and listings, among others) to connect rural hosts with global travelers.

Project principles:

Sustainability, innovation, integration, institutional cooperation, and participation.

Source: Authors' elaboration

Table 4. The Micro Level - The Artist House Pilot Project

<p>MICRO LEVEL</p> <p>General Description</p> <p>In 2017 Airbnb in collaboration with the Municipality of Civita, local authorities and other several partners (designers, architects, Italian and international artists, private companies, etc.) started the pilot project “Home of Artist” as part of a broader initiative by the Italian tourist board to support and champion the Italian small village.</p> <p>The Casa Greco, which was heavily damaged in an earthquake in the 1980s, was named The Artist House on March 30, 2017. It is the first public building in Italy to be permanently listed on the Airbnb platform through a unique partnership with the village, aimed at revitalizing the Civita artistic heritage.</p> <p>Hosted by the Mayor of Civita, it is available on the Airbnb platform for Euro 300 per night. All proceeds go to the village to sustain cultural projects. A special rate of Euro 10 per night is offered for the professional artist community.</p> <p>Pilot Project Aim:</p> <p>Setting up new collaborative practices to promote similar projects in other regions within the wider Italian campaign to help the self-sustainability of rural villages around the world by preserving and celebrating their cultural heritage.</p> <p>The Artist House was completed at the end of March 2017; in October 2017, Airbnb, together with the MiBACT and ANCI, launched the same project on a national level, that is, the Airbnb Italian Village Project.</p> <p>Actors:</p> <p>Main Actors:</p> <ol style="list-style-type: none">i) Airbnb coordinates public and private stakeholders and leverages its digital hospitality ecosystem to test the scalability and application of the same project to other rural villages.ii) The Major becomes the first public host in the world, collaborating with Airbnb and other public and private actors to provide concrete ways for the town to sustain its culture and tradition.iii) The Italian project curator, architects, and artists who agree on a working methodology and its application to another small village in Italy. <p>Other Actors: Citizens and tourism operators</p> <p>Enabling tools: The Airbnb platform</p> <p>Project working method:</p> <p>The Home of Artist Project is based on a public-private network.</p> <p>Airbnb joined forces with the Italian curator Federica Sala, who chose Francesco Simeti, a renowned artist celebrated for his immersive installations, and DWA Design Studio, an architectural firm based in Milan, for the project.</p> <p>Project principles:</p> <p>Small village self-sustainability, institutional cooperation, participation, promoting and celebrating the rural villages’ cultural heritage.</p>
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Source: Authors’ elaboration

4. RESEARCH DESIGN AND METHODOLOGY

To fulfill the aim of the study, an inductive study of resource orchestration in the service ecosystem was conducted by adopting a qualitative in-depth case study approach (Stake, 2011). We explored, in a real-life scenario (Siggelkow, 2007), how resource orchestration through multi-actor collaboration for value co-creation occurs in the Italian hospitality and tourism service ecosystem. Multi-level analysis was carried out by focusing on i) how different and interdependent actors enact orchestrating activities at different levels of aggregation of the ecosystem (Vink et al., 2021) to coordinate resource integration for value co-creation (Nenonen et al., 2020), and ii) how resource orchestration shapes the recursive context of value co-creation over time.

4.2. Data collection

To explain the context as part of the descriptive research (Stake, 2011), we developed a documentary analysis that included both primary and secondary data (Table 5). Primary data were collected based on personal interviews with key actors. These interviews were open-ended and focused on describing how the initiative moved from national actors in the service ecosystem (macro) to local community actors (micro), and regional actors by reinforcing the ecosystem as a whole. The interviews provided rich data about the roles, the motivations, and the activities different actors enacted to orchestrate resources within the service ecosystem and the outcome/results emerging from these activities (i.e., economic, sustainability/environmental, cultural, and social value).

Table 5. Data Collection and Analysis

Actors/ecosystem Levels	Data source	Key information collected and coded
Macro: National Level MiBACT: Ministry of Cultural Heritage and Activities and Tourism Italian Ministry for the Environment Land and Sea Tourism operators Association	Reports, documents: <ul style="list-style-type: none"> • The Italian Strategic Plan for Development of Tourism (2017–2022). • Italy and agenda 2030 at a glance: Italy National Sustainable Development Strategy • MiBACT newsletters YouTube videos Interviews: <ul style="list-style-type: none"> • Italian Minister of Culture • Italian Tourism Operators 	Mission and aim of the plan: <ul style="list-style-type: none"> • Common goals and guiding principles that inspire collaboration and RI among different actors. • Guidelines of the plan: • Rules, norms, and working mechanisms that enable RI. • Standing committee on tourism promotion members (principal public and private sector actors): • Main actors' roles and activities Areas of intervention: <ul style="list-style-type: none"> • Strategic actions and activities. Newsletters, videos, and interviews: <ul style="list-style-type: none"> • Results and value generated.
Meso: Inter-Regional Level Airbnb National Association of Italian Municipalities (ANCI)	Reports, Documents <ul style="list-style-type: none"> • The Italian Village Airbnb Project (2017) • Sharing Rural Italy, A Community Overview (Airbnb and MiBACT, 2017) • Airbnb and ANCI newsletter The Airbnb Italian citizen blog/ Facebook page YouTube videos Interviews: <ul style="list-style-type: none"> • Francesco Rutelli, Airbnb Mayor Advisory Board • Joe Gebbia, Airbnb co-founder and chief product officer (CPO). 	Mission and aim of the project: <ul style="list-style-type: none"> • Common goals and guiding principles, that inspire collaboration and RI among different actors. Guidelines of the project: <ul style="list-style-type: none"> • Rules, norms and working mechanisms that enable RI. Project committee and Italian rural community actors (principal public and private sector actors): <ul style="list-style-type: none"> • Main actors' roles and activities Areas of intervention: <ul style="list-style-type: none"> • Strategic actions and activities. Social Network Social community post and comments: <ul style="list-style-type: none"> • Main actors' roles and activities. • Community members' roles and activities • Results and value generated. Videos interviews: <ul style="list-style-type: none"> • Results and value generated.
Micro: Municipality Level Bagnoregio's former mayor The external affairs advisor of the municipality of Bagnoregio Airbnb Citizens, tourists, tourism operators, and Airbnb hosts	Reports, documents: <ul style="list-style-type: none"> • Civita/UNESCO application project (2018)/Civita Tourism highlights (2010–2019) • The Artist's House Pilot Project • Airbnb newsletters/The Airbnb Italian citizen blog Skype interviews: <ul style="list-style-type: none"> • Bagnoregio's former mayor (30 minutes) • The external affairs advisor of the municipality of Bagnoregio (30 minutes) • Ilaria Rossidoria, Airbnb host in Bagnoregio (1 hour) YouTube video interviews: <ul style="list-style-type: none"> • Bagnoregio's former mayor • Project's Italian curator, Federica Sala • Joe Gebbia, Airbnb co-founder and CPO. Social Network <ul style="list-style-type: none"> • CB Facebook and Instagram page, citizens and tourists' posts tagging CB. 	Mission and aim of the pilot project: <ul style="list-style-type: none"> • Common goals and guiding principles that inspire collaboration and RI among different actors. Guidelines of the project: <ul style="list-style-type: none"> • Rules, norms, and working mechanisms that enable RI. • Project committee (principal public and private local actors): • Main actors' roles and activities • Areas of intervention: • Strategic actions and activities. Direct interviews: Local authorities and host's subject's experiences and opinions about the project: <ul style="list-style-type: none"> • Characteristics and features of Civita • Social context (reasons why CB was chosen by Airbnb to test its pilot project). • Key elements boosting the scalability and stability of collaboration. • Results and value generated. Video interviews Guidelines of the project: <ul style="list-style-type: none"> • Rules, norms and working mechanisms that enable RI. • Results and value generated. Social Network Social community post and comments: <ul style="list-style-type: none"> • Main actors' roles and activities • Community members' roles and activities • Results and value generated.

Source: Authors' Elaboration

The secondary data included reports, newsletters, YouTube interviews, and social network posts and comments and were used to frame the context of the analysis and to integrate investigations conducted through direct questioning (Hammersley and Atkinson, 1995). The secondary data provided extensive and complementary information on the guiding principle that inspired collaboration and resource integration, the norms and working mechanisms that enabled RI, the actions and roles that actors implemented at each level of interaction, and the results and the evolving history of the projects. Data collection was conducted from August 2018 to January 2020.

4.3. Data analysis

Data were analyzed following a dynamic inductive/deductive process and by using a two-step procedure. First, we built categories according to the theoretical background drawn below and organized data into units of knowledge. The first step involved the preliminary selection and operationalization of the information and data according to the service ecosystem levels of aggregation (macro, meso, and micro). Tables 2, 3 and 4 provide a summary of the three projects (INSPT 2017–2002, Italian Villages Project 2017–2018, and the Home of the Artist pilot project) that we framed as institutions and institutional arrangements. Accordingly, the tables present the common goals and guiding principles (i.e., project aim) that inspired and drove collaboration and resource orchestration among the different actors, the key actors at each level of interaction across the service ecosystem, and the working mechanisms of the service ecosystem.

The second step encompassed the classification, analysis and interpretation of information and data according to a coding scheme that was derived from the research questions and existing theoretical framework. Codes allowed us to identify: i) the social roles of actors (e.g. orchestrator and or connector), ii) the activities of the actors, iii) the value co-created as the emergent outcome of institutionally concerted actions and interactions of multiple actors within the service ecosystem—value-in-context (i.e., economic, sustainability/environmental, cultural, and social value), and iv) the institutionalization and the scaling up of the service ecosystem in practice.

5. CIVITA DI BAGNOREGIO: AN OVERVIEW

Civita di Bagnoregio (Picture 1), in the far north of Lazio, is known as the “dying village.” By the 1990s, the village was practically abandoned, and the social, cultural, and economic strength of the town collapsed. The “dying village” slogan/image had originally been conceived to recall the attention of the public authorities to the fragile natural ecosystem of Civita that threatened its survival since the 17th century, whereas, more recently, it has been used as a marketing strategy for promoting tourism development.

Only twelve people still live in Civita. The “dying city” is not an ordinary tourist destination. The images have played a central role in the emergence of Civita as a global tourist destination. It is known as an untouched, historical, and original medieval town and receives up to 10,000 visitors a day. In 2019 one million tourists stopped to visit the small village. Civita has been promoted globally by a variety of different visual sources, practices, languages, and technologies that emphasized the image of Civita as a place beautifully frozen in a mythical past that seems to be custom-made for Instagram.

In less than ten years, the municipality of Civita has created *overtourism* to benefit the village. In 2013, the mayor of Bagnoregio encouraged arts events and cultural festivals to attract tourists. In

the same year, to increase the influx of people and money, the mayor charged tourists 1.50 euros per person to visit the village. In 2017, the tourist fee increases further to 5 euros per person. Both in 2018 and 2019 one million crossed the bridge to visit Civita: 70% of tourists are foreign with the balance being Italians (Data from external affairs advisor—municipality of Bagnoregio, 2018).

Today, Civita is known as “the village that wants to live” instead of “the dying village.” The following lines briefly explain the reason for such radical transformation.

“In a few years, Civita become a model of territorial development based on a system of public and private actors that includes local, national and international authorities.

First, the Lazio Region was an important partner in defining the “Civita model”. In May 2015, the President called for a project manifesto to save Civita. The result was disruptive, the top-level representatives from the world of institutions, culture, science and entertainment supported the project.

In the same year, Civita has been selected to represent the beauty of Italy in the Italian Pavilion set up at the Milan International Exposition – Expo 2015. From that event, the city administrators recognized the importance to create and strengthening relationships with influencers and national and international newspapers (e.g. New York Times, El Pais, CNN, etc.), as well as, creating new collaboration with some Universities, including Rome La Sapienza and friendship agreements (e.g. twin cities, sister cities) with other cities as Assisi, Capalbio, Amelia, and Narni.

The mediatic success of Civita has initially been boosted by the traditional media (e.g. TV, radio and newspapers) telling the story, the culture and the beauty of the territory to the Italian and international broadcasts (e.g. French, German, English, and Chinese channels).

As the classic media have brought the mass attention of more and more people, the peculiarities of Civita have entered directly on social networks. Here the real strength is not so much represented by the social channels of Civita di Bagnoregio but by the social profiles of the thousands of people, from all over the world, who arrive in this area every day. Nobody leaves Civita without posting at least one click and this ignited the interest in everyone’s contacts. In essence, it is a mechanism that continuously feeds itself. Today social networks have become a tool that guarantees an impressive diffusion of Civita’s image in the world, more than through direct actions due to the many private profiles that publish their images.

In 2017, Civita was selected by Airbnb to launch the Home of Artist pilot project as part of the broad Airbnb Italian Village project, which aims to promote small Italian villages around the world (Table 4).

The Municipality of Bagnoregio received the restoration of the historic building “Casa Greco” which is now mainly used by the municipality to host artists, actors and important personalities who come to Bagnoregio for initiatives, festivals and conferences. It is essentially used as a representative place, instead of a B&B for tourists.

The cost per night is very high – around 300 euros – therefore the project “Home of Artist” did not produce economic value in terms of revenues but was very relevant in terms of communication and promotion all over the world. Many national and international newspapers have dealt with the news, producing a positive effect on Civita’s image” (Cit. Roberto Pomi, external affairs advisor—municipality of Bagnoregio).



Picture 1. Civita di Bagnoregio Village- Italy

Source: Image by Michele Palmieri from Pixabay

In October 2017, the municipality proposed Civita as a UNESCO World Heritage site to prompt “the Civita effect” as a model for tourism in the surrounding area of Tuscia. The purpose was to create value by promoting a sustainable approach to tourism including activities to select tourists and plans to filter mass tourism through the surrounding region.

The entrance fee was addressed both to i) abolish local taxes for residents living in Civita and in Bagnoregio which has a population of 3,650 (they still must pay national taxes), and ii) to improve local infrastructure and services, including the health service, transport for disabled people, and a full-electric transport service using small buses to reduce the impact on the main street of Bagnoregio.

Tourism has improved life for local people by fostering the development of multiple businesses in Bagnoregio. Indeed, in recent years, the burgeoning tourist industry has seen more than two hundred new business activities, from B&Bs, self-catering accommodation, and restaurants opened in the Bagnoregio area. Civita alone includes 11 restaurants and 5 shops, and twelve commercial and artisan activities. The accommodation capacity of the wider area has increased to 23 B&B, 26-holiday farms and 38 vacation homes. Unemployment has dropped from 10% a decade ago to below 1%.

To preserve the fragile ecosystem of Civita and to expand the Civita effect to the surrounding area, the former mayor Francesco Bigiotti and the municipality announced that “whoever wants to invest now can do so in Bagnoregio, not Civita” (Cit. Francesco Bigiotti, Civita former mayor).

“In a few years, Bagnoregio has become the driving force of the economy of the entire Teverina, with many people moving from other municipalities to work in restaurants and tourism activities” (Cit. Roberto Pomi, external affairs advisor—municipality of Bagnoregio).

6. CONTEXTUALIZING THE SERVICE ECOSYSTEM IN PRACTICE: THE ROLES, ACTIVITIES, AND VALUES OF ACTORS

Our analysis provides insight into the nature of the service ecosystem from a multilevel perspective (macro, meso and micro). It briefly describes the actors (e.g., municipality, mayor, national authorities, citizens, Airbnb, hosts, and tourists), the prevailing roles they enact within the ecosystem, their relationships, and the value co-created. All actors within the service ecosystem are both resource integrators and value beneficiaries, however, they can perform other social roles (Akaka and Chandler, 2011), both intentionally and unintentionally, that affect the emergence and evolving path of novel multidimensional value co-creation structures (including the economic, environmental, social, and cultural value context). Intentionality refers to the commitment of individuals to take action to reach their goals (Taillard et al., 2016; Bratman, 1987). By referring to the degree of intentionality (Bratman, 1987) to perform activities for specific purposes (such as intended activities; Löbler, 2013), we defined the resource orchestrating and connecting roles of actors within the macro social role category as “resource integrators.”

The following tables (Tables 6, 7, 8) explain this concept by detailing: i) the social roles of actors, including those of resource orchestrators, featuring those who intentionally plan and enact specific activities to reach a well-defined purpose, and of resource connectors who enact specific activities unintentionally or without a well-defined purpose; ii) the intended or unintended actions and activities actors perform that fuel the development of a new and sustainable service ecosystem; and finally, iii) the value co-created within the service ecosystem. The tables present the analysis of the framework (institutions and institutional arrangements) that drive the emergence and evolution of the different levels of aggregation. Within this complex and extensive service ecosystem, we can identify multiple institutionally guided actors carrying out resource orchestration and connection activities at all levels.

Such activities (managing interaction, setting the agenda, sharing knowledge and leveraging personal networks to strengthen the new ecosystem) balance multi-level interdependencies and contribute to the transformative process of the emergence as well as stability and self-sustainability of the service ecosystem.

Resource orchestrators refer to the initiators: actors who are cognizant of their own social role (coordinator, auctioneer, developer, architect, gatekeeper, promoter, leader) and intentionally take deliberate and concerted actions to achieve a well-defined purpose. Resource orchestration requires shared intentional activities resulting from the matching between individual intention and institutional arrangements. They shape the shared intentions of orchestrators (Taillard et al., 2016) by fostering interdependence among actors at different levels of aggregation and enabling the emergence of a service ecosystem. Resource orchestrators act to create and extract different kinds of value reflecting their relational position in the network, personal interests, and the collective interests of the whole service ecosystem.

Resource connectors can be defined as boosters: actors who often are unaware of their own social role (as local champion or viral ambassador) and intentionally take actions without a well-defined purpose. They act informally to create value (economic, environmental, cultural, and social value) that reflects their relational position in the network and personal interests. Due to the informal nature of their engagement, connectors provide a valuable and indirect contribution to the stability and up-scaling of the service ecosystem. Indeed, they create strong interdependencies and connections

both at the micro and meso levels. For example, hosts connect tourists from all over the world with locals, creating the conditions allowing tourists and visitors to live an immersive and unique experience; this fundamentally boosts the role tourists play as viral ambassadors who increase the positive word of mouth of the small village globally.

Therefore, connectors act at an operational, rather than strategic, level. They contribute, once the novel value co-creation structure emerges, to micro- and meso-level changes that affect value co-creation structures. However, connectors do not act according to institutionally concerted actions and interactions as orchestrators do. Instead, they actively contribute to the institutionalization process and to the legitimation of the micro and meso context for broader and longer-term macro-level transformations.

7. DISCUSSION

In this study, we synthesize the shift away from understanding resource orchestration as a firm-level activity for initiating and managing innovation processes, to that of a key process for driving and managing the emergence of multidimensional and multilevel value co-creation structures (service ecosystems). The resource orchestration process contributes to balancing multi-level interdependencies within a service ecosystem, guided by institutional arrangements. In this study, the plans and related institutionalized norms, rules, regulations, and practices (institutional arrangements) define the normative and social framework enabling and constraining the micro, meso, and macro level roles and activities that orchestrators perform to drive the development of the novel service ecosystem and resulting value-in-context (economic, environmental, cultural, and relational; see Tables 6, 7, 8).

Our analyses identified the key roles of resource connectors in creating interdependence among different actors at the micro and meso levels of interaction. Resource integrators were specifically defined as boosters, as they change the internal structure and function of the whole service ecosystem in response to external circumstances and demands. Alternatively, resource connectors contribute, often unintentionally and indirectly, by augmenting the service ecosystem (through stability and adaptiveness) by creating local interactions among multiple actors without any external instruction, through a mechanism of self-organization (Erdi, 2008).

The service ecosystem perspective reveals the interdependence and circular causality among the different system levels. It underlines a sequential order that includes both a downward (macro-meso-micro) and an upward (micro-meso-macro) movement leading to the emergence of novel value co-creation structures (Koskela-Huotari, 2018) of new service ecosystems. Our examples, however, display a nonlinear interactive process among the different system levels. Indeed, the institutions and institutional arrangements at the macro level (The Italian National Strategic Plan for Tourism 2017-2022) inspire changes by creating a national framework to establish, upgrade, and govern new public and private partnerships at the micro level (e.g., The Civita di Bagnoregio pilot project, Home of the Artist, 2017).

The transition from the micro to the meso level requires more formalization and institutionalization of the collaborative practice set up at the micro level, to adapt and scale it up at the meso level (e.g., The Italian Villages Project 2017-2018 exports The Civita di Bagnoregio pilot project to other Italian regions, up to the meso level). This non-linear and iterative process (macro-micro-meso-macro) reinforces the structure of the whole service ecosystem and supports its stability as well as its upscaling.

Table 6. Resource Orchestration at Macro Level
 – Italian National Strategic Plan of Tourism - Italian travel itinerary 2017–2022

Actors' social roles	RO activities	Outcomes/value-in-context*	
MIBACT-Non-Players-Facilitator-orchestrators: ▪ Coordinator, ▪ Auctioneer ▪ Developer Sponsor-orchestrators: ▪ Promoter	<ul style="list-style-type: none"> ▪ Managing interactions between network members to ensure the stability and the coordination of the new network ▪ Setting the agenda relating to an open and participatory national debate on tourism in Italy ▪ Developing a framework to improve the knowledge mobility, innovation, skill building, and quality of the tourism services ▪ Boosting the responsible enhancement of the territorial, environmental, and cultural heritage in tourism policies ▪ Boosting the tourist market's contribution to the development of its local areas (sustainability) 	E	<ul style="list-style-type: none"> • New investment in the hospitality sector • Expanding offerings by promoting the emerging tourist destinations to innovate the service supply chain • Creating new jobs by increasing the quantity and quality of employees in tourism for new destinations • Increasing system competitiveness through full integration and interoperability between tourism actors
		SE	<ul style="list-style-type: none"> • Defining new institutional arrangements to boost the emergence of new models for sustainable tourism, digital innovation, quality accommodation/services, and adaptation to new trends in demand • Creating a new sustainable mobility system to reach marginalized or under-served areas
		C	<ul style="list-style-type: none"> • Ensuring full access to areas that are rich in culture, natural beauty, art, and traditions • Boosting the attractiveness of UNESCO sites and cities of culture, to place Italy among the European leaders in terms of attractive cities
		S	<ul style="list-style-type: none"> • Increasing multi-actor collaborative relationships and a sense of belonging to a wider community • Putting the tourist and the local community at the center by ensuring accessibility and cultural permeability
Local authorities: Regional non-players, facilitators, orchestrators: ▪ Representative ▪ Auctioneer Sponsor-orchestrators: ▪ Promoter	<ul style="list-style-type: none"> ▪ Sharing knowledge about the network and the plan with outsiders (municipalities, other local authorities, and relevant stakeholders) and evaluating the contributions of other actors ▪ Set out guidelines for national policies on destinations and products to develop targeted promotional activities based on regional demand ▪ Encouraging network members to promote a targeted approach to identify emerging destinations based on regional resources 	E	<ul style="list-style-type: none"> • Increasing the competitiveness of regional systems through full integration between national and inter-regional level • Developing new professional skills in tourism to boost employability and qualitative service standards
		SE	<ul style="list-style-type: none"> • Ensuring the self-sustainability of regions by integrating tourism offerings with local products and services • Promoting strategic pilot-projects to develop a network of soft mobility (cycle, rail, and paths etc.)
		C	<ul style="list-style-type: none"> • Creating inter-regional tourism itineraries to form closer ties between tourism and other activities • Harmonization of regional promotional plans in line with inter-regional projects • Framing museums as a connector between surrounding areas to foster cultural permeability • Broadening territorial heritage by integrating tourism supply with products and services from local industries
		S	<ul style="list-style-type: none"> • Providing regional training courses to improve the skills and abilities of hospitality operators • Revival and reuse of government properties for tourism
Italian Association of Tourism Operators (public and private economic actors) Player-orchestrators: ▪ Gatekeeper ▪ Conductor Sponsor-orchestrators: ▪ Promoter	<ul style="list-style-type: none"> ▪ Extracting and integrating specific knowledge about the needs and the main peculiarities of the Italian tourism system within the new network ▪ Improving the core competencies of focal actors ▪ Getting network members to work toward the same goal by sharing responsibility and a collective interest in tourism policies 	E	<ul style="list-style-type: none"> • Financial/fiscal incentives grouped by tourism operators and integrated services to develop business networks • Developing new professional skills in tourism to boost employment • Full adherence by tourist operators to their offers to tourists demands and expectations
		SE	<ul style="list-style-type: none"> • Setting common goals with sector operators • Establishing unique national regulations on “sharing” activities, jobs in tourism, brokerage, government property, and tourist tax to tackle improper activities and unfair competition
		C	<ul style="list-style-type: none"> • Enhancing the hospitality skills of operators and developing their know-how in line with market developments • Providing organizational and cultural support for tourism enterprises
		S	<ul style="list-style-type: none"> • Promoting tourist operator interoperability, joint decision-making, and responsibilities • Encouraging integration between business and public operators to develop a local systemic supply

* E=Economic value; SE=Sustainable/environmental value; C=Cultural value; S=Social value

Source: Authors' elaboration

Table 7. Resource Orchestration at Micro Level: The Home of the Artist Pilot Project

Actors' social roles	RO activities	Outcomes/value-in-context*	
Municipalities/ mayors Non-players, facilitator-orchestrators: ▪ Representative ▪ Auctioneer and developer	<ul style="list-style-type: none"> • Sharing knowledge about the CB sustainable development model to outsiders (municipalities, other local authorities, and relevant stakeholders) • Setting the agenda to manage tourism practices for the development of local social policies (abolition of local taxes) and the promotion of a joint vision of CB as the driving force of the economy of the area • Boosting the responsible enhancement of the territorial, environmental, and cultural heritage in tourism policies • Boosting the tourist market's contribution to the economic, social, and sustainable development of its local areas 	E	<ul style="list-style-type: none"> • Increasing the influx of tourists from 40,000 (2010) to one million (2019) • Developing local economies and the tourism industry by opening more than 200 new businesses (including B&Bs, self-catering accommodation, and restaurants). CB alone has 11 restaurants, 5 shops, and 12 commercial and artisanal activities • Reducing unemployment from 10% to under 1%
		SE	<ul style="list-style-type: none"> • Improving fully electric transport services and green practices (CB is Italy's first plastic-free small village) • Managing other tourism practices
		C	<ul style="list-style-type: none"> • Promoting responsible home-sharing to improve the accommodation capacity of the wider area • Addressing tourist entrance fees to abolish local taxes for residents living in CB • Improving health services and transport for disabled people
		S	<ul style="list-style-type: none"> • Addressing new economic resources (tourist fees) to long-term investment in festivals, cultural and social events (Civit'Arte, Civita cinema, etc.), as well as urban restoration (Palazzo Petrangeli) • Promoting the cultural permeability of the entire Teverina area (festivals, cultural, social events as connectors between the surrounding areas)
Airbnb via its Partners: designers, architects, Italian and international artists, etc. Player-orchestrators ▪ Architect ▪ Gatekeeper ▪ Judges	<ul style="list-style-type: none"> • Mobilization network, setting and coordinating new collaborative practice (restoring historical building in town) • Extracting knowledge/ ideas from professionals outside the network and disseminating it among the Airbnb team group to take action • Taking control over the pilot project; testing and promoting it in other regions to boost its stability, scalability, and recursiveness 	E	<ul style="list-style-type: none"> • Promoting and increasing the influx of artists and designer tourists • Monetizing unused public spaces
		SE	<ul style="list-style-type: none"> • Adopting eco-friendly working methods to restore/maintain/fund historical properties
		C	<ul style="list-style-type: none"> • Institutionalizing new collaborative practices and relationships to fund historical properties' restoration/maintenance and other cultural and social projects • Promoting design and architecture
		S	<ul style="list-style-type: none"> • Reinforcing the image of CB as a creative and green pilot project for successful collaborative practice • Driving new modes of creating and capturing value for the whole territory by making the collaborative practices stable and scalable
Guests (Italian and foreign travelers/ tourists) Viral Ambassador Connectors	<ul style="list-style-type: none"> ▪ Promoting CB globally as a competitive tourist destination • Sharing a dynamic image of CB through social media that evokes many meanings and interpretations 	E	<ul style="list-style-type: none"> • The sharing of the #civita dibagnoregio hashtag and promoting the city's branding/marketing policy. The hashtag has more than 118,000 posts on Instagram with more than 300 likes • The combined use of the #civita dibagnoregio together with the hashtags of local cafés, restaurants, etc. positively affects local businesses
		SE	<ul style="list-style-type: none"> • Creating a dialogue globally about the natural environment of CB and the need to preserve it
		C	<ul style="list-style-type: none"> • Sharing the image of a beautiful, clean and orderly medieval town "frozen in time" • Looking for an empathetic relationship with the culture and traditions of the local community
		S	<ul style="list-style-type: none"> • Enabling the communication from rhetoric (the dying city) to an iconic and poetic image through word-of-mouth • Moving from a referential and argumentative image of CB to a social construction based on tourists' narratives, involvement, and social interactions with the local community

* E=Economic value; SE=Sustainable/environmental value; C=Cultural value; S=Social value

Source: Authors' elaboration

Table 8. Resource Orchestration at Meso Level: The Airbnb Italian Village Project

Actors' social roles	RO activities	Outcomes/value-in-context*	
Airbnb Player-orchestrators ▪ Architect: ▪ Gatekeeper: Player-orchestrators ▪ Promoter: ▪ Leader:	<ul style="list-style-type: none"> • Mobilizing networks, setting and coordinating collaborative practices (restoring historical buildings) involve multiple actors (municipalities, designers, architects, Italian and international artists, and private companies) • Extracting knowledge from the stories of hosts and leading thinkers outside the network and disseminating it among network members • Leveraging the ecosystem (community of millions of people/digital platforms) to promote small Italian villages globally • Showing results of partnership to motivate and foster voluntary collaboration • Promoting new collaborative practices in other regions 	E	<ul style="list-style-type: none"> • Increasing revenue growth and profitability by creating a leadership niche in the Italian rural tourism market • Expanding the host and guest community by increasing both the value of the network and the attractiveness of the small villages • Driving micro-entrepreneurship
		SE	<ul style="list-style-type: none"> • Leveraging resources (technology and expertise, etc.) and strong relational positions in the network to strengthen public-private business relationships, and ensure service ecosystem stability and self-sustainability • Spreading qualitative standards of new services to increase the influx of frequent travelers to small villages • Promoting responsible home-sharing to improve community well-being • Institutionalizing new collaborative practices and relationships to fund historical property restoration
		C	<ul style="list-style-type: none"> • Driving the development of new tourism models (rural tourism) of an immersive local community experience • Reconceptualizing the idea of hospitality by creating new wants and consumption practices • Improving/reshaping brand image and social impact by supporting local communities
		S	<ul style="list-style-type: none"> • Shaping the new service context (home-sharing in small villages) and reinforcing loyalty to the brand and the wider Airbnb ecosystem
Hosts (e.g. locals) Local champion connectors	<ul style="list-style-type: none"> • Leveraging local communities to create connections between tourist and local businesses (e.g. traditional cafés and restaurants) • Promoting the immersive experience of tourists and visitors in the local community 	E	<ul style="list-style-type: none"> • Earning supplemental income of 1,600 euros a year (Airbnb Data, 2019) • Promoting micro-entrepreneurialism by creating local connections between tourist and local businesses that typically do not benefit from tourist spending • Extending the average length of stay per guest
		SE	<ul style="list-style-type: none"> • Incorporating eco-friendly practices in their hosting activities according to the Airbnb policies
		C	<ul style="list-style-type: none"> • Practicing new tourism models that encourage tourists and visitors to enjoy the local community • Spreading the territorial heritage by connecting tourists with cultural local industries (product and services)
		SE	<ul style="list-style-type: none"> • Shaping new relationships by connecting tourists from all over the world and locals
Regional Administrations ANCI Non-players and facilitator-orchestrators: ▪ Representative ▪ Auctioneer Sponsor-orchestrators: ▪ Promoter	<ul style="list-style-type: none"> • Sharing knowledge with outsiders (municipalities, other local authorities, and relevant stakeholders) • Setting the guidelines for national policies on destinations and products and developing targeted promotional activities; Getting network members to promote a targeted approach to identifying emerging destinations according to the individual resources of regions 	E	<ul style="list-style-type: none"> ▪ Connecting tourists from all over the world and shaping new relationships ▪ New economic investment in the hospitality sector ▪ Supporting local economies and creating new jobs: increasing quantity/quality of tourism employees (hosts based in rural areas earned almost €80 million in 2018; hosts typically earn an extra income of €1,600 a year)
		SE	<ul style="list-style-type: none"> ▪ Improving the distribution of visitors by broadening supply and providing “new” tourism experiences ▪ Improving soft mobility (e.g., cycle tracks, tourist rail services, and paths) and other green practices
		C	<ul style="list-style-type: none"> ▪ Promoting cultural permeability by linking itineraries in small villages to specific types of tourist experiences (wine, Italian craftsmanship, and culture, etc.) Promoting the role of museums as connectors between the surrounding areas
		S	<ul style="list-style-type: none"> Promoting destinations with high potential, that is not fully recognized as “tourist spots.” Over 540,000 guest arrivals choose to stay in rural Italy rather than in typical tourist hot spots

*E=Economic value; SE=Sustainable/environmental value; C=Cultural value; S=Social value

Source: Authors' elaboration

The insights from extant research and our analysis revealed that the emergence, stability, and upscaling of novel service ecosystems require both the deliberate efforts of resource orchestrators and the unintentional efforts of resource connectors. That is, novel and sustainable service ecosystems are always co-created throughout a nonlinear and iterative process that requires both institutionally concerted actions and interactions (Koskela-Huotari, 2018) of multiple resource orchestrators, together with the individual and self-organized actions creating actor interdependencies at the micro and meso level of aggregation.

8. CONCLUSION

This study highlights the roles of multiple collaborating actors in orchestrating resource integration in Italian Tourism ecosystems. It also responds to an understanding of service ecosystems in action, and the need for empirical studies on value co-creation in practice. The study contributes to explaining how resource connectors and orchestrators, as actors who intentionally orchestrate the exchange of complementary resources and enabled by digital service platforms, drive the emergence and the evolution of service ecosystems. It explains how within the Italian Village project actors often unintentionally connect resources without the specific purpose to create or maintain the ecosystem, but nonetheless contribute to its stability through continuity and repetitiveness. It further refines and contextualizes the orchestrating roles enacted by collaborating actors (Hurmelinna-Laukkanen and Nätti, 2018; Pikkarainen et al., 2017).

It explains how a key actor leveraging digital platforms (such as Airbnb) enables connections between multiple collaborating actors to orchestrate resources, thereby accomplishing, coordinating, and facilitating the realization of value co-creation in service ecosystems.

To conclude, this study contributes to debates on theory and practice, with implications for scholars, managers, and policymakers.

The results suggest that the existence of multiple collaborating actors in tourism ecosystems requires management in a wide range of activities within a changing context. This can be successfully achieved by digital platforms, resulting in the upscaling of various services, from local to national and global markets. Successfully managing the selection of, and connections between actors can serve as an inspiration for managers. However, how this is done in practice depends on several factors including the intention of actors and the institutional arrangements shaping the focal service ecosystem. More specific managerial implications require further research.

9. FURTHER RESEARCH

Future research should look at investigating other service ecosystems (health, transport, and education) using the same approach as in this study; comparing the results and interpreting them could enable the building of a stronger and more valid theoretical framework for sustainable development.

We propose to spend time defining resource orchestration challenges and analyzing the interdependence between different levels in the service ecosystems to understand and conceptualize RI and orchestration between multiple collaborating actors, especially for service industries where the influence and role of policy and public administrators are relevant.

REFERENCES

- Akaka, M.A. & Chandler, J.D. (2011). Roles as resources: A social roles perspective of change in value networks. *Marketing Theory* 11(3), 243-260.
- Bratman, M. (1987). *Intention, plans, and practical reason* (Vol. 10). Cambridge, MA: Harvard University Press.
- Caridà, A. Edvardsson, B. & Colurcio, M. (2019). Conceptualizing resource integration as an embedded process: Matching, resourcing and valuing. *Marketing Theory*, 19(1), 65-84.
- Chandler, J.D. & Vargo, S.L. (2011). Contextualization and value-in-context: How context frames exchange. *Marketing Theory*, 11(1), 35-49.
- Dhanaraj, C. & Parkhe, A. (2006). Orchestrating innovation networks. *Academy of Management Review*, 31, 659-669.
- Edvardsson, B. & Tronvoll, B. (2013). A new conceptualization of service innovation grounded in S-D logic and service systems. *International Journal of Quality and Service Sciences*, 5(1), 19-31.
- Edvardsson, B. & Trovoll, B. (2019). How platforms foster service innovations. *Organizational Dynamics*, 49, 1-8.
- Edvardsson, B., Tronvoll, B. & Gruber, T. (2011). Expanding understanding of service exchange and value co-creation: a social construction approach. *Journal of the academy of marketing science*, 39(2), 327-339.
- Erdi, P. (2008). *Complexity Explained*. Berlin: Springer Science & Business Media.
- Eriksson, E. & Hellström, A. (2021). Multi-actor Resource Integration: A Service Approach in Public Management. *British Journal of Management*, 32(2), 456-472.
- Findsrud, R. & Dehling, S. (2019). Resource Integration Processes as a Microfoundation for Service Innovation, World Scientific Book Chapters, in: Per Kristensson & Peter Magnusson & Lars Witell (ed.), *Service Innovation for Sustainable Business Stimulating, Realizing and Capturing the Value from Service Innovation*, chapter 6: 95-116, World Scientific Publishing Co. Pte. Ltd.
- Gidhagen, M., Ridell, O.P. & Sörhammar, D. (2011). The orchestrating firm: value creation in the video game industry. *Managing Service Quality*, 21(4), 392-409.
- Hammersley, M. & Atkinson, P. (1995). *Ethnography: Practices and principles*. Routledge, New York.
- Hurmelinna-Laukkanen, P. & Nätti, S. (2018). Orchestrator types, roles and capabilities—A framework for innovation networks. *Industrial Marketing Management*, 74: 65-78.
- Koskela-Huotari, K. & Vargo, S.L. (2016). Institutions as resource context. *Journal of Service Theory and Practice*, 26(2), 163-178.
- Koskela-Huotari, K. (2018). *The evolution of markets-A service ecosystems perspective*. Doctoral dissertation, Karlstad University Press.
- Koskela-Huotari, K., Edvardsson, B., Jonas, J.M., Sörhammar, D. & Witell, L. (2016). Innovation in service ecosystems—Breaking, making, and maintaining institutionalized rules of resource integration. *Journal of Business Research*, 69(8), 2964-2971.
- Löbler, H. (2013). Service-dominant networks: An evolution from the service-dominant logic perspective. *Journal of Service Management*, 24 (4), 420-434.
- Lusch, R.F., Vargo, S.L. & O'brien, M. (2007). Competing through service: Insights from service-dominant logic. *Journal of retailing*, 83(1), 5-18.
- Nenonen, S., Storbacka, K., Sklyar, A., Frow, P., & Payne, A. (2020). Value propositions as market-shaping devices: A qualitative comparative analysis. *Industrial Marketing Management*, 87, 276-290.

- Paquin, R.L. and Howard-Grenville, J. (2013). Blind dates and arranged marriages: Longitudinal processes of network orchestration. *Organization Studies*, 34, 1623-1653.
- Pikkarainen, M., Ervasti, M., Hurmelinna-Laukkanen, P. & Nätti, S. (2017). Orchestration roles to facilitate networked innovation in a healthcare ecosystem. *Technology Innovation Management Review*, 7(9), 30-43.
- Plé, L. & Chumpitaz Cáceres, R. (2010). Not always co-creation: introducing interactional co-destruction of value in service-dominant logic. *Journal of Services Marketing*, 24(6), 430-437.
- Scott, W.R. (2014) Institutions and Organizations. *Ideas, Interests and Identities*. SAGE Publications Inc.
- Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal*, 50(1), 20-24.
- Sklyar, A., Kowalkowski, C., Tronvoll, B. & Sörhammar, D. (2019). Organizing for digital servitization: A service ecosystem perspective. *Journal of Business Research*, 104, 450-460.
- Stake, R.E. (2011). Qualitative research and case study. *Silpakorn Educational Research Journal*. 3(1-2), 7-13.
- Taillard, M., Peters, L.D., Pels, J. & Mele, C. (2016). The role of shared intentions in the emergence of service ecosystems. *Journal of Business Research*, 69(8), 2972-2980.
- Valkokari, K., Seppänen, M., Mäntylä, M. & Jylhä-Ollila, S. (2017). Orchestrating innovation ecosystems: a qualitative analysis of ecosystem positioning strategies. *Technology Innovation Management Review*, 7(3), 12-24.
- Vargo, S.L. & Akaka, M.A. (2012). Value cocreation and service systems (re)formation: A service ecosystems view. *Service Science*, 4(3), 207-217.
- Vargo, S.L. & Lusch, R.F. (2016). Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1), 5-23.
- Vargo, S.L., Wieland, H. & Akaka, M.A. (2015). Innovation through institutionalization: A service ecosystems perspective. *Industrial Marketing Management*, 44, 63-72.
- Vink, J., Koskela-Huotari, K., Tronvoll, B., Edvardsson, B., & Wetter-Edman, K. (2021). Service ecosystem design: Propositions, process model, and future research agenda. *Journal of Service Research*, 24(2), 168-186

ADDITIONAL READING

- Airbnb – ANCI (2017) From village to village. <https://italianvillages.byairbnb.com/>
- Airbnb newsroom (2017) Airbnb Promotes Small-Town Italy with “Italian Villages” Project. <https://news.airbnb.com/airbnb-joins-ministry-of-tourism-and-anci-to-promote-small-town-italy-with-italian-villages-project/>
- Airbnb newsroom (2017) From Crumbling Hamlet to Artist House: Airbnb Helps to Revitalize Ancient Village of Civita, Italy. <https://news.airbnb.com/it/civita/>
- Airbnb newsroom (2017) Italy Rural Report: Sharing Rural Italy. A Community Overview. https://s3.amazonaws.com/airbnb-citizenmedia/2017/10/Sharing_Rural_Italy_2017.pdf
- Ministero dei beni delle attività culturali e del turismo-MiBACT (2017) Italian National Strategic Plan for Tourism (2017-2022). Agenzia Nazionale per l’attrazione degli Investimenti e lo Sviluppo d’Impresa S.p.A. https://www.beniculturali.it/mibac/multimedia/MiBAC/documents/1482320029441_PST_2017_ENG.pdf



Short-Term and Long-Term Effects of International Tourism Development on the Economic Growth of Mediterranean Countries

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Abstract: *The research presented in this paper aims to examine the short-term and long-term effects of international tourism on the economic growth of 17 Mediterranean countries in the period 2000 to 2019. The impact of tourism is not analysed separately. Actually, the indicators of the countries' labour potential, annual investments, openness to total foreign trade and inflation are also included in the analysis. A panel autoregressive distributed lag (ARDL) evaluation model along with pooled mean group (PMG) estimator was used which proved to be appropriate, based on the characteristics of the panel data series. Our research has shown that the share of international tourism receipts in total exports of a country does not have a statistically significant positive short-term effect on GDP per capita growth, but that it has a statistically significant positive effect in the first lag and a positive long-term effect. Therefore, the hypothesis stating that international tourism receipts have statistically significant short-term and long-term effects on economic growth can be rejected. Our research has shown that economic growth, as a dependent variable, returns to a long-term equilibrium after changing a selected set of independent variables in just over a year. It is vital to note that the size of long-term coefficients obtained by applying the selected model indicates that economic growth is more sensitive to the changes in the share of international tourism in total exports compared to other selected independent variables.*

1. INTRODUCTION

Tourism is one of the fastest-growing industries in the 21st century (Dwyer et al., 2009, pp. 63-74). Accelerated growth and tourism development play an increasingly important role in the global market. Moreover, tourism has a major direct and indirect impact on other related activities (Pjanić, 2019, pp. 291-305). As one of the global leading industries, tourism enables so-called “invisible export” and “invisible import”, i.e. both international tourism receipts and the international tourism expenditures in a country, meaning that tourism has a profound impact on foreign trade between all countries (Unković & Zečević, 2011, pp. 48-53). One of the key positive effects of a country's tourism is reflected in the increase in the number of employees in that industry (Pjanić & Mitrašević, 2020, pp.53-66). By generating the revenue for the public and private sectors through tax income, tourism has a major impact on employment growth, simultaneously encouraging public consumption and private investments accompanied by production growth in the entire national economy (Šimundić & Kuliš, 2016, pp. 178-196).

Regardless of the fact that the tourism industry proved to be relatively well resistant to the effects of the 2008 crisis, the 2020 crises caused by the COVID-19 pandemic has adversely affected the

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entire tourism industry worldwide. The restrictions on international, regional, and local travel have greatly affected all national economies (Gössling & Scott & Hall, 2020, pp. 1-20).

Bringing the normal functioning of all countries to a standstill, COVID-19 has drastically affected the tourism sector, leading to a fall in GDP by 4.5 trillion US dollars and 62 million jobs in 2020. Capital investment also declined from \$986 billion in 2019, amounting to 4.4% of the global investment, to \$693 billion in 2020, which accounts for 3.2% of the global investment, meaning that the decline was 29.7% (World Travel & Tourism Council, 2021). In 2021, in the period from January to May, international tourist arrivals fell by 85% compared to the same period in 2019, or 65% compared to 2020, due to the travel restrictions caused by the coronavirus pandemic. This represents a decrease of as much as 147 million international arrivals compared to the period January-March 2020 or as much as 460 million compared to the entire 2019. Looking at the regions separately, the largest decline in international arrivals is recorded in Asia and the Pacific region with as much as 95% in the period January-March 2021. compared to the same period in 2019. The second-largest decline is in Europe with 85%, followed by the Middle East with 83%, Africa with 81%, and America with 72%. After a total revenue decline of as much as 64% from international tourism in 2020, many world destinations continued to generate low revenues in the period January-May 2021, in the range of 50% to 90% compared to 2019 (World Tourism Organization, 2021).

Due to globalization, the tourism industry has been facing various crises, with the tourism industry undergoing continuous expansion and showing considerable resistance to various crises. These crises are forcing national governments worldwide to respond quickly and efficiently to reduce the negative impact of the crises on the entire tourism industry. The current COVID-19 crisis has greatly slowed down the growth of tourism and resulted in the decline of the tourism industry globally (Marinković & Stevanović, 2020, pp. 425-439).

One of the most important tourist destinations is the Mediterranean region since this region generates one third of the total international tourism receipts (Aslan, 2014, pp. 363-372). In 2019 the Mediterranean region recorded more than 400 million international tourist arrivals, which makes it one of the most popular tourist destinations in the world, with the tourism sector accounting for about 15% of the regional GDP (Fosse, 2021).

The primary purpose of the paper is to examine the short-term and long-term effects of international tourism on economic growth. The research covers 17 Mediterranean countries (Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Malta, Morocco, Slovenia, Spain, Tunisia and Turkey) from the period 2000 to 2019. The literature includes the scientific papers that contain empirical evidence that the effects of international tourism have a positive impact on economic growth, as well as the papers indicating that certain variables through which the impact is observed, do not have a positive impact on economic growth or it is a negative one.

2. LITERATURE REVIEW

A large number of scientific literature includes a comprehensive list of certain tools used to analyse the impact of tourism on economic growth. While contributing to the increase in income and employment, the tourism industry is also expanding and searching for new directions for long-term economic growth (Parrilla, Font and Nadal, 2007, pp. 709–726).

Tourism is one of the most important economic activities that has influenced the economic growth of many countries, especially the Mediterranean countries. The research conducted by Belke et al. (2021) indicates that tourism can significantly help the Mediterranean countries to establish sustainable tourism management over a longer period, as well as the stability of the national economies of these countries. Similarly, the empirical research conducted by using the hidden panel cointegration test proves the existence of a long-term significant relationship between the development of economic activity and economic growth in terms of positive and negative components. However, economic growth is significantly more sensitive to an increase in tourism receipts than to a decrease in tourism receipts. The causality test confirms the hypothesis of tourism-led growth, meaning that all activities that have an impact on tourism development, such as subsidies, tax relief and other measures, contribute to economic growth.

By applying panel unit root tests and error-correction-based panel cointegration techniques to 18 Mediterranean countries (Albania, Algeria, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Slovenia, Spain, Syria, Tunisia and Turkey) in the period 1995-2009, Eryiğit & Eryiğit (2011) outline the existence of a long-term relationship between tourism receipts and economic growth.

The research conducted by Šimundić & Kuliš (2016) used a dynamic panel analysis in the period 2004-2014 based on 24 Mediterranean countries (Albania, Libya, Algeria, Macedonia, Bosnia & Herzegovina, Malta, Croatia, Montenegro, Cyprus, Morocco, Egypt, Portugal, France, Serbia, Greece, Slovenia, Israel, Spain, Italy, Syria, Jordan, Tunisia, Lebanon and Turkey) indicates that tourist demand has a positive and statistically significant impact on the economic growth of Mediterranean countries. Moreover, the research shows that certain factors of economic growth, such as investments, trade openness and human capital, have a positive and significant impact on economic growth, and government consumption has a negative impact on economic growth. Moreover, by applying a panel analysis (random effects model) in the period 1987-2002, the empirical research of Gökovali & Bahar (2006) indicates that tourism development significantly affects the economic growth of Mediterranean countries. Aslan's study (2014) was conducted on a sample of 12 Mediterranean countries (Spain, Italy, Portugal, Malta, Tunisia, Cyprus, Turkey, Croatia, Egypt, Israel, Bulgaria and Greece) in the period 1995-2010 using the panel Granger causality tests proves that tourism growth stimulates the economic growth of these countries. Tugcu (2014) analyses the relationship between tourism and economic growth in the period 1998-2011 in European, Asian and African countries (European countries: Albania, Bosnia and Herzegovina, Croatia, France, Greece, Italy, Malta, Monaco, Montenegro, Slovenia, Spain and Turkey. Asian countries: Cyprus, Israel, Lebanon and Syria. African countries: Algeria, Egypt, Libya, Morocco and Tunisia) bordering the Mediterranean Sea by using a panel Granger causality analysis. Its results show that the causality of tourism and economic growth depends on the selected indicators in tourism and a group of countries and outlines a significant impact of tourism on economic growth in European countries. A similar analysis conducted by Manera & Taberner (2006) taking into account Mediterranean countries with a focus on the western islands (Corsica, Sardinia, Sicily, Malta, and the Balearic Islands) also confirms that tourism growth has a positive impact on economic growth.

In the period 1995-2014, based on a sample of eight Mediterranean countries (Egypt, France, Greece, Italy, Morocco, Spain, Tunisia and Turkey), Ren et. al. (2019) indicate that the level of income from tourist arrivals in these countries in all quantiles, significantly affects economic growth. Additionally, the research indicates that the impact of tourism receipts on environmental

pollution varies with quantile changes. It means that tourism receipts have a positive impact on environmental pollution when it comes to lower quantiles, and a negative impact on the higher quantiles. The results of the ARDL model indicate that the level of tourism receipts has both positive and negative effects on economic growth, i.e. pollution.

Using the Panel Granger tests and variance decomposition analysis in Asian countries (Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Bhutan, China, Fiji, Georgia, India, Indonesia, Iran, Islamic Rep, Japan, Jordan, Kazakhstan, Korea, Rep, Kuwait, Lebanon, Macao SAR, Malaysia, Maldives, Mongolia, Nepal, Oman, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Turkey and the United Arab Emirates) in the period 1995-2014, Shakouri et al. (2017) found out that many tourism-related factors, such as tourism revenues, exchange rates, financial development and trade openness of Asian countries affect significantly their economic growth.

The research conducted by Pjanić & Mitrašević (2020) on a sample of twenty-seven EU countries in the period 2001-2019 using a linear mixed model indicates that business tourism spending (BTS) and domestic tourism spending (DTS) have a statistically significant and positive impact on the economic growth of the member states of the European Union. Based on a sample of twenty-eight European Union countries in the period 2012-2018, the results of Haller et al. (2020) also prove that there is a positive and direct relationship between tourism and economic growth. Similar results are obtained by Mirović, Kalaš & Pavlović (2020) by applying a fixed-effects model to a sample of the selected countries of the Western Balkans (Serbia, Montenegro, Northern Macedonia, Bosnia and Herzegovina, and Albania) in the period 2007-2018, where the results indicate that tourism has a positive and significant impact on the economic growth of these countries. Moreover, an almost identical study by Selimi, Sadiku, & Sadiku (2017) on a sample of Western Balkan countries shows that tourism growth has a significant and positive impact on the economic growth of the Western Balkan countries.

Based on the data for South Africa in the period 1995 - 2014, Phiri (2016) did not reject the hypothesis of tourism-led growth, that is, international tourism receipts positively and significantly affect economic growth. As for North African countries (Algeria, Morocco, Egypt, and Tunisia), the Azeez research (2019), conducted in the period 1995-2016, also indicates a positive impact of tourism on the economic growth of these countries.

As for Saudi Arabia, Naseem's empirical research (2021) confirms the concept that tourism promotes economic growth, pointing to the long-term relationship between economic growth and tourism revenues, expenditures, and the number of tourist arrivals.

By applying Granger tests in the period 1980-2014 in Turkey, Hüseyini, Doru, & Tunç (2017) indicate that there is a one-way causality between tourism and economic growth, as the tourism sector in Turkey plays a significant role in economic growth and the development of the entire Turkish economy.

Based on a sample of 18 Mediterranean countries (Albania, Croatia, Cyprus, France, Greece, Italy, Malta, Slovenia, Spain, Turkey, Algeria, Egypt, Israel, Lebanon, Libya, Morocco, Syria and Tunisia) and by using a panel analysis for the period 1995 and 2010, the results of Gao, Xu, & Zhang (2021) show that there is a two-way causality between tourism and economic growth in the northern Mediterranean countries, and a one-way causality between tourism and economic growth in the southern Mediterranean countries. Furthermore, the obtained results

indicate a one-way causality between tourism and CO₂ emissions, suggesting that the Mediterranean countries should focus on the development of tourism, primarily the development of sustainable tourism, taking into account the relationship between economic growth, tourism development, and CO₂ emission.

In tourist destinations such as Slovenia and Montenegro, there was an influx of tourists before the onset of the coronavirus crisis. The empirical results of Gričar et al. (2021) indicate that the influx of tourists has a major impact on economic growth, with economic growth also affecting the development of tourism. A stable and efficient economic environment influences the creation of an attractive environment for the arrival of tourists. At the same time, the influx of tourists affects the growth of foreign exchange earnings and, thus, the overall economic growth.

Tourism, as one of the key drivers of growth in developing countries, has a significant impact on the economic growth of these countries. As for Pakistan, the empirical results of Khan et al. (2020) confirm that the increase in tourism affects economic growth, increases inflows of foreign direct investment, growth and development of agriculture, and poverty reduction.

3. METHODOLOGICAL SETTING

In the paper, we are going to analyse the short-term and long-term effects of changes in the development of international tourism expressed through the share of international tourism receipts in total exports on the annual GDP growth rate per capita as a measure of economic growth. In addition to the impact of tourism, we have examined the impact of the indicators of a country's labour potential, annual investments, openness to total foreign trade and inflation measured by the consumer price index, as an indicator of the degree of instability in the economy. A more detailed description of the variables used in the analysis is presented in Table 1.

Table 1. Role, definitions and units of the variables

Variables	Definitions	Role of variable
GDP	GDP per capita growth (annual %)	dependent
TOUR	International tourism receipts (% of total exports)	independent
LBR	Labour force participation rate (% of total population ages 15-64)	independent
CAP	Gross fixed capital formation (% of GDP)	independent
TO	Trade (% of GDP); Trade= (export+ import)	independent
INFL	Inflation, consumer prices (annual %)	independent

Source: World Bank's World Development Indicators database

In the study, we used balanced panel data for the period 2000–2019 for 17 out of 21 Mediterranean countries (Panel 1). These countries are spread over three continents: Africa, Asia, and Europe, and the areas they occupy are known as the Northern and Southern Mediterranean regions. Along with the analysis of 17 Mediterranean countries, a comparison of the results of a group of 6 Southern Mediterranean countries (Panel 2) was performed and analysed: Algeria, Egypt, Israel, Lebanon, Morocco, Tunisia; and 11 Northern Mediterranean countries (Panel 3): Albania, Bosnia and Herzegovina, Croatia, Cyprus, France, Greece, Italy, Malta, Slovenia, Spain, Turkey. Four Mediterranean countries: Libya, Syrian Arab Republic, Monaco and Montenegro, were excluded from the analysis due to lack of data. For econometric and statistical data processing, we used the software package EViews 10 and Stata 13.

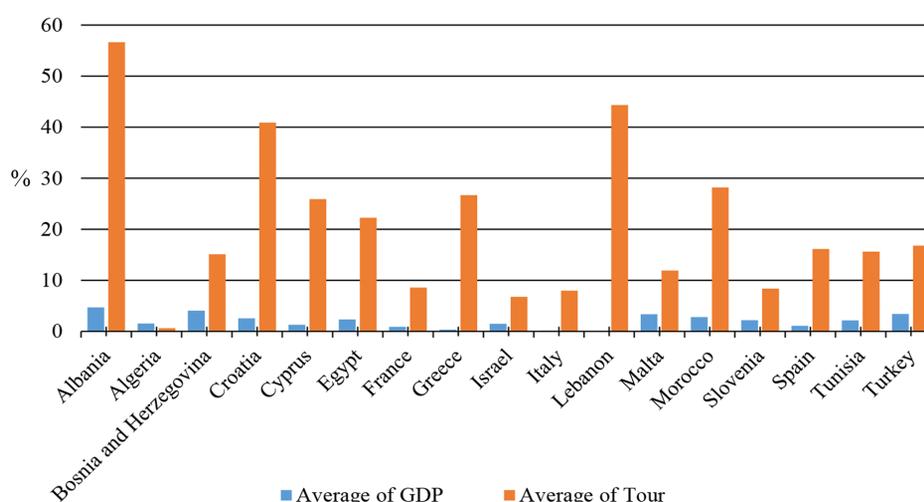
Table 2 depicts the descriptive statistics of the variables used in the analysis of the countries covered by Panel 1. Since Panel 1 covers 17 Mediterranean countries over 20 years, the total number of observations for each variable was 340.

Table 2. Descriptive statistics (%)

Variable	GDP	TOUR	CAP	TO	LBR	INFL
Mean	2.026511	20.75289	22.82679	87.62344	60.82641	3.507486
Median	1.990212	16.93175	21.71053	71.48741	63.20000	2.308093
Maximum	18.91149	74.76000	43.07444	322.6765	75.14000	54.91537
Minimum	-10.01628	0.365350	10.13518	30.24655	44.78000	-4.298475
Std. Dev.	3.186748	15.44523	5.550848	52.94324	9.271797	5.759815

Source: Authors' calculation based on World Bank's World Development Indicators database

GDP per capita growth (annual %) of the Mediterranean countries in the analysed period ranged from -10.02 to 18.91%. There was also a significant difference between the minimum and maximum value of the inflation rate in this period. The values of international tourism receipts (% of total exports) ranged from 0.37% to 74.76%. As we will see in the following graph, the lowest average value of international tourism, receipts (% of total exports) was recorded in Algeria and the highest one in Albania. Out of the selected countries, Albania also had the highest average GDP per capita growth (annual %).



Graph 1. Average values of GDP per capita growth (annual %) and international tourism receipts (% of total exports) in the period 2000-2019 in the selected Mediterranean countries

Source: Authors' calculation based on World Bank's World Development Indicators database

The research was based on the null hypothesis stating that the change in the share of tourism receipts in the country's total exports has statistically significant short-term and long-term effects on GDP per capita growth of the selected Mediterranean countries.

Bearing in mind that in order to obtain statistically valid results, it is necessary to check the presence of multicollinearity, we used the VIF test. Asteriou, et al. (2007, p. 100) state that the VIF test values greater than 10 are generally considered to be evidence of the presence of multicollinearity problems. The limit of the VIF test values in some studies varies, therefore, some researchers take the value 5 (Akinwande, Dikko, and Samson, 2015, pp. 754-767).

In order to select an appropriate model for the analysis of the impact of international tourism receipts on the economic growth of the Mediterranean countries, after checking the presence of multicollinearity, we tested individual data series for stationarity. In this paper, the unit root test of Im, Pesaran, and Shin (2003) was used. The null hypothesis states that there is non-stationarity of time series of all comparative data, i.e. the existence of a unit root, while the alternative hypothesis implies that at least one of those individual components is stationary.

Having conducted the stationarity test, we are going to check the existence of cointegration using the Pedroni Cointegration Test (1999, 2004) based on seven different statistics, assuming the absence of cointegration by the null hypothesis. Four panel test statistics are based on the aggregation of within-dimension data for each observation unit (panel v-statistic, panel rho-statistic, panel PP-statistic, and panel ADF-statistic), while three group test statistics are based on the aggregation of between-dimension data for each time moment (group rho-statistic, group PP-statistic, and group ADF-statistic).

In the last step of the analysis, we used the ARDL model based on the Pooled Mean Group (PMG) estimator proposed by Pesaran, Shin, and Smith (1997, 1999). The Akaike Information Criterion (AIC) was used for lag length selection.

4. RESULTS AND DISCUSSION

As mentioned above, we began our analysis by checking multicollinearity. The results of the VIF test (Table 3), conducted using Stata 13 software package, show that there is no problem of multicollinearity.

Table 3. VIF test results

Variable	VIF-Panel 1	VIF-Panel 2	VIF-Panel 3
TOUR	1.05	1.26	1.22
CAP	1.11	1.28	1.47
TO	1.07	1.07	1.07
LBR	1.20	1.20	1.52
INFL	1.13	1.23	1.36

Source: Authors' calculation using Stata 13 software package

In the following part of the paper, we tested the values of the series for the existence of a unit root. The analysis includes Im, Pesaran, and Shin tests, starting from the null hypothesis that panels contain unit roots. When conducting the test, we chose the option offered in EViews software package to include individual effects in the model and to perform automatic lag length selection based on the Akaike Information Criterion (AIC).

Rejecting the null hypothesis implies that at least one time series is stationary, while all others can be non-stationary. The results of testing individual data series for stationarity based on Im, Pesaran, and Shin test show that the analysed data series were of a different order of integration (mixture of I (0) and I (1)).

The following table shows the results of the Pedroni Cointegration Test, which is based on the within-dimension test or panel statistics test and the between-dimension test. The results based on the data of the countries included in Panels 1, 2 and 3 show that in 6 out of 11 tests, the null

hypothesis of the absence of cointegration has been rejected. Consequently, according to the Pedroni Cointegration Test, there is a long-term consistency in the movement of the analysed time series.

Table 4. Panel unit root test results - Im, Pesaran, and Shin (Individual effects)

Variable	Panel 1		Panel 2		Panel 3	
	At level	At first difference	At level	At first difference	At level	At first difference
GDP	-6.06964***	-14.8358***	-6.27118***	-12.7174***	-1.89861***	-7.78795***
TOUR	-3.65876***	-12.5403***	-2.51607***	-10.3472***	-2.78904***	-7.10278***
CAP	-0.07812	-7.28145***	-0.28457	-4.84808***	0.25599	-5.63571***
TO	0.21360	-9.24134***	0.36896	-7.83861***	-0.14608	-4.93522***
LBR	1.56551	-8.06091***	1.76694	-7.13334***	0.23910	-3.89419***
INFL	-5.48248***	-14.8659***	-4.67642	-11.5000***	-2.92778***	-9.43089***

Significance at 1%, 5% and 10% level are denoted with ***, **, and *, respectively.

Source: Authors' calculation using EViews 10 software package

Table 5. Panel Cointegration Test Results

Panel 1.

Alternative hypothesis: common AR coefficient (within-dimension)

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-0.449699	0.6735	-1.897179	0.9711
Panel rho-Statistic	1.469213	0.9291	1.553386	0.9398
Panel PP-Statistic	-5.622419	0.0000	-7.083092	0.0000
Panel ADF-Statistic	-6.027964	0.0000	-7.346366	0.0000

Alternative hypothesis: individual AR coefficient (between-dimension)

	Statistic	Prob.
Group rho-Statistic	3.336887	0.9996
Group PP-Statistic	-9.107641	0.0000
Group ADF-Statistic	-8.652141	0.0000

Panel 2.

Alternative hypothesis: common AR coefficient (within-dimension)

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-0.173258	0.5688	-1.732116	0.9584
Panel rho-Statistic	1.093499	0.8629	1.782622	0.9627
Panel PP-Statistic	-5.110654	0.0000	-4.057614	0.0000
Panel ADF-Statistic	-5.637107	0.0000	-4.933928	0.0000

Alternative hypothesis: individual AR coefficient (between-dimension)

	Statistic	Prob.
Group rho-Statistic	3.344524	0.9996
Group PP-Statistic	-4.614488	0.0000
Group ADF-Statistic	-5.576907	0.0000

Panel 3.

Alternative hypothesis: common AR coefficient (within-dimension)

	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-0.678965	0.7514	-0.790748	0.7855
Panel rho-Statistic	1.065844	0.8568	0.052580	0.5210
Panel PP-Statistic	-2.160678	0.0154	-6.788237	0.0000
Panel ADF-Statistic	-1.963390	0.0248	-5.996254	0.0000

Alternative hypothesis: individual AR coefficient (between-dimension)

	Statistic	Prob.
Group rho-Statistic	1.088310	0.8618
Group PP-Statistic	-9.082398	0.0000
Group ADF-Statistic	-7.012556	0.0000

Source: Authors' calculation using EViews 10 software package

According to the theoretical knowledge, in a situation when working with relatively small samples with time series data of different order of integration, the application of Autoregressive Distributed Lag Models - ARDL with Pooled Mean Group (PMG) estimator allows a reliable assessment of long-term and short-term effects of tourism development on economic growth. The next two tables show the results of the analysis conducted in the software package EViews 10 based on the countries covered by Panels 1, 2 and 3 while using the option that the model includes a constant term.

Table 6. Values of long-term coefficients using Panel ARDL model

	Panel 1	Panel 2	Panel 3
Selected Model:	ARDL(2, 2, 2, 2, 2, 2)	ARDL(2, 2, 2, 2, 2, 2)	ARDL(1, 2, 2, 2, 2, 2)
Independent variable:	Coefficient (Std. error)		
TOUR	0.258413*** (0.013358)	0.120285*** (0.037834)	0.267748*** (0.042045)
CAP	0.250165*** (0.018957)	0.100374*** (0.033123)	0.200600*** (0.041657)
TO	0.040950*** (0.003378)	0.029419* (0.017154)	0.037390*** (0.013809)
LBR	0.075686*** (0.015884)	0.090783* (0.057165)	0.138252* (0.095135)
INFL	-0.077233*** (0.017172)	-0.031156 (0.036336)	-0.064699* (0.040282)

Source: Authors' calculation using the EViews 10 software package

The preliminary results show that in the case of Panel 1 and Panel 3 all long-term coefficients are statistically significant, while in the case of Panel 2 the long-term coefficient expressing the movement of economic growth depending on the movement of the inflation rate is not statistically significant.

The share of international tourism receipts in total exports has a statistically significant, at the level of significance of 1%, positive long-term effect in the case of all three panels. However, based on the following table (Table 7) which shows the values of short-run coefficients, we can conclude that the change in the share of tourism receipts in total exports does not have a statistically significant short-term effect on GDP per capita growth; however, it has a statistically significant positive effect in the first lag.

The error correction term is negative and statistically significant, and its size in the case of all three panels (-0.868599, -0.753360, -0.916398) indicates that GDP per capita growth, as a dependent variable, returns to long-term equilibrium after changing the selected set of independent variables for a little over a year.

In the following part of the paper, the results of long-term and short-term relationship between GDP per capita growth and the selected variables are compared with the previous research in this area, followed by a comprehensive conclusion and directions for further research.

Table 7. Values of short-term coefficients using Panel ARDL model

	Panel 1	Panel 2	Panel 3
Selected Model:	ARDL(2, 2, 2, 2, 2, 2)	ARDL(2, 2, 2, 2, 2, 2)	ARDL(1, 2, 2, 2, 2, 2)
Variable:	Coefficient (Std. error)		
COINTEQ01	-0.868599*** (0.204723)	-0.753360*** (0.126647)	-0.916398*** (0.267889)
D(GDP(-1))	0.122194* (0.096615)	0.204047* (0.163458)	
D(TOUR)	0.027997 (0.526978)	0.111512 (0.393432)	0.800443 (1.202180)
D(TOUR(-1))	0.470385** (0.209588)	0.524728* (0.332365)	0.425399* (0.448047)
D(CAP)	0.815101*** (0.169705)	0.751336*** (0.242279)	0.674890*** (0.238656)
D(CAP(-1))	0.413976** (0.183205)	0.150207 (0.212407)	0.386292* (0.253655)
D(TO)	0.053410 (0.059128)	0.159939* (0.081102)	0.042771 (0.036000)
D(TO(-1))	0.124445* (0.047565)	0.039455 (0.067222)	0.136703** (0.061650)
D(LBR)	0.841353 (0.736107)	0.181817 (0.544859)	2.380316 (1.680553)
D(LBR(-1))	0.231215 (0.323765)	0.018232 (0.195060)	0.119239 (0.613089)
D(INFL)	-0.041205* (0.110834)	-0.083104* (0.088608)	-0.062390* (0.204020)
D(INFL(-1))	-0.100972* (0.166464)	-0.325283* (0.185290)	-0.177252* (0.292615)
C	-4.125882*** (0.945111)	-4.539357*** (0.957770)	-7.349082*** (2.659925)

Source: Authors' calculation using the EViews 10 software package

5. CONCLUSION

Our main goal was to analyse the long-term and short-term impact of international tourism receipts on the economic growth of the analysed Mediterranean countries using the panel autoregressive distributed lag (ARDL) model. We have included the indicators from the domain of various economic policies as independent variables which according to theoretical and practical knowledge have an impact on a country's development, as well as annual investments, openness to total foreign trade and inflation, and labour potential as one of the key indicators which, according to empirical knowledge, is largely interdependent with the country's development indicator.

Our results show a statistically significant long-term relationship between international tourism receipts (% of total exports) and GDP per capita growth (annual %) in 17 out of 21 Mediterranean countries in the period 2000-2019. Based on these coefficients, we can conclude that the growth of the share of international tourism receipts in total exports of 1% would imply the growth of GDP per capita growth (annual %) by 0.25%, 0.12% and 0.26% in the case of Panel 1, 2, and 3 respectively.

Similar results based on the example of the panel composed exclusively of Mediterranean countries are obtained by Ren, et al. (2019) and Simnudić and Kuliš (2016). Many studies, including

Hüseyini, Doru and Tunç (2021), Azeez (2019), Selimi, Sadiku & Sadiku (2017), covering the Mediterranean countries individually or in a group of other countries belonging to this area also confirm our results concerning the positive impact of tourism on economic growth.

Our research shows that there is a positive statistically significant impact of gross fixed capital formation (% of GDP) on economic growth. The long-term coefficient labour force participation rate (% of total population ages 15-64) indicates a statistically significant and positive impact; however, the results of the selected model do not show that a short-term coefficient is statistically significant. The results of our research show that trade openness has a statistically significant and positive long-term effect on economic growth and a statistically significant and positive short-term effect in the case of Panel 2.

Our results show a statistically significant short-term negative effect in the case of all three panels and a long-term effect in the case of Panel 1 and Panel 3, while in the case of Panel 2 the long-term coefficient is not statistically significant.

Having in mind the abovementioned results, it can be concluded that the tourism sector has a significant impact on economic growth, which once again confirms the importance of encouraging tourism development in the selected countries.

6. FUTURE RESEARCH DIRECTIONS

Since the tourism industry has been one of the hardest-hit sectors due to the pandemic, many countries have been forced to implement various financial measures in order to stabilize and improve the tourism industry. Future research should consider the concrete effects of the undertaken measures on the growth and development of tourism, as well as on the overall economic growth of all countries.

REFERENCES

- Akinwande, M.O., Dikko, H.G. and Samson, A. (2015). Variance Inflation Factor: As a Condition for the Inclusion of Suppressor Variable(s) in Regression Analysis. *Open Journal of Statistics*, 5, 754-767. <http://dx.doi.org/10.4236/ojs.2015.57075>
- Aslan, A. (2014). Tourism Development and Economic Growth in the Mediterranean Countries: Evidence from panel Granger causality tests. *Current Issues in Tourism*, Volume 17, Issue 4, 363-372. DOI: 10.1080/13683500.2013.768607
- Asteriou, D. & Hall, G. S. (2007) *Applied Econometrics*, revised edition, New York: Palgrave Macmillan.
- Azeez, R. O, (2019). Is Tourism a Sustainable Haven for Economic Growth in North African Countries? An Evidence from Panel Analysis, *MPRA Paper* 93449, available at: https://mpra.ub.uni-muenchen.de/93449/1/MPRA_paper_93449.pdf (accessed 1.9. 2021).
- Belke, M. Bolat, S. & Hatemi-j, A. (2021). The impact of tourism on the economic growth in the Mediterranean countries: evidences from hidden panel cointegration test. *Mehmet Akif Ersoy Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 8(1), 399-419. <https://doi.org/10.30798/makuiibf.822194>
- Dwyer, L., Edwards, D., Mistilis, N., Roman, C. & N. Scott (2009). Destination and enterprise management for a tourism future. *Tourism management*, 30(1), 63-74. <https://doi.org/10.1016/j.tourman.2008.04.002>

- Eryiğit, C. & Eryiğit, M. (2011). Tourism and economic development in Mediterranean Sea basin countries: A panel data analysis. *Vadyba Journal of Management*, 19(2), 87-92.
- Fosse J. et al. (2021). The future of Mediterranean tourism in a (post) COVID world. *eco-med briefing 01/21. eco-union*, <https://doi.org/10.5281/zenodo.4616983>
- Gao, J., Xu, W. & Zhang, L. (2021). Tourism, economic growth, and tourism-induced EKC hypothesis: evidence from the Mediterranean region. *Empirical Economics*, 60(3), 1507-1529.
- Gökovali, U. & Bahar, O. (2006). Contribution of tourism to economic growth: A panel data approach, *An International Journal of Tourism and Hospitality Research*, 17(2), 155-167.
- Gričar, S., Bojnec, Š., Karadžić, V., & Backović Vulić, T. (2021). Tourism-led economic growth in Montenegro and Slovenia. *Economic Research-Ekonomska Istraživanja*. <https://doi.org/10.1080/1331677X.2021.1875858>
- Haller, A.P., Butnaru, G.I., Harsan, G.D.T. & Stefanica, M. (2020). The relationship between tourism and economic growth in the EU-28. Is there a tendency towards convergence? *Economic Research-Ekonomska Istraživanja*, 34(1), 1121-1145. <https://doi.org/10.1080/1331677X.2021.1875858>
- Hüseyini, İ., Doru, Ö., Tunç, A. (2017). The effects of tourism revenues on economic growth in the context of neo-classical growth model: in the case of Turkey. *Ecoforum Journal*, North America, 6(1), 1-2.
- Im, K.S, Pesaran, M.H., Shin, Y. (2003). Testing for unit roots in heterogeneous panels. *J. of Econometrics*, 115(1), 53–74.
- Khan, A., Bibi, S., Lorenzo, A., Lyu, J., & Babar, Z.U. (2020). Tourism and Development in Developing Economies: A Policy Implication Perspective. *Sustainability*, 12(4), 1-19. <https://doi.org/10.3390/su12041618>
- Manera, C., & Taberner, J.G. (2006). The Recent Evolution and Impact of Tourism in the Mediterranean: The Case of Island Regions, 1990-2002. *Natural Resources Management*, 1-42.
- Marinković, G., & Stevanović, S. (2020). Performance changes of the tourism sector in the crises, In V. Bevanda & S. Štetić (Eds.), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era* (pp. 425-439). Belgrade: Association of Economists and Managers of the Balkans with Faculty of Tourism and Hospitality, Ohrid, North Macedonia. <https://doi.org/10.31410/tmt.2020.425>
- Mirović, V., Kalaš, B., & Pavlović, N. (2020). An empirical analysis of relationship between tourism and economic growth: Panel evidence from Western Balkan Countries, In V. Bevanda & S. Štetić (Eds.), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era* (pp. 39-52). Belgrade: Association of Economists and Managers of the Balkans with Faculty of Tourism and Hospitality, Ohrid, North Macedonia. <https://doi.org/10.31410/tmt.2020.39>.
- Naseem, S. (2021). The Role of Tourism in Economic Growth: Empirical Evidence from Saudi Arabia, *Economies*, 9(117), 1-12. <https://doi.org/10.3390/economies9030117>
- Parrilla, J. C., Font, A. R. and Nadal, J. R. (2007). Tourism and long-term growth - a Spanish perspective. *Annals of Tourism Research*, 34(3), 709–726.
- Pedroni, P. (2004). Panel cointegration: Asymptotic and finite sample properties of pooled time series tests with an application to the PPP hypothesis. *Econometric Theory*, 20, 597–625.
- Pedroni, P. (1999). Critical values for cointegration tests in heterogeneous panels with multiple regressors. *Oxford Bulletin of Economics and Statistics*, 61, 653–670.
- Pesaran, H. M., Shin, Y., & Smith, R. P. (1999). Pooled Mean Group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association*, 94, 621–634.

- Pesaran, M. H., Shin, Y. & Smith, R. P., (1997), Pooled Estimation of Long-Run Relationships in Dynamic Heterogeneous Panels, *Econ Papers*.
- Phiri, A. (2016). Tourism and Economic Growth in South Africa: Evidence from Linear and Nonlinear Cointegration Frameworks. *Managing Global Transitions* 14(1), 31–53.
- Pjanić, M. (2019). Economic effects of tourism on the World economy. In V. Bevanda & S. Štetić (Eds.), *4th International Thematic Monograph - Thematic Proceedings: Modern Management Tools and Economy of Sector in Present Era* (pp. 291-305). Belgrade: Association of Economists and Managers of the Balkans with Faculty of Tourism and Hospitality, Ohrid, North Macedonia. <https://doi.org/10.31410/tmt.2019>
- Pjanić, M., Mitrašević, M. (2020). The impact of tourism on GDP growth in the European Union countries, In V. Bevanda & S. Štetić (Eds.), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era* (pp. 53-66). Belgrade: Association of Economists and Managers of the Balkans with Faculty of Tourism and Hospitality, Ohrid, North Macedonia. <https://doi.org/10.31410/tmt.2020.53>
- Ren, T., Can, M., Paramati, SR., Fang, J., Wu, W. (2019). The Impact of Tourism Quality on Economic Development and Environment: Evidence from Mediterranean Countries. *Sustainability*, 11(8):2296. <https://doi.org/10.3390/su11082296>
- Selimi, N., Sadiku, L., & Sadiku, M. (2017). The impact of tourism on economic growth in the Western Balkan countries: An empirical analysis. *International Journal of Business and Economic Sciences Applied Research*, 10(2), 19-25. <http://dx.doi.org/10.25103/ijbesar.102.02>
- Shakouri, B., Yazdi, SK., Nategian, N., Shikhrezaei, N. (2017). International Tourism and Economic Growth and Trade: Variance Decomposition Analysis. *Journal of Tourism & Hospitality*, 6(3), 1-11. doi: 10.4172/2167-0269.1000286.
- Šimundić, B., & Kuliš, Z. (2016). Tourism and economic growth in Mediterranean region: Dynamic Panel Data Approach. *Acta economica et Turistica*, 1(2), 178-196.
- Gössling, S., Scott D., Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19, *Journal of sustainable tourism*, 29(1), 1-20, <https://doi.org/10.1080/09669582.2020.1758708>
- Tugcu, C.T. (2014). Tourism and economic growth nexus revisited: A panel causality analysis for the case of the Mediterranean Region. *Tourism Management*, 42, 207-212.
- Unković, S., Zečević, B. (2011). *Ekonomika turizma*. Beograd, Srbija: Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu.
- Bank W. World Bank's World Development Indicators database, available at: <https://databank.worldbank.org/source/world-development-indicators>
- World Tourism Organization (UNWTO). (2021). *UNWTO World Tourism Barometer and Statistical Annex*, available at: <https://www.unwto.org/unwto-world-tourism-barometer-data> (viewed 1.9. 2021)
- World Travel & Tourism Council (WTTC). (2021). *Investing in Travel and Tourism*, available at: <https://wttc.org/Portals/0/Documents/Reports/2021/Investing%20in%20Travel%20and%20Tourism%20100921.pdf?ver=2021-09-16-112521-367> (viewed 1.9. 2021).



Is the Tourism-Led Growth Hypothesis Valid for Višegrad Group Countries?

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Abstract: *The tourism sector represents one of the most essential segments of the world economy. This paper aims to identify the effects of tourism indicators on economic growth in terms of tourism share, international tourism arrivals and tourism employment. The subject of the paper is evaluating the impact of the tourism sector on economic growth in selected Višegrad group countries (Czechia, Hungary, Poland and Slovakia) for the period 2008-2018. The empirical findings show that the tourism sector has a significant and positive effect on economic growth in these countries for the observed period. The results of the panel fixed effects model reflect that governments in Višegrad group countries should increase the tourism sector share in their economies in order to enable positive and lucrative implications for economic development.*

1. INTRODUCTION

In the recent era of globalization, the tourism industry is increasing rapidly and enhancing economic growth around the world (Danis and Wang, 2019). Tourism and tourism-related activities are considered one of the most essential sectors of economic growth in the world (Malec and Ahrám, 2016). With the tourism economy developing rapidly, major long-term trends such as changing demographics, evolving demand, digitalization as well as climate change manifest new opportunities and challenges for each country (OECD, 2018). It is widely accepted that tourism development positively affects the economy and leads to increased income, production and employment which enhance overall economic growth in the country (Chingarande and Saayman, 2018). In the twenty-first century, the tourism industry is observed as the main factor for economic growth in many developed and emerging economies (Eyuboglu and Eyuboglu, 2019). Similarly, the tourism industry has emerged as an important driver for economic growth strategies during the last decades (Balsalobre-Lorente et al. (2020). Accordingly, tourism is increasingly an important part of the economy as well as a source of income in today's conditions of globalization and an open economy (Mirović, Kalaš, Pavlović, 2020). Many authors emphasize that tourism manifests as the main component of international trade in services (Katirciogul, 2009; Arslanturk et al. 2011; Hana et al. 2015; Dogan et al. 2017; Akadiri et al. 2019). Arslanturk et al. (2011) highlight that international tourism has become an increasingly essential part of the economy, and the tourism sector has begun to play an important role in the many regions. Katircioglu (2009) points out that real income growth enhances growth in international trade and international tourist arrivals to the country.

The tourism industry had significant growth in terms of international tourism arrivals and tourism receipts in many countries, most especially in the tourism island states (Akadiri and Akadiri, 2019). Brida et al. (2014) highlight that tourism is driven by exogenous components such as the

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economic cycle and tourist preferences. Raza and Shah (2017) emphasize that a higher level of tourism revenues will help countries to reduce income inequality. Podovac (2021) emphasizes the importance of urban tourism because it enables the inflow of tourists throughout the year, as well as, the economic sustainability of the tourism sector. Likewise, governments can play an important role in attracting foreign investments and expanding international tourism. Banerjee et al. (2018) argue that tourism is one of the rapidly growing economic industries that makes 10% of the gross domestic product, as well as 30% of export in the services sectors in the global economy. Brida et al. (2020) point out that the tourism sector positively contributes to economic growth while Pjanić and Mitrašević (2020) point out the significant effects of business tourism spending and domestic tourism spending on economic growth in the European Union. Akadiri et al. (2019) indicate that the tourism sector can contribute to economic growth but only when countries have geopolitical stability. An empirical study for Turkey identified unidirectional causality running from geopolitical risk index to real GDP and from geopolitical risk index to tourism. It implies that real GDP and tourism react negatively to a one standard deviation shock to geopolitical risk.

The structure of this chapter is as follows. After the introduction, there is a literature review about the relationship between the tourism sector and economic growth in the world. The next segment is methodology and data which defines variables, makes hypotheses and creates a panel regression model. The fourth segment is the descriptive and empirical analysis of selected explanatory variables in Višegrad group countries (Czechia, Hungary, Poland and Slovakia) for the period 2008-2018. In this segment, it is presented panel data estimation in terms of the fixed effects model and random effects model. The last segment summarizes the findings and conclusions with enabling informational support to policymakers in these economies from the aspect of the effect of tourism indicators on economic growth, as well as their relationship.

2. LITERATURE REVIEW

For almost two decades, tourism researchers are trying to identify and determine the nexus between economic growth and tourism development to provide a better understanding of their relationship (Kožić et al. 2020). Traditionally, the tourism sector is considered to have a positive impact on the economy and therefore to be a tool by which economies can stimulate their economic growth (Pérez-Rodríguez et al. 2021). Ehigiamusoe (2020) defined the tourism-led growth hypothesis in a way that tourism can facilitate economic growth because it provides income and employment, as well as improves infrastructure and balance of payments. Many previous empirical studies investigated the nexus between tourism and economic growth in order to inform about the potential effect of this industry on the economic development (Balaguer and Cantavella-Jorda, 2002; Gunduz and Hatemi-J 2005; Kim et al. 2006; Lee and Chang, 2008; Lean and Tang, 2010; Arslanturk et al. 2011; Aslan, 2014; Wu and Wu, 2018; Antonakakis et al. 2019; Khan et al. 2020; Mirović et al. 2020; Usmani et al. 2020). Gunduz and Hatemi-J (2005) found unidirectional causality running from international tourist arrivals to the economic growth of Turkey. Further, Ongan and Demiroz (2005) researched the effect of international tourism receipts on economic growth in Turkey and found bidirectional causality between international tourism and economic growth. Lee and Chang (2008) analyzed the relationship between tourism development and economic growth for OECD and non-OECD countries for the period 1990 to 2002.

Their findings indicate that there is a unidirectional causality between tourism development and economic growth in OECD countries and bidirectional causality in non-OECD countries.

Simiraly, Chen and Chiou-Wei (2009) revealed that the tourism-led economic growth hypothesis was supported for Taiwan with a reciprocal causality for South Korea. Chou (2013) analyzed the relationship between tourism spending and economic growth in transition countries for the period 1988 to 2011. His results confirmed the growth hypothesis in Cyprus, Latvia and Slovakia, while the reverse nexus was identified in the Czech Republic and Poland. Can and Gozgor (2016) researched the relationship between tourism and economic growth in 8 Mediterranean countries for the period 1995-2014 and they found causality from market diversification to economic growth in Egypt and Greece. On the other hand, causality from economic growth to market diversification is identified in France, Morocco and Turkey, while bidirectional causality was in Italy, Spain and Tunisia. Salifou and Haq (2016) highlighted the positive impact of tourism on economic growth in ECOWAS countries for the period 1990-2010 and concluded that tourism development will enhance economic growth in these countries. Perles-Ribes et al. (2017) confirmed bidirectional causality between tourism and economic growth in Spain. Muhtaseb and Daoud (2017) estimated the relationship between tourism and economic growth in Jordan and their empirical findings confirmed unidirectional causality between these variables. Tang and Tan (2017) estimated the relationship between the tourism sector and economic growth in 167 countries for the period 1995-2013 and their results confirmed that tourism positively affects the economic growth with different effects between countries at various levels of income. Lin et al. (2018) investigated the causality between international tourism growth and regional economic expansion in 29 regions of China for the period 1978-2013 and confirmed that tourism-led growth hypothesis is identified in 10 regions. Contrary, economy-driven tourism growth is recorded in 9 regions in China for the analyzed period. Öztürk et al. (2018) analyzed the relationship between the tourism industry and economic growth in the ASEAN region from 1995 to 2015. The empirical results show that there is a statistically significant nexus between gross domestic product, export and tourism. Sokhanvar et al (2018) confirmed unidirectional causality from tourism to economic growth in Brazil, Mexico and the Philippines; reverse causality is identified in China, India, Indonesia, Malaysia and Peru. Finally, bidirectional causality is detected for Chile.

Akadiri et al. (2019) investigated international tourism arrivals and economic policy in 12 countries for the period 1995-2016. Their findings revealed bidirectional causality in Ireland, France and the United States, while unidirectional causality is identified in Brazil, Canada, China and Germany. Finally, the neutrality between these variables is recorded in Chile, Japan, Russia, South Korea and Sweden for the observed period. Mitra (2019) investigated causality between the tourism sector and economic growth in 158 economies for the period 2001-2017, where empirical results show bidirectional causality between these variables. Yazdi (2019) estimated the relationship between tourism and economic growth in Iran for the period 1981-2014 and confirmed unidirectional causality running from tourism to economic growth. Zhang and Cheng (2019) revealed that tourism significantly contributes to the economic growth of the thirty-six Wenchuan earthquake-affected countries in China for the period 2008-2016. Khan et al. (2020) revealed a significant and positive effect of economic growth on tourism in Pakistan. Empirical results show that a 1% increase in economic growth enhances tourism by 1.9% in the long-run while the same increase in economic growth raises tourism by 1.32% in the short-run. Usmani et al. (2020) have examined the effect of tourism arrivals and tourist expenditure on economic growth in Brazil, Russia, India and China for the period 1995-2016. Their findings confirmed that tourist expenditure positively affects economic growth as well as the existence of bidirectional causality between these variables.

Chirilă et al. (2020) confirmed that international tourism led to economic growth in Bulgaria and Estonia, while the opposite direction is identified in the Czech Republic, Hungary, Lithuania,

Romania, Slovenia and Slovakia for the period 2000-2019. Croes et al. (2021) found that the tourism sector has a significant positive direct impact on economic growth in Poland, but only in the short term. Xia et al. (2021) analyzed 34 European countries for the period 1995-2015 and their results showed that tourism indicators have a necessary role in promoting economic development in these countries. Finally, Haller et al. (2020) detected a positive and direct relationship between tourism and economic growth in EU-28 member states for the period from 2012 to 2018.

3. METHODOLOGY AND DATA

The chapter includes annual data obtained from World Bank (WB) and International Monetary Fund (IMF) for four Višegrad group countries (Czechia, Hungary, Poland and Slovakia) for the period 2008-2018. This segment implies panel data estimation where gross domestic product per capita is the dependent variable. Gross domestic product is considered an important economic indicator because it best manifests the performance of the economy (Ivanová & Masárová, 2018). A common feature of previous studies is using the aggregate tourism indicators such as tourism arrivals and tourism receipts as proxies for tourism development (Solarin, 2016). Accordingly, international tourism, arrivals, international tourism receipts, tourism employment and export are identified as independent variables.

Table 1. Variable definition

Variable	Notation	Calculation	Source	Expected impact
Dependent variable				
Gross domestic product per capita	GDPpc	US	IMF	/
Independent variables				
International tourism arrivals	ITR	US	WB	+
International tourism receipts	ITR	US	WB	+
Tourism employment	EMP	Number of employees	WB	+
Export	EXP	% of GDP	WB	+

Source: Authors illustration

In order to create an appropriate model, we develop the following hypotheses based on the determined research objectives:

- H₀: Tourism sector has a significant and positive effect on economic growth in Višegrad group countries.
- H₁: Greater number of international tourism arrivals significantly increases economic growth in Višegrad group countries.
- H₂: Greater level of international tourism receipts significantly increases economic growth in Višegrad group countries.
- H₃: Greater level of tourism employment significantly increases economic growth in Višegrad group countries.
- H₄: Greater level of export significantly increases economic growth in Višegrad group countries.

The chapter includes the panel fixed effects model and panel random effects model. The random effects model was identified as an adequate model in order to evaluate the effect of explanatory variables.

The model can be presented as:

$$GDPpc_{it} = \beta_1 + \beta_2 TRS_{it} + \beta_3 ITR_{it} + \dots + \beta_4 ITA_{it} + \varepsilon_i + \mu_{it} \quad (1)$$

where GDP_{pc} – gross domestic product per capita, ITA – international tourism arrivals, ITR – international tourism receipts, EMP – tourism employment, EXP – export, N denotes number of observations, T number of period, α constant, β_1 a random variable with a mean value of parameters and ε_i - random error with mean value 0 and variance σ_ε^2 , μ - random error.

4. TOURISM STATE AND PERSPECTIVES

Tourism development is a segment of the overall development strategy for many countries, including Višegrad group countries. The development of this sector enables foreign exchange receipts and generates employment opportunities which stimulate economic growth (Suresh et al. 2017). Accordingly, Baduelscu et al. (2020) argue that tourism is positively related to economic development, monetary gains, infrastructure improvements, as well as, sustainable development with environmental impact and cultural values. Competitive advantages include demographic development, labor productivity, gross domestic product, employment and many other factors. Between 1990 and 2018 international tourist arrivals in the CEE region grew from 33.9 million to 141.4 million which represents an increase of 317%, while in 2018 international tourism generated 58 billion euros in receipts (Light et al. 2020). One of the advantages of the Višegrad region can be tourism area (Audretsch and Pena-Legazkue, 2012). Antošova et al. (2020) point out that tourism numbers constantly increased since 2012 in Višegrad group countries. For example, arrivals of tourists increased from 15 million arrivals to almost 18.4 million arrivals in 2016. Similarly, the arrivals of tourists in Hungary were almost 11.1 million arrivals in 2016, while tourist numbers increased as well in Poland from 22 million arrivals in 2012 to almost 29 million arrivals in 2016. In the same year, tourist numbers increased by over 5 million tourist arrivals in Slovakia. Those numbers reflect that tourism has an important place in the Višegrad group countries (Antošova et al. 2020). In 2018 tourism trends in Višegrad group countries implied a few facts:

Czechia

- International travel arrivals: 36.3 million tourists which is 4.52% more than the previous year.
- International travel receipts reached 7.02 billion dollars which is 3.32% more than the previous year.

Hungary

- International travel arrivals: 57.67 million tourists which is 4.92% more than the previous year.
- International travel receipts reached 8.16 billion dollars which is 9.76% more than the previous year.

Poland

- International travel arrivals: 85.94 million tourists which is 2.56% more than previous year.
- International travel receipts reached 13.37 billion dollars which is 7.57% more than the previous year.

Slovakia

- International travel arrivals: 16.82 million tourists which is 9.19% more than the previous year.
- International travel receipts reached 2.82 billion dollars which is 5.71% more than the previous year.

Before empirical analysis, there are trends in GDP growth rate and tourism indicators such as international tourism arrivals, international tourism receipts and tourism employment for the period 2008-2018.

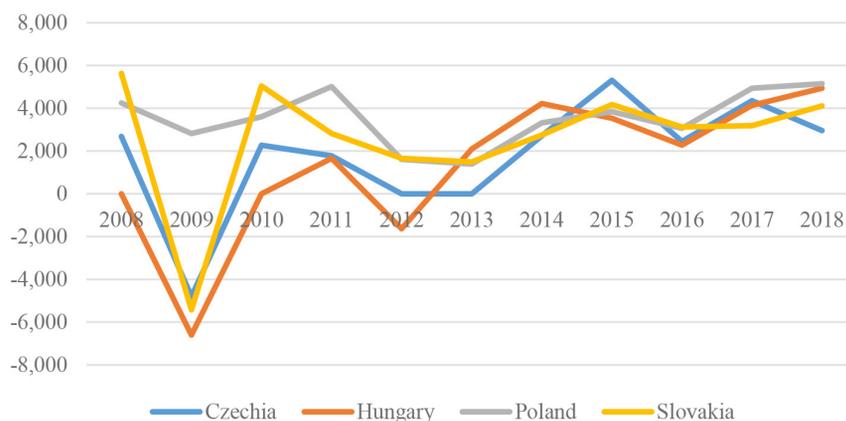


Figure 1. GDP growth rate in Višegrad group countries

Source: Authors calculation

The average GDP growth rate of Višegrad group countries was 2.31% from 2008 to 2018. It is important to notice that all countries recorded a positive average growth rate, where the highest mean GDP growth rate was identified in Poland (3.54%). On the other hand, Hungary had the smallest mean GDP growth of 1.33%, as well as, Czechia (1.79%) which is below average level. Finally, Slovakia had a mean GDP growth rate of 2.59% for the observed period. In the last five years, the Višegrad group economy had an average GDP growth rate of 3.72%, whereas Poland's economy mostly increased by 4.06% on average level.

After presenting the GDP growth rate, there is the level of gross domestic product per capita and share of export in GDP in Višegrad group countries. The average GDPpc of Višegrad group countries was 16601 dollars in the observed period, whereas Czechia recorded the highest GDPpc of 20302 dollars. Likewise, Slovakia had an average GDPpc of 17602 dollars which is above average level, while Hungary and Poland recorded below-average GDPpc of 13880 dollars and 13418 dollars.

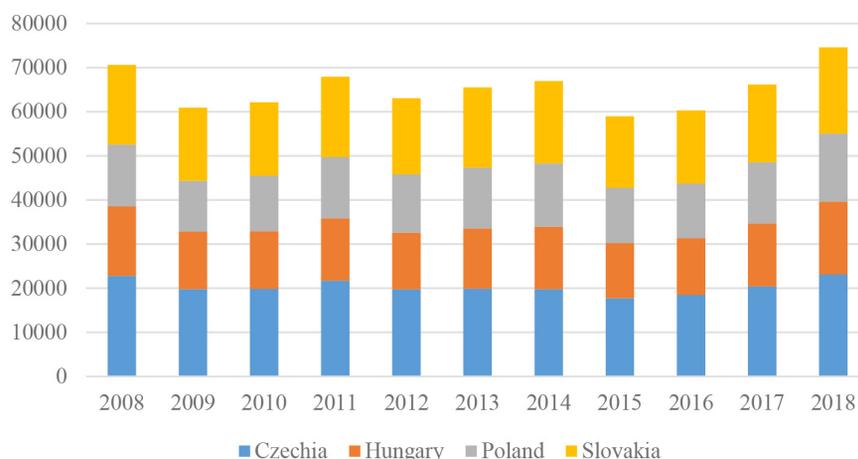


Figure 2. GDPpc in Višegrad group countries

Source: Authors calculation

After presenting the GDP growth rate, there is the level of gross domestic product per capita and share of export in GDP in Višegrad group countries. The average GDPpc of Višegrad group countries was 16601 dollars in the observed period, whereas Czechia recorded the highest GDPpc of 20302 dollars. Likewise, Slovakia had an average GDPpc of 17602 dollars which is above average level, while Hungary and Poland recorded below-average GDPpc of 13880 dollars and 13418 dollars.

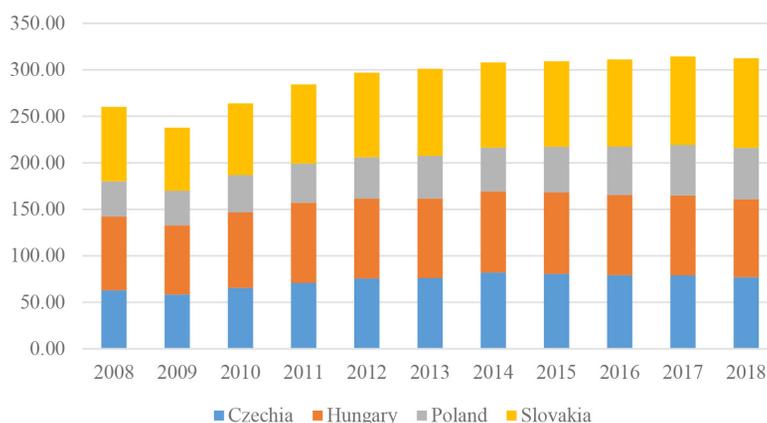


Figure 3. Export in Višegrad group countries

Source: Authors calculation

The economic structure of Višegrad group countries is dominantly based on export. The importance of export is manifested in fact that the average export share is 72.73% of GDP which reveals enough how this component is important for economic development in these countries. The highest mean export share in GDP is identified in Slovakia (87.59%), while the smallest average export share in GDP is recorded in Poland (45.09%) for the observed period.

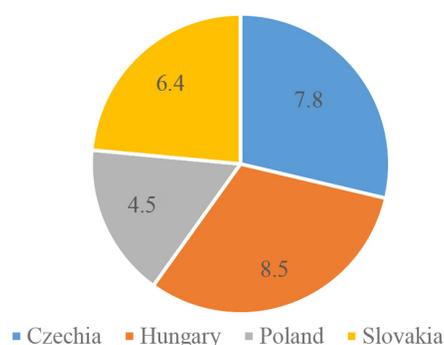


Figure 4. Tourism share in Višegrad group countries (% of GDP)

Source: Authors calculation

The average tourism share in Višegrad group countries was 6.8% of the gross domestic product in 2018. The highest tourism share is manifested in Hungary (8.5%), while the tourism share is the smallest in Poland (4.5%). According to data from 2017, these countries increased tourism contribution to the gross domestic product, respectively Hungary (2.25%), Poland (0.75%), Slovakia, (0.69%) and Czechia (0.40%).

In order to provide the real state of international tourism arrivals in Višegrad group countries, we analyzed their relative trends from 2008 to 2018. The results show that the number of international tourism arrivals mostly increased in Czechia and Slovakia for the observed period. Namely, these countries recorded an average growth rate of 5.22% and 5.18%, while Hungary and Poland had a mean growth rate of 3.88% and 3.96%. Analyzing the countries, the highest growth rate of international tourism arrivals is identified in Slovakia (29.25% in 2015).

On the other hand, the number of international tourism arrivals is mostly decreased in Poland (-10.17% in 2008) and Slovakia (-11.33% in 2017). It is also important to notice that in the last five years, these countries recorded a positive growth rate of this indicator, except Slovakia in 2017.



Figure 5. Relative trend of international tourism arrivals in Višegrad group countries
 Source: Authors calculation

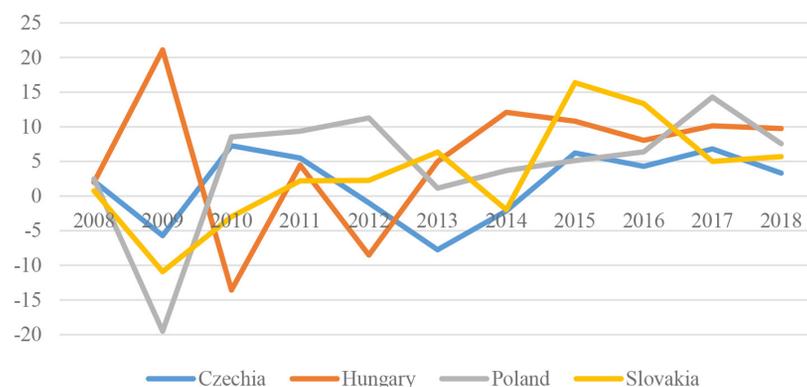


Figure 6. Relative trend of international tourism receipts in Višegrad group countries
 Source: Authors calculation

After analyzing the number of international tourism arrivals, there is a relative trend of international tourism receipts in Višegrad group countries for the observed period. Selected countries recorded a positive growth rate at an average level from 2008 to 2018. The highest average growth of international tourism receipts is identified in Hungary (5.58%) and Poland (4.58%), while Czechia and Slovakia had smaller growth rates of 1.73% and 3.29%. Looking at the countries, the maximum growth rate is recorded in Hungary (21.11% in 2009), Slovakia (16.37% in 2015) and Poland (14.29% in 2017). Further, the international tourism receipts mostly decreased in Poland (-19.51% in 2009) and Hungary (-13.57% in 2010).

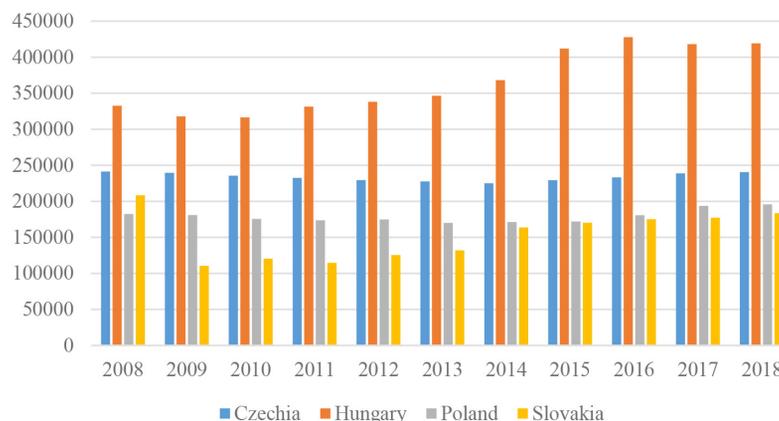


Figure 7. Tourism employment in Višegrad group countries
 Source: Authors calculation

Figure 7 manifests the number of employees in the tourism sector in Višegrad group countries from 2008 to 2018. The average employment in the tourism sector is 233010, where Hungary had the highest mean number of employees in the tourism sector (366143). During the observed period, tourism employment increased in Hungary and Poland, where the number of employees enhances to 86662 and 13300. Contrary, Czechia recorded a slight drop of 645 employees, while a significant drop of 24617 employees is identified in Slovakia.

5. EMPIRICAL ANALYSIS AND FINDINGS

This segment implies descriptive statistics, panel unit root tests, panel data estimation and causality test in order which explanatory variables are significant for economic growth in Višegrad group countries.

Table 2. Descriptive statistics

Country	GDPpc	ITA	ITR	EMP	EXP
Czechia					
Mean	20302.36	27475091	6225.91	233897.6	73.36
Std. Dev.	1657.33	5152.36	421.26	5648.51	7.85
Max	23112	36268000	7024	241236	81.95
Min	17728	21850000	5679	225006	58.35
Hungary					
Mean	13880.36	46219091	5899.55	366142.5	84.01
Std. Dev.	1265.41	6404.57	1133.46	44403.85	4.09
Max	16484	57667000	8162	427715	87.6
Min	12487	39554000	4789	316583	74.39
Poland					
Mean	13417.91	70389000	9722.82	179156.4	45.92
Std. Dev.	1083.81	10159.32	1928.39	8701.32	6.31
Max	15425	85946000	13368	195675	55.24
Min	11541	53840000	7019	170061	37.15
Slovakia					
Mean	17601.55	13319364	2129.64	152840.6	87.59
Std. Dev.	1055.67	2533.21	378.07	33201.46	8.98
Max	19579	17376000	2817	208257	96.37
Min	16197	9773000	1766	110493	68.04
Total					
Mean	16300.54	39350636	5994.48	233009.3	72.73
Std. Dev.	3114.06	22662.47	2937.88	87523.12	17.86
Max	23112	9773000	13368	427715	96.37
Min	11541	85946000	1766	110493	37.14

Source: Authors calculation

Based on the Table, we can see that the mean gross domestic product per capita was 16300 dollars in the Višegrad group from 2008 to 2018. Further, the average share of export is 72.73% of gross domestic product, while Slovakia and Hungary had a mean share above 80% of GDP. Analyzing tourism indicators, we can see that the mean international tourism arrivals were 39350636, where tourism employment was 233009 at the average level for the observed period. Finally, these countries recorded international tourism receipts of 59994 billion dollars.

Table 3. Panel unit root test

H0: Panels contain unit roots				
H1: Panels are stationary				
Variables	Number of panels	LLC test	IPS test	Breitung test
GDPpc	4	-5.810 (0.003)	-2.936 (0.001)	-2.125 (0.016)
ITA	4	-4.543 (0.000)	-3.639 (0.002)	-1.819 (0.034)
ITR	4	-3.853 (0.007)	-3.306 (0.009)	-1.931 (0.027)
EMP	4	-4.247 (0.0267)	-3.696 (0.063)	-1.151 (0.082)

Source: Authors calculation

To identify the stationarity of the panels series, we used panel units root tests such as LLC, IPS and Hadri test. Results from Table 3 show that panel series are stationary at a level of 5% and it provides to implement panel regression models such as the fixed effects model and random effects model.

Table 4. Panel Data Estimation

Variable	RE		FE	
	Coeff.	Prob.	Coeff.	Prob.
GDPpc	0.491	0.000	0.193	0.049
ITA	0.534	0.000	0.364	0.028
ITR	0.139	0.004	0.078	0.035
EXP	0.612	0.003	0.132	0.019
C	3.55	0.000	3.56	0.000
R-squared	0.846		0.396	
Model specification	Chi-Sq. d.f.		Prob.	
Hausman test	2(6) = 6.80		0.339	

Source: Authors calculation

Table 4 manifests the impact of selected tourism indicators such as international tourism arrivals, international tourism receipts and tourism employment on gross domestic product per capita in Višegrad group countries. Results of Hausman test determined that the random effects model is appropriate for the analysis of explanatory variables on economic growth in the observed period. The random model explains 84.6% variations of independent variables and shows a significant effect of selected tourism indicators on gross domestic product per capita in observed countries. The chosen model shows that ITA, ITR and EMP have a positive impact on GDPpc where a 1% increase of these variables improves economic growth for 0.49%, 0.53% and 0.14%. Finally, variable EXP has a positive impact on GDPpc in these economies. Precisely, a 1% increase in export improves economic growth by 0.61% for the observed period. The empirical findings show that these countries should focus on a higher share of the tourism industry in GDP as well as a greater level of international tourism receipts and number of arrivals in order to provide rapid economic activity.

Table 5 represents the causality between economic growth and tourism indicators in Višegrad group countries from 2008 to 2018. The results show that there is bidirectional causality between GDPpc and tourism indicators such as international tourism receipts and international tourism arrivals. On the other hand, the results confirmed that there is unidirectional causality from EMP to GDPpc, as well as EXP to GDPpc. These findings indicate the importance of tourism indicators and export for the economic structure of selected countries.

Table 5. Causality test

Direction	W-stat	Z-stat	P-value
<i>ITA</i> → <i>GDPpc</i>	1.3323	2.9442	0.0029
<i>GDPpc</i> → <i>ITA</i>	1.5805	2.1176	0.0352
<i>ITR</i> → <i>GDPpc</i>	1.7309	2.8034	0.0017
<i>GDPpc</i> → <i>ITR</i>	1.8655	2.6117	0.0226
<i>EMP</i> → <i>GDPpc</i>	1.5263	2.6278	0.0011
<i>GDPpc</i> → <i>EMP</i>	1.6399	0.9051	0.2463
<i>EXP</i> → <i>GDPpc</i>	2.2812	4.6403	0.0000
<i>GDPpc</i> → <i>EXP</i>	1.2791	0.3947	0.6931

Source: Authors calculation

6. CONCLUSION AND DISCUSSION

The tourism sector reflects an essential component in the world economic structure and its faster growth should provide positive effects on the economic development. Višegrad group region has great potential to develop the tourism area and intensify this sector by using all existing natural and material resources. The issue of the tourism sector and economic growth is important for policymakers in creating an appropriate tourism strategy and environment. The chapter evaluated the impact of tourism indicators on economic growth in selected Višegrad group countries such as Czechia, Hungary, Poland and Slovakia for the period 2008- 2018. The empirical study includes the most important tourism indicators such as international tourism arrivals, international tourism receipts and tourism employment, as well as export as one of the most important macroeconomic components in the Višegrad group economy. In this chapter, we estimated the impact of selected variables on economic growth measured by gross domestic product per capita. Empirical results of the panel random effects model show that the tourism sector has a significant and positive effect on economic growth in these countries, which implies that H_0 can be accepted because all tourism indicators positively affect economic growth. Similarly, H_1 , H_2 , H_3 and H_4 can be accepted, where *ITA*, *ITR*, *EMP* and *EXP* have a significant and positive impact on *GDPpc*. Panel random effects model shows that *ITA*, *ITR* and *EMP* have a positive impact on *GDPpc* where a 1% increase of these variables improves economic growth for 0.49%, 0.53% and 0.14%. Finally, variable *EXP* has a positive impact on *GDPpc* in these countries. Namely, a 1% increase in export improves economic growth by 0.61% for the observed period. Further, causality analysis shows that there is a bidirectional relationship between *GDPpc* and tourism indicators such as *ITR* and *ITA*. Also, empirical results identified unidirectional causality from *EMP* to *GDPpc*, as well as, *EXP* to *GDPpc*. These findings show that policymakers should focus on selected tourism indicators, as well as, export, in order to provide lucrative implications for economic growth in Višegrad group countries. The empirical results showed that Poland should use the tourism-led growth before reaching greater development and this would bring rising return performance for the GDP growth. On the other hand, Czechia and Hungary should focus more on achieving higher overall economic development so the spillovers to the tourism sector could be higher (Škrinjarić, 2019). The contribution of this research is reflected in the fact that there are not many studies that have investigated the tourism-led growth hypothesis in this region. Consequently, each kind of new finding on the relationship between tourism and economic growth provides additional views and opinions during profiling economic policy on tourism development.

REFERENCES

- Akadiri, S.S., & Akadiri, A.C. (2019). Examining the Causal Relationship Between Tourism, Exchange Rate, And Economic Growth in Tourism Island States: Evidence From Second-Generation Panel. *International Journal of Hospitality & Tourism Administration*, 22(3), 1-17. <https://doi.org/10.1080/15256480.2019.1598912>
- Akadiri, S. S., Alola, A. A., & Uzuner, G. (2019). Economic policy uncertainty and tourism: evidence from the heterogeneous panel. *Current Issues in Tourism*, 23(20), 1–8. <http://doi.org/10.1080/13683500.2019.1687662>
- Akadiri, S. S., Eluwole, K. K., Akadiri, A. C., & Avci, T. (2020). Does causality between geopolitical risk, tourism and economic growth matter? Evidence from Turkey. *Journal of Hospitality and Tourism Management*, 43, 273-277. <https://doi.org/10.1016/j.jhtm.2019.09.002>
- Antonakakis, N., Dragouni, M., Eeckels, B., & Filis, G. (2019). The tourism and economic growth enigma: Examining an ambiguous relationship through multiple prisms. *Journal of Travel Research*, 58(1), 3–24. <https://doi.org/10.1177/0047287517744671>
- Antošova, G., Vogl, M., & Schraud, M. (2020). Challenges for the Visegrad Group – The Coronavirus Crises and Its Impact on Tourism. *Visegrad Journal on Bioeconomy and Sustainable Development*, 9(1), 28-32. <https://doi.org/10.2478/vjbsd-2020-0006>
- Arslanturk, Y., Balcilar, M., & Ozdemir, Z. A. (2011). Time-varying linkages between tourism receipts and economic growth in a small open economy. *Economic Modelling*, 28(1), 664–671. <https://doi.org/10.1016/j.econmod.2010.06.003>
- Aslan, A. (2014). Tourism development and economic growth in the Mediterranean countries: Evidence from panel Granger causality tests. *Current Issues in Tourism*, 17(4), 363–372. <https://doi.org/10.1080/13683500.2013.768607>
- Audretsch, D. B. & Pena-Legazkue, I. (2012). Entrepreneurial Activity and Regional Competitiveness: an Introduction to the Special Issue. *Small Business Economics*, 39(3), 531–537. <https://doi.org/10.1007/s11187-011-9328-5>
- Badulescu, A., Badulescu, D., Simut, R., & Dzitac, S. (2020). Tourism-economic growth nexus. The case of Romania. *Technological and Economic Development of Economy*, 26(4), 867-884. <https://doi.org/10.3846/tede.2020.12532>
- Balaguer, J., & Cantavella-Jorda, M. (2002). Tourism as a long-run economic growth factor: the Spanish case. *Applied Economics*, 34(7), 877–884. <https://doi.org/10.1080/00036840110058923>
- Balsalobre-Lorente, D., Driha, O. M., Bekun, F. V., & Adedoyin, F. F. (2020). The asymmetric impact of air transport on economic growth in Spain: fresh evidence from the tourism-led growth hypothesis. *Current Issues in Tourism*, 24(4), 1–17. <http://doi.org/10.1080/13683500.2020.1720624>
- Banerjee, O., Cicowiez, M., Morris, E.J., & Moreda, A. (2018). Boosting tourism's contribution to growth and development: Analysis of the evidence. *Review of Development Economics*, 22(3), 1-25. <http://doi.org/10.1111/rode.12385>
- Brida, J. G., Cortes-Jimenez, I., & Pulina, M. (2014). Has the tourism-led growth hypothesis been validated? A literature review. *Current Issues in Tourism*, 19(5), 394–430. <https://doi.org/10.1080/13683500.2013.868414>
- Brida, J.G., Matesanz Gómez, D., & Segarra, V. (2020). On the empirical relationship between tourism and economic growth. *Tourism Management*, 81, 1-11. <https://doi.org/10.1016/j.tourman.2020.104131>
- Can, M., & Gozgor, G. (2016). Revisiting the tourism-growth nexus: evidence from a new index for the market diversification of tourist arrivals. *Current Issues in Tourism*, 21(10), 1157–1170. <https://doi.org/10.1080/13683500.2016.1268103>

- Chen, C.-F., & Chiou-Wei, S.Z., (2009). Tourism expansion, tourism uncertainty and economic growth: new evidence from Taiwan and Korea. *Tourism Management*, 30, 812–818. <https://doi.org/10.1016/j.tourman.2008.2008.12.013>
- Chingarande, A., & Saayman, A. (2018). Critical success factors for tourism-led growth. *International Journal of Tourism Research*, 20(6), 1-19. <https://doi.org/10.1002/jtr.2233>
- Chirilă, V., Butnaru, G.I., & Chirilă, C. (2020). Spillover Index Approach in Investigating the Linkage between International Tourism and Economic Growth in Central and Eastern European Countries. *Sustainability*, 12(18), 1-36. <https://doi.org/10.3390/su12187604>
- Chou, M. C. (2013). Does tourism development promote economic growth in transition countries? A panel data analysis. *Economic Modelling*, 33, 226–232. <https://doi.org/10.1016/j.econmod.2013.04.024>
- Croes, R., Ridderstaat, J., Bąk, M., & Zientara, P. (2021). Tourism specialization, economic growth, human development and transition economies: The case of Poland. *Tourism Management*, 82, 1-12. <https://doi.org/10.1016/j.tourman.2020.104181>
- Danish, & Wang, Z. (2019). Dynamic relationship between tourism, economic growth, and environmental quality. *Journal of Sustainable Tourism*, 26(11), 1–16. <https://doi.org/10.1080/09669582.2018.1526293>
- Dogan, E., Seker, F., & Bulbul, S. (2017). Investigating the impacts of energy consumption, real GDP, tourism and trade on CO₂ emissions by accounting for cross-sectional dependence: A panel study of OECD countries. *Current Issues in Tourism*, 20(16), 1701–1719. <https://doi.org/10.1080/13683500.2015.1119103>
- Ehigiamusoe, K.U. (2020). Tourism, growth and environment: analysis of non-linear and moderating effects. *Journal of Sustainable Tourism*, 28(8), 1174-1192. <https://doi.org/10.1080/09669582.2020.1729164>
- Eyuboglu, S., & Eyuboglu, K. (2019). Tourism development and economic growth: an asymmetric panel causality test. *Current Issues in Tourism*, 23(6), <https://doi.org/10.1080/13683500.2019.1588863>
- Gunduz, L., & Hatemi-J, A. (2005). Is the tourism-led growth hypothesis valid for Turkey? *Applied Economics Letters*, 12(8), 499–504. <https://doi.org/10.1080/13504850500109865>
- Haller, A.-P., Butnaru, G. I., Hârșan, G.-D. T., & Ștefănică, M. (2020). The relationship between tourism and economic growth in the EU-28. Is there a tendency towards convergence? *Economic Research - Ekonomska Istraživanja*, 34(1), 1–25. <https://doi.org/10.1080/1331677x.2020.1819852>
- Hanna, J., Lévi, L., & Petit, S. (2015). Intra-tourism trade, income distribution and tourism endowment: An econometric investigation. *Applied Economics*, 47(21), 2184–2200. <https://doi.org/10.1080/00036846.2015.1005817>
- Ivanová, E. & Masárová, J. (2018). Performance evaluation of the Visegrad Group countries, *Economic Research – Ekonomska Istraživanja*, 31:1, 270-289, <https://doi.org/10.1080/1331677X.2018.1429944>
- Katircioglu, S. T. (2009). Revisiting the tourism-led-growth hypothesis for Turkey using the bounds test and Johansen approach for cointegration. *Tourism Management*, 30, 17–20. <https://doi.org/10.1016/j.tourman.2008.04.004>
- Khan, A., Bibi, S., Ardito, L., Lyu, J., Hayat, H., & Arif, A.M. (2020). Revisiting the Dynamics of Tourism, Economic Growth, and Environmental Pollutants in the Emerging Economies – Sustainable Tourism Policy Implications. *Sustainability*, 12(6), 1-23. <http://doi.org/10.3390/su12062533>
- Kim, H. J., Chen, M. H., & Jang, S. C. (2006). Tourism expansion and economic development: The case of Taiwan. *Tourism Management*, 27(5), 925–933. <https://doi.org/10.1016/j.tourman.2005.05.011>

- Koišová, E., Grmanová, E., Škrovánková, K., & Kostrová, J. (2019). Competitiveness of Regions in the Visegrad Group Countries. *Inzinerine Ekonomika-Engineering Economics*, 30(2), 203–210. <https://doi.org/10.5755/j01.ee.30.2.21746>
- Kožić, I., Sorić, P., & Sever, I. (2020). Contextual factors influencing tourism-led growth: do social and political background matter? *Current Issues in Tourism*, 24(13), 1–11. <https://doi.org/10.1080/13683500.2020.1778648>
- Lean, H. H., & Tang, C. F. (2010). Is the tourism-led growth hypothesis stable for Malaysia? A note. *International Journal of Tourism Research*, 12(4), 375–378. <https://doi.org/10.1002/jtr.759>
- Lee, C.-C., & Chang, C.-P. (2008). Tourism development and economic growth: a closer look at panels. *Tourism Management*, 29, 180–192. <https://doi.org/10.1016/j.tourman.2007.02.013>
- Light, D., Crețan, R., Voiculescu, S., & Jucu, I. S. (2020). Introduction: Changing Tourism in the Cities of Post-Communist Central and Eastern Europe. *Journal of Balkan and Near Eastern Studies*, 22(4), 1–13. <https://doi.org/10.1080/19448953.2020.1775405>
- Lin, V. S., Yang, Y., & Li, G. (2018). Where Can Tourism-Led Growth and Economy-Driven Tourism Growth Occur? *Journal of Travel Research*, 1-14. <http://doi.org/10.1177/0047287518773919>
- Malec, L., & Abrahám, J. (2016). Determinants of tourism industry in selected European countries: a smooth partial least squares approach. *Economic Research - Ekonomska Istraživanja*, 29(1), 66-84. <https://doi.org/10.1080/1331677X.2016.1156554>
- Mirović, V., Kalaš, B., & Pavlović, N. (2020). An empirical analysis of relationship between tourism and economic growth: Panel evidence from Western Balkan countries. In *MODERN MANAGEMENT TOOLS AND ECONOMY OF TOURISM SECTOR IN PRESENT ERA* (pp. 39-52). Association of Economists and Managers of the Balkans - UDEKOM. <https://doi.org/10.31410/tmt.2020.39>
- Mitra, S.K. (2019). Is tourism-led growth hypothesis still valid? *International Journal of Tourism Research*, 21(5), 1-10. <http://doi.org/10.1002/jtr.2285>
- Muhtaseb, B. M., & Daoud, H. E. (2017). Tourism and economic growth in Jordan: Evidence from linear and nonlinear frameworks. *International Journal of Economics and Financial Issues*, 7(1), 214–223.
- OECD (2018). *OECD Tourism Trends and Policies 2018*. OECD Publishing, Paris. <http://dx.doi.org/10.1787/tour-2018-en>
- Ongan, S., & Demiroz, D. M. (2005). The contribution of tourism to the long-run Turkish economic growth. *Ekonomicky časopis*, 53(9), 880–894.
- Öztürk, M., Ihtiyar, A., & Aras, O. N. (2018). The Relationship Between Tourism Industry and Economic Growth: A Panel Data Analysis for ASEAN Member Countries. *Perspectives on Asian Tourism*, 35–58. https://doi.org/10.1007/978-981-13-2463-5_3
- Pérez-Rodríguez, J. V., Rachinger, H., & Santana-Gallego, M. (2021). Testing the validity of the tourism-led growth hypothesis under long-range dependence. *Current Issues in Tourism*, 24(6), 768–793. <https://doi.org/10.1080/13683500.2020.1744537>
- Perles-Ribes, J. F., Ramón-Rodríguez, A. B., Rubia, A., & Moreno-Izquierdo, L. (2017). Is the tourism-led growth hypothesis valid after the global economic and financial crisis? The case of Spain 1957–2014. *Tourism Management*, 61, 96–109. <https://doi.org/10.1016/j.tourman.2017.01.003>
- Pjanić, M., & Mitrašević, M. (2020). The impact of tourism on GDP growth in the European Union countries. In *MODERN MANAGEMENT TOOLS AND ECONOMY OF TOURISM SECTOR IN PRESENT ERA* (pp. 53-66). Association of Economists and Managers of the Balkans - UDEKOM. <https://doi.org/10.31410/tmt.2020.53>
- Podovac, M. (2021). Analysis of the tourists' motivation for the staying in cities: The case study of the City of Belgrade. *The Annals of the Faculty of Economics in Subotica*, 57(45), 51-65. <https://doi.org/10.5937/AnEkSub.2145051P>

- Raza, S. A., & Shah, N. (2017). Tourism growth and income inequality: does Kuznets Curve hypothesis exist in top tourist arrival countries. *Asia Pacific Journal of Tourism Research*, 22(8), 874–884. <https://doi.org/10.1080/10941665.2017.1343742>
- Salifou, C. K., & Haq, I. ul. (2016). Tourism, globalization and economic growth: a panel cointegration analysis for selected West African States. *Current Issues in Tourism*, 20(6), 664–667. <http://doi.org/10.1080/13683500.2016.1175421>
- Sokhanvar, A., Çiftçioğlu, S., & Javid, E. (2018). Another look at tourism- economic development nexus. *Tourism Management Perspectives*, 26, 97–106. <https://doi.org/10.1016/j.tmp.2018.03.002>
- Solarin, S. A. (2016). Does tourism-led growth hypothesis exist in Mauritius? Evidence from disaggregated tourism markets. *Current Issues in Tourism*, 21(9), 964–969. <https://doi.org/10.1080/13683500.2016.1232377>
- Suresh, K. G., Tiwari, A. K., Uddin, G. S., & Ahmed, A. (2017). Tourism, trade, and economic growth in India: a frequency-domain analysis of causality. *Anatolia*, 29(3), 1–7. <https://doi.org/10.1080/13032917.2017.1408025>
- Škrinjarić, T. (2019). Examining the Causal Relationship between Tourism and Economic Growth: Spillover Index Approach for Selected CEE and SEE Countries. *Sustainability*, 7(1), 1-19. <https://doi.org/10.3390/economies7010019>
- Tang, C. F., & Tan, E. C. (2017). Tourism-Led Growth Hypothesis: A New Global Evidence. *Cornell Hospitality Quarterly*, 59(3), 304–311. <http://doi.org/10.1177/1938965517735743>
- Usmani, G., Akram, V., & Praveen, B. (2020). Tourist arrivals, international tourist expenditure, and economic growth in BRIC countries. *Journal of Public Affairs*, 1-8. <https://doi.org/10.1002/pa.2202>
- Wu, T.P., & Wu, H.C. (2018). Tourism and economic growth in Asia: A bootstrap multivariate panel Granger causality. *International Journal of Tourism Research*, 21(1), 1-10. <https://doi.org/10.1002/jtr.2243>
- Xia, W., Dogan, B., Shahzad, U., & Adedoying, F.F., Poola, A., & Bashir, M.A. (2021). An empirical investigation of tourism-led growth hypothesis in the European countries: evidence from augmented mean group estimator. *Portuguese Economic Journal*, <https://doi.org/10.1007/s10258-021-00193-9>
- Yazdi, S.K. (2019). Structural breaks, international tourism development and economic growth. *Economic Research – Ekonomska istraživanja*, 32(1), 1765-1776. <https://doi.org/10.1080/1331677X.2019.1638279>
- Zhang, J., & Cheng, L. (2019). Threshold Effect of Tourism Development on Economic Growth Following a Disaster Shock: Evidence from the Wenchuan Earthquake, P.R. China. *Sustainability*, 11(2), 1-22. <https://doi.org/10.3390/su11020371>



Analysis of Tourism Demand in Selected WB Countries during the COVID-19 Pandemic

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Abstract: *The subject of this chapter is tourism demand-side investigation in the following Western Balkans (WB) countries - Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia during the period 2019 M1 – 2021 M6. The chapter addresses the changing structure of tourism demand with the increased share of domestic visitors in all observed WB economies. Furthermore, the ongoing health crisis has emphasized the fundamental problems of tourism sectors in observed WB economies: very high seasonality and insufficient attractiveness of certain types of destinations. Improving the attractiveness of destinations (especially cities) for domestic guests through the development of modern tourism products, implementation of advanced ICT solutions, and customized marketing and promotional activities has the potential to improve the structure of guests and consequently mitigate the sector's resistance to similar shocks in the future.*

1. INTRODUCTION

The outbreak of the contagious coronavirus, the twin threat to lives and livelihoods (McKinsey, 2021), has disrupted businesses and challenged societies worldwide (Hussain & Fuste-Forne, 2021). The COVID-19 pandemic has led to the global GDP plummeting, followed by substantial reductions in income and liquidity, as well as complete or significant loss of international demand (Arbulu et al., 2021). Moreover, the pandemic has further increased inequalities and global poverty by disproportionately hitting women and other vulnerable categories (Palomino et al., 2020; Moreno-Luna et al., 2021). Although no industry has been unaffected, the sectoral distribution of the pandemic's destructive effects has not been equal. The sectors most affected are those where a relatively high proportion of total revenue is generated by person-to-person contact and those directly exposed to government restrictions (Bank of England, 2020).

The persistent and lingering health crisis caused by the outbreak of the COVID-19 has strongly affected the world in general and the tourism industry in particular (Hussain & Fuste-Forne, 2021). Even though tourism has been facing continuous expansion during the last couple of decades as one of the fastest-growing economic sectors globally (Moreno-Luna et al., 2021), the restrictions imposed to mitigate the further spread of the disease have had “the effect of putting the industry into a form of forced hibernation” (Bausch et al., 2020). According to official reports (UNWTO, 2021a; Freifer, 2021), the year 2020 is considered to be “*the worst year in the history of tourism*”, with the overall number of international tourist arrivals decline of 74% in comparison to the previous year (y/y growth rate) (UNWTO, 2021a). Extensive lockdowns and imposed social distancing measures have hit the industry at the national, regional, and global levels (Hussain & Fuste-Forne, 2021). In 2019, the sector accounted for 10.3% of the worldwide GDP, which translated to an 8.9 trillion USD contribution to the overall newly created value with 848 billion USD capital investments (WTTC, 2021). Over the last five years, one in

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four new jobs was created in travel and tourism, making the sector one of the critical drivers of economic growth and prosperity and a valuable partner in governments' employment schemes (WTTC, 2021). Nevertheless, travel and tourism must not be perceived as a "stand-alone sector" considering extremely high levels of sectoral interdependence. According to official statistics (UNWTO, 2021a) more than 100 million jobs in tourism are directly affected by the pandemic in addition to sectors associated with the industry which are estimated to provide employment for 144 million workers globally.

Pre COVID-19 tourism industry was dominated by mass "sun-and-beach" tourism. The amplitude and intensity of the ongoing health crisis have redefined the existing tourism demand and supply (Rogerson & Rogerson, 2021). Increased risks and sector vulnerability caused by the coronavirus outbreak have moved the authorities' focus to protection and resilience (Prayag, 2020), with health safety and hygiene measures as critical components of the sector's responsible recovery (Hussain & Fuste-Forne, 2021). Since the distance of travel became a risk factor *per se* (Zenker & Kock, 2020), destinations are urged to develop immediate recovery strategies designed to revive domestic tourism demand (Arbulu et al., 2021; Calderon et al., 2021; Duro et al., 2021; Buckley, 2020; Hussain & Fuste-Forne, 2021; Moreno-Luna et al., 2021; Rogerson & Rogerson, 2021; Volgger et al., 2021, etc.). Marketing messages are designed to reflect more on empathy and solidarity to create an emotional attachment with potential visitors (Hang et al., 2020). Furthermore, domestic confidence-building strategies are based on safety-relating messaging accompanied by the promotion of restorative experience (Volgger et al., 2021).

The COVID-19 pandemic represents the opportunity for the tourism industry to re-start on a more resilient, inclusive, and eco-friendly basis (UNWTO, 2021b). The coronavirus outbreak "has given nature a healing time" by limiting humankind's impact on the natural environment (Moreno-Luna et al., 2021). In that regard, the 21st century has been characterized by continuing contamination of natural resources (Đukić et al., 2016). Consequently, work towards a responsible recovery of the industry should be based on the following five cornerstones (UNWTO, 2021b): (1) reduce socio-economic impact of crisis with particular emphasis on vulnerable population groups; (2) soar competitiveness and build sector's resilience; (3) implement innovations and modern digital solutions; (4) promote sustainability and eco-friendly growth; and (5) transform sector towards achieving sustainable development goals (SDGs).

Given the context and the importance of the tourism industry, both on a national and international level, the subject of this chapter is tourism demand-side investigation in the following Western Balkans countries - Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia during the period 2019 M1 – 2021 M6. The purpose of the chapter is to obtain deeper insights into the changing patterns of tourism demand in the observed WB economies. The results indicate the changing structure of tourism demand with the increased share of domestic visitors in all observed WB economies.

The paper is organized as follows. After introductory remarks, a literature review with a brief summary of main research findings has been presented. The third part of the paper sheds light on the current trends and perspectives in the tourism sector globally, while the fourth and fifth sections are completely devoted to the analysis of tourism demand in selected WB countries. The paper concludes with future research directions and recommendations for sustainable tourism recovery in observed WB economies during the post-COVID period.

2. LITERATURE REVIEW

The examination of the impacts of natural disasters (Rossello et al., 2020), climate changes (Hamilton et al., 2005; Siddiqui & Imran, 2018), tourist attacks (Feridun 2011; Albu, 2016), economic shocks/crises (Kapiki, 2012), and diseases (Leon et al., 2020) on tourism and/or tourism demand has been in the focus of the relevant literature from decades now. Travel and tourism have proved to be a fragile industry that can be profoundly affected by natural and human disasters (Hussain & Fuste-Forne, 2021), which made the concept of tourism vulnerability widely explored in the existing literature. A large body of empirical literature has found a strong connection between risk perception and tourist demand expressed as a willingness to purchase (Nardi et al., 2020). Considering that expenditures on travel represent discretionary spending (Scott et al., 2008), increased uncertainty and, consequently, risk perception directly affect tourists' intention to travel and visit vulnerable areas (Ritchie & Jiang, 2019).

Social disasters such as pandemics are not limited by physical boundaries, which is why they are considered one of the essential travel deterrents (Scott et al., 2008). The new millennium has already witnessed three pandemics - SARS-CoV, MERS-CoV and Ebola, and the COVID-19 (Hussain & Fuste-Forne, 2021). Nevertheless, the coronavirus outbreak has been perceived as different and unique due to the virus' strength and speed of spread. Increased safety and security concerns, as well as imposed government restrictions, have powerfully reshaped many aspects of tourism supply and demand (Gosling et al., 2020). The changed perception of risk has led visitors to avoid crowded and "mass-tourism" destinations and choose more familiar and less overcrowded destinations instead (Moreno-Luna et al., 2021). The changing patterns of tourism demand have shed light on domestic tourism and local markets as an immediate and suitable response to the crisis outbreak. It is considered that the "substitution effect" and shift to domestic tourism may to a certain extent mitigate the COVID-19 pandemics' harmful effects.

Domestic markets are perceived as closer and safer options to travel as they provide visitors with a higher sense of security expressed in terms of the probability to get infected (Calderon et al., 2021). Existing literature indicates that the presence of international tourists and the rise of the number of infected cases harm domestic tourists' booking intentions (Volgger et al., 2021). Besides, the implementation of domestic-tourism-reliance strategies has additional benefits such as (1) more considerable contribution to local development through higher environment conservation (Sheldon & Dwyer, 2010), (2) higher possibility of purchasing local products and services and consequently promotion of domestic entrepreneurship (Scheyvens, 2007), and (3) contribution to balanced regional development (Haddad et al., 2013; Arbulu et al., 2021).

Considering the effectiveness of marketing variables that tourism destinations can apply as disaster recovery tools, it is crucial to bear in mind that in times of social and natural disasters, solidarity- and empathy-oriented communication has proven itself to be effective (Volgger et al., 2021). For that reason, health and safety issues should be implemented in marketing campaigns to build visitors' trust and ensure the sector's sustainable recovery. Moreover, after the break on mobility through extensive government restrictions and quarantining, nature-based tourism and outdoor activities are preferred destinations (Calderon et al., 2021). "Visiting friends and relatives" and short business travels are also perceived as cornerstones of effective immediate tourism recovery strategies.

National branding and the establishment of local destinations' images represent the critical factor of immediate post-COVID tourism recovery strategies. The growth of the brand value of a

given tourist destination significantly contributes to the visitors' satisfaction (Opute et al., 2021). Furthermore, it has been common knowledge that travelling has a strong positive impact on physical and mental wellbeing. Consequently, marketing messages should be designed to reflect previous tourist experiences and restore the sense of necessity to travel. Disaster recovery literature indicates that repeat visitors are more likely to return to affected areas than those who have never been there before (Li et al., 2008). In addition to retentive advertising, discounts and flexible cancellation policies positively correlate with booking intentions, especially in the short run (Volgger et al., 2021).

Significant changes have been presented in the past couple of decades due to technological innovation, liberalization, and globalization (Lončar et al., 2016). Technological improvements and digital technologies have changed the nature of risk and created new ecosystems (Kaličanić & Lazić, 2018). The increased implementation and usage of digital technologies and big data (Bradić-Martinović, 2021) have made the travel and tourism industry more resilient and competitive (Opute et al., 2021), which was one of the critical competitive advantages in the COVID-19 environment. Although some tourist destinations have organized virtual visits and online tours, the travel and tourism sector cannot “develop its full social, cultural, and economic potential solely based on online experience” (Moreno-Luna et al., 2021). The sense of travel and direct experience of tourist destinations and attractions make the essence of total tourist satisfaction and experience.

3. THE COVID-19 PANDEMIC AND TOURISM INDUSTRY – TRENDS AND PERSPECTIVES

The COVID-19 pandemic and measures imposed to suppress its adverse effects have abruptly hit the travel and tourism industry. In 2020 the sector suffered losses of 4.5 trillion USD (WTTC, 2021), which is estimated to be almost 18 times higher than the losses sector suffered as a consequence of the Global financial crisis outburst in 2008. Compared with domestic spending, the total decline of international spending was larger and accounted for a 69.4% decrease compared to 2019 (y/y rate) (Figure 1).

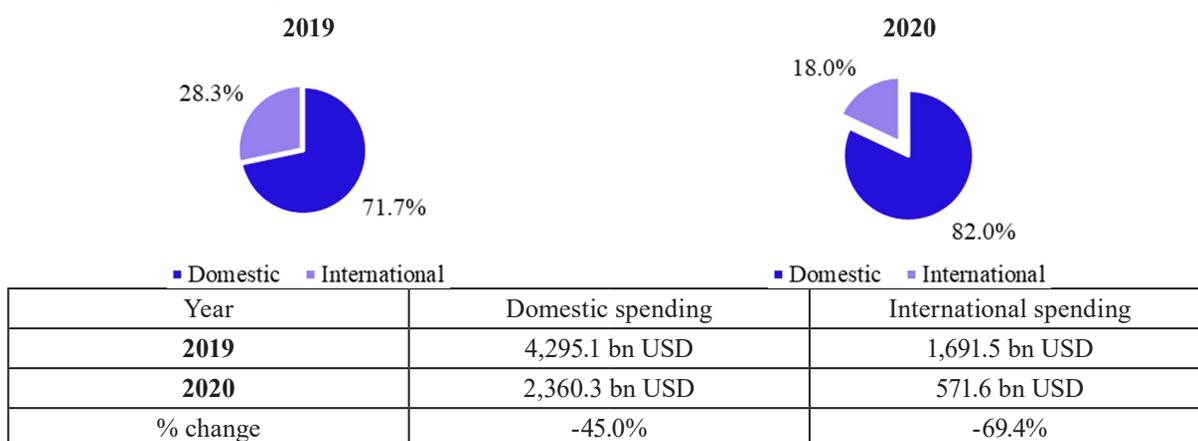


Figure 1. Sector characteristics – Domestic vs International spending (in billion USD)

Source: WTTC, 2021

According to official statistics (WTTC, 2021), business spending shrunk by 61% in 2020 compared to the previous year, which is 11.6 percentage points higher than the fall of leisure spending (Figure 2).

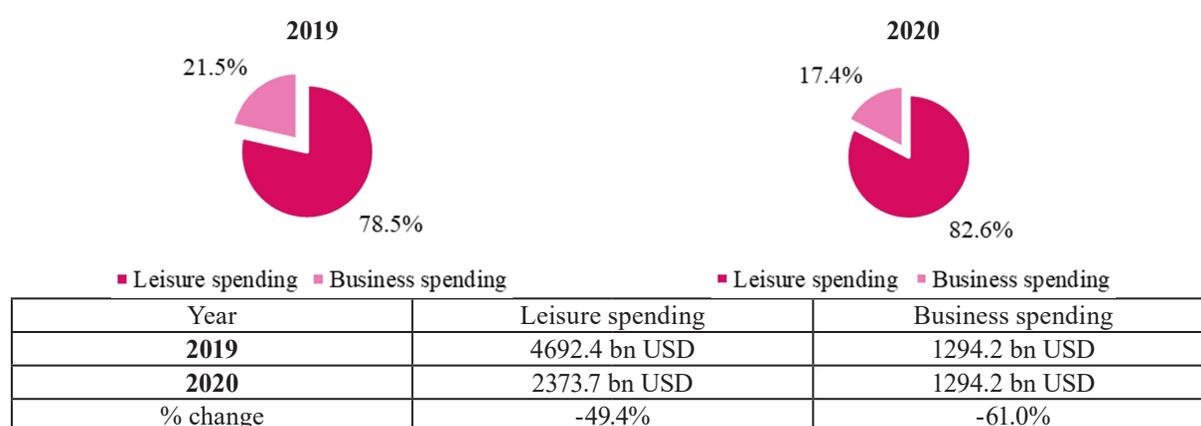


Figure 2. Sector characteristics – Leisure vs Business spending (in billion USD)

Source: WTTC, 2021

The biggest crisis in the history of the travel and tourism industry continues deep into 2021. On the global scale, the number of international tourist arrivals in the first five months of 2021 is estimated to be 85% lower compared to the same period of the year 2019 (Table 1).

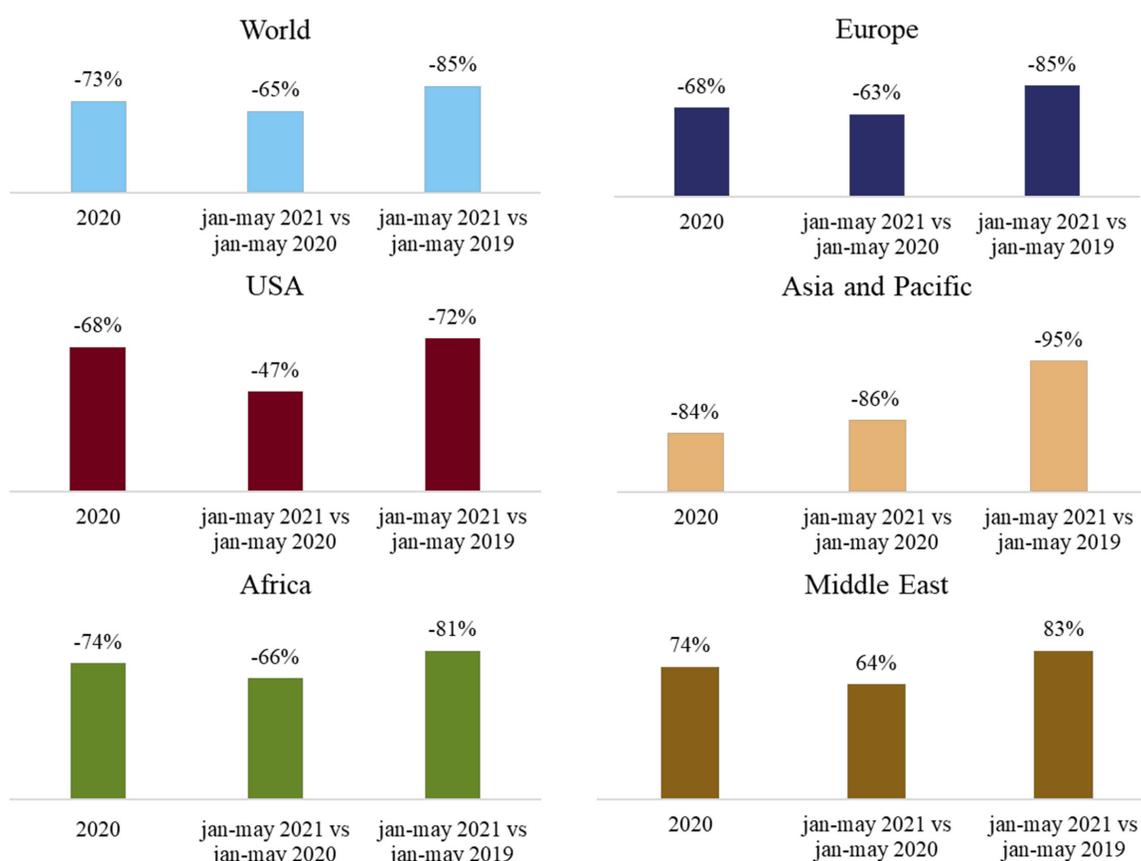


Figure 3. Number of international tourist arrivals, % change

Source: UNWTO, 2021a

The regional distribution of the COVID-19 pandemic impacts on tourism (Table 1) indicates certain inequalities. Asia and the Pacific suffered the most - the number of international tourist arrivals was 95% lower in the first five months of 2021 compared to 2019. Compared to other regions, in the first five months of 2021 USA accounted for a comparatively lowest loss of 72% compared to the same period in 2019.

When it comes to the Western Balkans, 2020 brought a sharp decline in tourism receipts and remittances due to the travel restrictions and labor market shocks in source countries (OECD, 2021). The average drop of the tourist arrivals in the Western Balkans region ranged from 80-90% during the spring and 40-60% during the summer of 2020 (Nientied & Shutina, 2020). Nevertheless, recovery in the USA and China in 2021 influenced Europe's external demand, with positive spillover effects on the Western Balkans region. Consequently, the region has experienced a faster-than-expected recovery which has been strongly supported by domestic reopening and consumption and tourism inflows rebound (OECD, 2021).

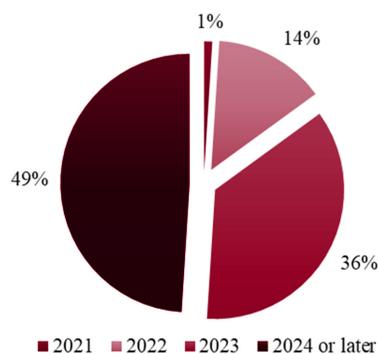


Figure 4. The year in which the number of international tourist arrivals is predicted to return to pre-COVID-19 levels

Source: UNWTO, 2021a

In June 2021, the total number of countries that have fully closed their borders accounted for 63, which is six less than February 2021. The vast majority of these destinations are countries located in the region of Asia and Pacific. In contrast, only seven destinations with completely closed borders are located in Europe, making the region the most liberal on the issue. According to official reports (UNWTO, 2021a), most experts consider returning the number of international tourist arrivals to pre-outbreak levels in 2024 or later (Figure 4).

4. TOURISM SECTOR IN SELECTED WB COUNTRIES

European countries are traditionally well-developed tourist destinations. France, Italy, Spain, Greece, and other EU countries have evidenced record tourist turnover in the last ten years. During this period, rapid tourism development in transition economies of the Western Balkans has also been recorded. Croatia and Montenegro, which offer sun and beach tourism products, are leaders. Nevertheless, they are undoubtedly followed by other countries in the region. *“The increasing importance of tourism in the economic structure of Balkan countries is undeniable”* (Cvetkoska et al., 2017, p. 32). The biggest obstacle to the development of the industry was (and in some cases still is) poor or non-existent infrastructure - roads, accommodation facilities of a higher category, more developed tourist products, etc. In the last 15 years, supply quality has risen, with direct reflection to demand. It is also noteworthy to point out initiatives for a joint offer in thematic regional tours. It allows for attracting guests from distant countries such as China and Japan. The EU supports this concept by co-financing the Regional Cooperation Council projects. One example is a tour that includes monuments built during the socialist era (1950-1990) - The Balkan Monumental Trail (BMT).

The importance of the industry in selected WB countries can be perceived through its participation in national GDP (Table 1). As presented, all selected WB countries experienced increasing

participation rates. The annual growth rate of participation is 5% in Montenegro, North Macedonia, and Serbia and 1.4% in Bosnia and Herzegovina. The growth of the tourism sector in the WB countries has become the main lever of economic development (Selimi, et. al., 2017, p. 20).

Table 1. Travel and tourism direct contribution to GDP – share in GDP (%)

	Bosnia and Herzegovina	Montenegro	North Macedonia	Serbia
2011	2.40	9.00	1.35	1.70
2012	2.10	10.00	1.40	1.80
2013	2.20	10.50	1.60	1.80
2014	2.30	10.00	1.70	2.00
2015	2.40	11.50	1.75	2.30
2016	2.50	11.00	1.80	2.30
2017	2.60	11.50	1.85	2.30
2018	2.65	12.50	1.90	2.40
2027 ^f	3.40	15.70	2.15	2.80

Note: 2017-2027 annualized real growth adjusted for inflation (%), but due to various statistical issues, numbers can be interpreted as indicative values

Source: World Travel & Tourism Council (WTTC), 2020

Table 2 shows the major tourism development indicators in selected WB countries in the most successful, pre-COVID-19 year. Based on the data presented, it is noticeable that Montenegro is the regional leader in the number of tourist arrivals, followed by Serbia, Bosnia and Herzegovina and Macedonia. However, it has to be noted that Montenegro recorded the lowest growth rate of tourist visits in the same year (9%), while the other three countries have a growth rate higher than 10%. Montenegro also has a significantly higher share of tourism in total exports (54%) in comparison to other WB countries, whose share ranges from 4-13%.

Table 2. Key tourism indicators for selected WB countries for 2019

Countries / Key indicators for 2019	Bosnia and Herzegovina	Montenegro	North Macedonia	Serbia
International tourist arrivals (mil)	1.2	2.5	0.8	1.8
International tourism receipts (mil \$)	1,100	1,200	400	1,600
Average receipts per arrival (\$)	950	490	520	870
International tourism exports (mil \$)	1,200	1,300	400	2,000
Share of tourism of total export	13%	54%	4%	7%
Average annual growth for last ten years for tourist arrivals	14%	9%	11%	11%
Total contribution of T&T to employment (% total employment)	9.6%	32.8%	6.8%	6.2%

Source: Chamber Investment Forum Western Balkans 6, 2020, p. 15.

Another indicator, which shows progress in all countries except Macedonia, in the period 2017-2019, is the travel and tourism competitiveness index. In 2017, the survey covered 136 countries, with Bosnia and Herzegovina ranking 113, Montenegro 72, North Macedonia 89, and Serbia 95. In 2019, the survey covered 140 countries, with Bosnia and Herzegovina raising the rank to 105, Montenegro raising the rank to 67, North Macedonia lowering the rank to 101, and Serbia also raising the rank to 83. It can be concluded that selected WB countries have realized the potential of the tourism sector and made significant steps towards its development, which is visible through the results achieved.

Whereas tourism growth rates in the selected WB countries were above overall averages before the crisis, the COVID-19 pandemic has impacted their tourism sector more than the global and European averages (WTTC, 2020), especially in 2020. The data show (ETC, 2021, p. 10) that the worst results in tourism in the last 30 years were achieved. All European countries recorded a decline in tourist traffic, from 40% in Austria to 70% in Montenegro, observed in overnights. The beginning of the vaccination process, which started massively in 2021, has raised expectations for the sector's recovery. Improved tests and faster virus detection have also brought relief.

5. ANALYSIS OF TOURISM DEMAND DURING THE COVID-19 PANDEMIC IN BOSNIA AND HERZEGOVINA, MONTENEGRO, NORTH MACEDONIA, AND SERBIA

Tourist data of WB countries are covered at the national levels. Nevertheless, available data on tourist arrivals and overnights indicate that national statistics are not aligned with best practices. Considering official statistical reports' structure and content, we selected four WB countries - Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia, and excluded Albania and Kosovo*. Despite specific differences listed below, the data for selected WB countries provide comparability. Bosnia and Herzegovina (data source: Agency for Statistics of Bosnia and Herzegovina, <https://bhas.gov.ba/?lang=en>), North Macedonia (data source: Republic of North Macedonia State Statistical Office, https://www.stat.gov.mk/Default_en.aspx), and Serbia (data source: Statistical Office of the Republic of Serbia, <https://www.stat.gov.rs/en-US/>) have aggregated data on monthly tourist arrivals and overnight stays for all types of accommodation. Montenegro (data source: Statistical Office of Montenegro, <https://www.monstat.org/eng/index.php>) keeps separate collective and individual accommodation records. Data for collective accommodation are kept monthly, and only annual reports are publicly available for individual accommodation. Accordingly, the analysis for Montenegro performed monthly and quarterly is based only on data from collective accommodation or in total for annual data.

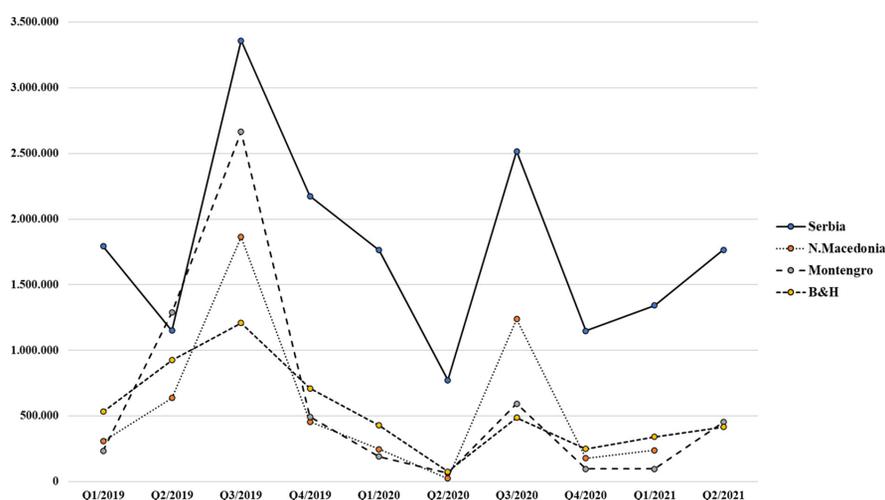
Tourism turnover in selected WB countries in 2020 started as a record year. The volume of tourist traffic in the first two months of 2020 increased in most countries compared to 2019. The first significant decrease was recorded in May, as presented in Table 3.

Table 3. Growth rates of tourist traffic in the first three months of 2020 compared to 2019 in selected WB countries (overnights)

Countries	January 2020/2019	February 2020/2019	March 2020/2019	August 2020/2019	Total 2020/2019	First half 2021/2020
Bosnia and Herzegovina	17.59%	-2.82%	-63.62%	-54%	-63.22%	49.87%
Montenegro	6.37%	14.90%	-59.73%	-73%	-79.82%	115.51%
North Macedonia	6.86%	3.44%	-62.80%	-24%	-47.97%	53.98%
Serbia	25.11%	20.07%	-45.72%	-17%	-38.44%	22.49%

Source: Authors calculation

In April 2020, due to the COVID-19 outbreak, all the observed countries imposed lockdowns and quarantining measures, more or less restrictive. Serbia, for instance, introduced a curfew from 8 pm to 5 am and a complete embargo on mobility for residents over the age of 65. Until the end of March, cafes, bars, shopping malls, and public transportation were closed. The situation had a massive impact on all dimensions of personal and social life and, consequently, the economy. The consequences for tourism turnover were devastating. Bosnia and Herzegovina recorded a decrease of 63.22%, North Macedonia of 47.97%, Montenegro of 88.64% (for all types of accommodation), and Serbia 38.44% of touristic overnights (y/y). In 2021 demand slowly begins to recover.



Note: Montenegro data include only collective accommodation.

Figure 5. Overnights in period January 2019 - June 2021, quarterly data for selected WB countries

Source: Authors calculation

The quarterly data covering the period of January 2019 to June 2021 (Figure 5) imply that the seasonality of tourist demand is discernible (reaching the peak in Q3). Nevertheless, the pattern was much more pronounced in 2019 compared to 2020. The first two quarters of 2021 also confirmed the beginning of pattern formation. The existence of pronounced seasonality is a massive challenge for the tourism sector of the observed WB countries.

We will observe below in more detail and on a country level the characteristics of tourist demand in selected WB countries in 2019, 2020, and the first half of 2021.

5.1. Bosnia and Herzegovina

Bosnia and Herzegovina has recognized the importance of tourism as a significant stimulus to economic growth and development. According to the World Tourism Organization, from 1995 to 2019, the country recorded one of the highest tourism growth rates globally. Bahtic (2015) highlights five comparative advantages of tourism in Bosnia and Herzegovina: (1) compactness – you need up to five hours of car drive to tour the country, whether it's north-south or east-west direction; (2) diversity of the offer; (3) diverse climate; (4) separate micro areas with specific flora and fauna, clean rivers and lakes, and indigenous settlements specific to the site; (5) cultural heritage. On the contrary, Bosnia and Herzegovina possesses underdeveloped transport and telecommunications infrastructure. The lack of high-quality accommodation capacity is also a limiting development factor.

Table 4 shows Bosnia and Herzegovina's monthly tourism demand for 2019, 2020 and the first half of 2021. In 2019 (pre-COVID year), the tourist demand was characterized by expressed seasonality and remarkable participation of foreign guests. The lowest tourist turnover was attained in January when the share of foreign guests reached 61%. The top of the tourist season was in August, with as many as 81% of foreign guests. Given the participation of domestic guests in the demand structure, it is understandable that the average stay time (ALS) is higher in January (2.35 days) compared to August (2.22 days), which in both cases indicates a relatively short average stay in Bosnia and Herzegovina.

Table 4. Touristic turnover in Bosnia and Hercegovina in 2019, 2020 and first half of 2021 (monthly)

M/Y	Arrivals			Overnights			ALS
	Domestic	International	Total	Domestic	International	Total	
1/2019	26,412(39)	40,972(61)	67,384(100)	56,797(36)	101,565(64)	158,362(100)	2.35
1/2020	27,410(35)	50,909(65)	78,319(100)	59,697(32)	126,514(68)	186,211(100)	2.38
1/2021	33,633(68)	15,584(32)	49,217(100)	76,322(63)	45,509(37)	121,831(100)	2.92
2/2019	28,349(38)	45,670(62)	74,019(100)	55,730(32)	119,941(68)	175,671(100)	2.37
2/2020	29,906(41)	42,650(59)	72,556(100)	58,175(34)	112,538(66)	170,713(100)	2.35
2/2021	32,835(69)	20,11(31)	52,948(100)	67,623(63)	53,100(37)	120,723(100)	2.28
3/2019	34,332(36)	61,518(64)	95,850(100)	66,202(33)	131,690(67)	197,892(100)	2.06
3/2020	13,882(48)	15,103(52)	28,985(100)	33,554(47)	38,437(53)	71,991(100)	2.48
3/2021	25,387(61)	16,564(39)	41,951(100)	58,299(59)	40,902(41)	120,723(100)	2.36
4/2019	39,706(27)	105,204(73)	144,910(100)	80,856(28)	206,455(72)	287,311(100)	1.98
4/2020	1,271(83)	268(17)	1,539(100)	5,541(71)	2,310(29)	7,851(100)	5.10
4/2021	21,746(62)	13,582(38)	35,328(100)	52,273(62)	31,772(38)	84,045(100)	2.38
5/2019	35,663(23)	117,143(77)	152,806(100)	79,316(28)	207,250(72)	286,566(100)	1.88
5/2020	4,387(91)	52(9)	4,839(100)	12,081(88)	1,670(12)	13,751(100)	2.84
5/2021	34,380(56)	26,609(44)	60,989(100)	74,075(55)	57,792(45)	131,867(100)	2.16
6/2019	45,103(25)	134,215(75)	179,318(100)	104,676(30)	245,762(70)	350,438(100)	1.95
6/2020	19,745(74)	6,839(26)	26,584(100)	41,654(76)	13,477(24)	55,131(100)	2.07
6/2021	47,521(54)	40,670(46)	88,191(100)	109,349(55)	90,823(45)	200,172(100)	2.27
7/2019	36,888(19)	156,585(81)	193,473(100)	94,123(22)	330,273(78)	424,396(100)	2.19
7/2020	38,150(80)	9,374(20)	47,524(100)	12,090(83)	22,826(17)	134,916(100)	2.84
8/2019	39,047(19)	165,554(81)	204,601(100)	97,360(21)	357,593(79)	454,953(100)	2.22
8/2020	52,762(73)	19,956(27)	72,718(100)	158,048(75)	52,246(25)	210,294(100)	2.89
9/2019	40,716(24)	129,010(76)	169,726(100)	87,541(27)	240,968(73)	328,509(100)	1.94
9/2020	40,199(73)	15,055(27)	55,254(100)	106,764(75)	34,733(25)	141,497(100)	2.56
10/2019	41,432(25)	124,935(75)	166,367(100)	86,414(26)	240,286(74)	326,700(100)	1.96
10/2020	29,357(67)	14,406(33)	43,763(100)	71,056(69)	32,428(31)	103,484(100)	2.36
11/2019	35,899(37)	60,522(63)	96,421(100)	71,485(37)	119,201(63)	190,686(100)	1.98
11/2020	19,658(67)	9,592(33)	29,250(100)	42,362(66)	21,844(34)	64,206(100)	2.20
12/2019	39,435(41)	56,891(59)	96,326(100)	73,433(38)	119,535(62)	192,968(100)	2.00
12/2020	27,311(69)	12,274(31)	39,585(100)	50,737(63)	30,201(37)	80,938(100)	2.04
Total							
2019	442,982(27)	1,198,219(73)	1,641,201(100)	953,933(28)	2,420,519(72)	3,374,452(100)	2.06
2020	304,038(61)	196,878(39)	500,916(100)	751,759(61)	489,224(39)	1,240,983(100)	2.48
1-6/2021	195,502(59)	133,122(41)	328,624(100)	437,941(58)	319,898(42)	757,839(100)	2.31

Note: numbers in brackets are percentages

Source: Agency for Statistics of Bosnia and Herzegovina, 2021.

The first two months of 2020 were promising, especially given the January 2020 turnover growth compared to the previous year's same month, which accounted for 17.59%. In these months, the share of domestic demand in total tourist traffic was higher than average and even significantly higher than in the busiest month. With the announcement of the COVID-19 pandemic, the situation changed significantly. In March 2020, tourist demand shrank at a rate of 63.62% (CAGR) compared to the same month the previous year. The drop in tourist demand was highest in April when only 7,851 overnights were recorded. ALS has also achieved an unusually high value (5.10 days) which significantly deviated from the average value recorded for this year (2.48). Domestic guests, on average, make longer stays, and in April 2020, only 59 foreign guests were registered in Bosnia and Herzegovina, which represented 9% of the total turnover of the observed month, significantly lower than average in 2019 – 72% of foreign guests, and even in comparison to the average in 2020 – 39%. Given these low values, a very modest increase in demand led to a slight recovery, and demand rose monthly until August when the annual peak was reached. Nevertheless, it also recorded a 53.78% drop from the previous year. The decline would have been much more significant had it not been for a drastic change in the demand structure and

increased domestic guests compared to the previous year. In 2019, only 21% of domestic guests stayed in Bosnia and Herzegovina. This share rose to 75% in 2020. The presence of domestic guests also caused a slight increase in the value of ALS, so in August 2019, it was 2.22, and in 2020 was 2.89. The drop in tourist overnights was 63.22% (2020/2019), which was lower than the world and European average since tourism in Bosnia and Herzegovina has not yet reached high despite its high growth rates levels of development.

Observing the first half of 2021, a partial recovery can be noted. During this period, demand has recovered at a rate of 49.87% from 2020. In the same period in 2020/2019, the decline was 63.22%. This is an encouraging trend, and monthly growth in June was exceptionally high, at 263.08% (2021/2020) when domestic (55%) and international (45%) arrivals were equal. ALS recorded a lower value than the previous year but is still above the 2019 average.

Table 5. Leading source markets in Bosnia and Herzegovina (2019, 2020 and the first half of 2021)

2019	2020	1-6/2021
Croatia, Serbia, Saudi Arabia, Slovenia, China, Germany, Italy, Turkey	Serbia, Croatia, United Arab Emirates, Slovenia, Turkey, Germany, Montenegro, Austria	Serbia, United Arab Emirates, Croatia, Montenegro, Saudi Arabia, Slovenia, Turkey, Germany

Note: markets are aligned descending by overnight stays volume

Source: Agency for Statistics of Bosnia and Herzegovina, 2021.

Source markets are also significant for the analysis. As expected, China as a fourth source market for Bosnia and Herzegovina in 2019 disappears from the list in 2020 and the first half of 2021, while tourists from Montenegro climbed to the seventh and fifth place in 2020 and 2021, respectively. Guests from Serbia and Croatia are in the top three places in the whole observed period.

To mitigate the consequences caused by the pandemic, the Government of Bosnia and Herzegovina introduced a set of measures aimed at the entire economy, but not precisely at tourism businesses. The measures imposed can be divided into several segments. The first would be worker protection - Time spent in isolation or self-isolation is treated as sick leave. Wages were paid by the employer but refunded by the cantonal health fund within 45 days from the refund request. A sick leave certificate can be issued in a state-run healthcare institution or a private practice, and employers' recommendations were to reduce working hours and organization of remote work if possible. The second would refer to liquidity - The Government announced the creation of a guarantee fund to provide guarantees to banks for working capital loans to the most affected sectors. The third refers to the fiscal area - Deadline for submission of tax returns due by the end of March extended until 15 April 2020; Tax Administration of the Federation was instructed to accept taxpayers' requests for debt rescheduling, and Lump-sum tax applicable to private entrepreneurs were reduced. It is not surprising that there are no measures aimed at tourism, given that this economic activity is not mainly developed in Bosnia and Herzegovina – tourism and travel's direct contribution to GDP is 3.47% (WTTC, 2021).

Some authors (Peštek, et al., 2021) believe that tourism in Bosnia and Herzegovina faced serious problems even before the pandemic, but that the chance was not used to correct things during the period of low demand. Among the most important were the tourism enabling environment and business enabling environment, and the infrastructure and supra-structure in tourism.

5.2. Montenegro

Montenegro has the most developed tourism sector in selected WB countries. Tourism applies to every aspect of society and affects the development of the economy, living standards, and citizens' way of life, encouraging job creation and general prosperity (Ministry of tourism and environment protection of Montenegro, 2008). Montenegro's vision as a competitive tourist destination is in one strategic document formulated as follows: in one half of the year to be a high-quality Mediterranean destination and in the other half of the year a destination for active holidays in mountain destinations.

Table 6. Touristic turnover in Montenegro in 2019, 2020 and first half of 2021 (monthly)

M/Y	Arrivals			Overnights			ALS
	Domestic	International	Total	Domestic	International	Total	
1/2019	6,450(24)	20,536(76)	26,986(100)	20,065(33)	39,926(67)	59,991(100)	2.22
1/2020	5,785(21)	21,436(79)	27,221(100)	17,836(28)	45,975(72)	63,811(100)	2.34
1/2021	4,706(31)	10,428(69)	15,134(100)	12,022(35)	22,823(65)	34,845(100)	2.30
2/2019	5,670(15)	33,071(85)	38,741(100)	20,065(25)	39,926(75)	59,991(100)	1.96
2/2020	6,602(15)	37,152(85)	43,754(100)	22,149(25)	45,975(75)	87,098(100)	1.99
2/2021	3,438(25)	10,094(75)	13,532(100)	8,843(27)	23,868(73)	32,711(100)	2.42
3/2019	7,084(13)	49,135(87)	56,219(100)	22,407(23)	76,255(77)	98,662(100)	1.75
3/2020	2,797(15)	16,128(85)	18,925(100)	11,630(29)	28,103(71)	39,733(100)	2.10
3/2021	2,586(26)	7,316(74)	9,902(100)	9,469(34)	18,788(66)	28,257(100)	2.85
4/2019	8,602(9)	86,309(91)	94,911(100)	26,673(12)	191,355(88)	218,028(100)	2.30
4/2020	35(34)	68(66)	103(100)	743(36)	1,310(64)	2,053(100)	19.93
4/2021	4,638(25)	14,189(75)	18,827(100)	16,904(35)	31,122(65)	48,026(100)	2.55
5/2019	13,912(11)	111,580(89)	125,492(100)	51,508(13)	359,851(87)	411,359(100)	3.28
5/2020	1,417(85)	241(15)	1,658(100)	3,535(64)	2,087(36)	5,622(100)	3.39
5/2021	8,085(17)	38,957(83)	47,042(100)	25,408(20)	103,172(80)	128,580(100)	2.73
6/2019	14,478(9)	145,917(91)	160,395(100)	58,091(9)	601,538(91)	659,629(100)	4.11
6/2020	9,688(42)	6,978(58)	16,666(100)	36,508(64)	20,330(36)	56,838(100)	3.41
6/2021	9,727(14)	60,196(86)	69,923(100)	38,268(14)	239,199(86)	277,467(100)	3.97
7/2019	13,976(7)	176,346(93)	190,322(100)	73,847(8)	863,249(92)	937,096(100)	4.92
7/2020	21,090(64)	11,765(36)	32,855(100)	84,270(62)	51,865(38)	136,135(100)	4.14
8/2019	16,453(7)	204,462(93)	220,915(100)	85,869(8)	962,168(92)	1,048,037(100)	4.74
8/2020	20,926(35)	39,458(65)	60,384(100)	88,360(31)	192,175(69)	280,535(100)	4.65
9/2019	12,101(7)	153,104(93)	165,205(100)	44,361(7)	635,672(93)	680,033(100)	4.12
9/2020	10,000(26)	28,829(74)	38,829(100)	40,204(23)	136,343(77)	176,547(100)	4.55
10/2019	10,610(9)	106,352(91)	116,962(100)	36,655(12)	276,320(88)	312,975(100)	2.68
10/2020	4,322(34)	8,236(66)	12,558(100)	17,714(40)	26,771(60)	44,485(100)	3.54
11/2019	7,405(13)	48,249(87)	55,654(100)	22,954(22)	80,505(78)	103,459(100)	1.86
11/2020	3,053(38)	5,036(62)	8,089(100)	13,524(44)	17,072(56)	30,596(100)	3.78
12/2019	8,480(20)	32,907(80)	41,387(100)	18,902(25)	56,810(75)	75,712(100)	1.83
12/2020	2,892(37)	4,944(63)	7,836(100)	6,162(29)	14,827(71)	20,989(100)	2.68
Total							
2019	125,221(10)	1,167,968(90)	1,193,189(100)	480,208(10)	4,200,579(90)	4,680,787(100)	3.62
2020	88,607(33)	180,271(67)	944,442(100)	342,635(36)	601,807(64)	944,442(100)	3.51
1-6/2021	33,180(19)	141,180(81)	174,360(100)	110,914(20)	438,972(80)	549,972(100)	3.15

Note: numbers in brackets are percentages

Source: MONSTAT, Statistical Office of Montenegro, 2021.

The main characteristic of tourism in this country is uneven regional development. The northern region is underdeveloped, while the central and southern parts are more developed. The underdevelopment of the north region can significantly threaten sustainability, especially concerning natural resources. Vitić-Ćetković et al. (2012, pp. 56) highlight the most influential forces of sustainable tourism in Montenegro – the EU candidate, the declaration of Montenegro as an “ecological state”, the wealth of biodiversity, specific landscapes and cultural values.

On the other hand, the authors also stressed the most significant country's weaknesses - lack of experience in the field of modern economy and management, obsolescence of the system for protection and governance, underdeveloped participation system of government and weak self-government and civil society. Another significant deficiency, which prevents the precise management of Montenegrin tourism, is the lack of adequate evidence and statistical coverage of tourist turnover. Many apartments, holiday homes, and private rental rooms are not registered to provide tourist accommodation. For example, 9,755,133 overnights were recorded in an individual capacity in 2019 and 4,680,787 in collective accommodation. As we have already stated, monthly sales figures for individual accommodation are not available.

In 2019, incomparable tourist traffic in Montenegro was achieved, with more than 14 mil overnights and an annual growth rate of 4.22% in the last ten years. The turnover structure suggests that tourism is almost entirely reliant on international inbounds, with 90% of foreign guests participating in the total number of overnights. The trend continued in the first two months of 2020, with a growth of 6.37% in January and an impressive growth of 14.90% in February (2020/2019). As expected, March delivered an unprecedented decline of 59.73%, and April can be classified as a month without tourist traffic. Compared to the same month in 2019, a 98.63% drop in overnights was recorded. Keeping in mind the lockdowns and the situation in the country, guests who achieved 2,053 overnights in April were primarily domestic visitors (63%), which is significantly higher than the previous year, when the participation of domestic guests was only 12%. The exceptional situation also affected the increase in ALS, which amounted to more than 20 days for domestic guests. Traffic was slowly recovering by the end of the year, although guests from Montenegro dominated. The structure changed for the first time in August 2020, as foreign guests became dominant again. If we look at the total number of overnight stays, there was a 79.82% year-on-year decline (2020/2019), higher than the world and European average.

The first three months of 2021 were characterized by lower demand than expected in 2020. Overall, the number of overnights decreased at a rate of 50%. The recovery occurred in April, when demand increased at a rate of 754%, even though drastic measures were introduced in both March and April (curfew, prohibition of catering facilities, etc.). The latest available tourism turnover figures for Montenegro show that in June 2021, there was an increase from 2020 at a rate of 388.17%, indicating a significant recovery. On a half-yearly basis, growth was at a rate of 115.51%, but the most extensive growth is expected in the remaining two summer months when demand season showed the maximum. The increase in demand was accompanied by a change in the structure of guests. In June 86% of foreign visitors were recorded, while in the first half of the year it was 80% - which was approximately the average value recorded in previous years. The average length of stay in 2020 decreased from 2019 to 3.62 to 3.51 days, which remained unchanged in the first half of 2021.

Table 7. Leading source markets in Montenegro
(2019, 2020 and the first half of 2021)

2019	2020	1-6/2021
Russia, Serbia, B&H, Kosovo*, Germany, Ukraine, France, UK	Serbia, Russia, B&H, Ukraine, Albania, Kosovo*, Germany, Belarus	Serbia, Ukraine, Kosovo*, B&H, Albania, Russia, Turkey, Poland

Note: markets are aligned descending by overnight stays volume

Source: MONSTAT, Statistical Office of Montenegro, 2021.

Traditionally, the most important source markets in Montenegro are Russia, Serbia, and Bosnia and Herzegovina. The demand structure did not change for leading markets, but in 2020 and 2021, guests from Albania, Belarus, Turkey and Poland started to visit the country more immensely.

The Global lockdown will severely impact Montenegro's key sector – tourism. The Government of Montenegro implemented supporting measures through different ministries and different bodies and institutions of the Ministry of Health, Ministry of Internal Affairs, Ministry of Defense, Ministry of Transport, Ministry for Sustainable Development and Tourism, Ministry of Economy and Ministry of Education. During the first wave of infections, the government adopted two economic packages to support vulnerable groups, businesses and employees affected by the pandemic. The first package included 120 million EUR, made available through the Investment Development Fund, to help businesses, a 90 moratorium on the repayment of loans and support to vulnerable groups, including pensioners. The second set of measures supported employees affected by the lockdown, providing them with a percentage equivalent of the minimum wage depending on their employment status. The third package of measures announced around 1.2bn EUR during the second wave. The package aimed to support businesses, particularly in the tourism, agriculture and fisheries sectors and provided some provisions to social expenditures in the immediate term. It outlined some medium-term support for the recovery with expenditures outlined in those economic sectors and Information Technology (UN, 2020). However, the essential measure that conditioned the partial recovery of tourism in 2021 was the mitigation and abolition of harsh measures of entry and movement in the country.

5.3. North Macedonia

Tourism has been developing intensively in North Macedonia since 2001, when tourist traffic has started to be recorded. Northern Macedonia has numerous tourist resources, primarily cities and lakes, but mountain and spa tourism destinations also complement them. The strong sides of tourism in North Macedonia are cultural and natural heritage, rich history, the potential for mountain tourism development in an eco-friendly environment, and a rich tradition of wine and food production and consumption. However, North Macedonia also faces many challenges that are slowing the development of this sector, of which we emphasize the most prominent ones: the lack of infrastructure (good quality roads and modern airports accustomed to international traffic), accommodation facilities are not being adjusted to high standards, political instability - a problem at the level of global society that overflows and has a substantial impact on tourist demand and lack of modern tourism products and promotions (Marinoski & Korunovski, 2012, pp. 22). Conclusively, tourism in North Macedonia was not formed as a brand. One possible development direction has been proposed by Kovachevski et al. (2019, pp. 77), who argued that tourism “*should not focus on re-developing the massive type of tourism. Instead, it should follow the new trends in the tourism market and direct its tourism products towards the alternative and adventurous types of tourism, according to its natural landmarks*”.

Measured by the number of arrivals, tourism in North Macedonia increased by 8.13% (in period 2010 – 2019). In 2019, the highest turnover was recorded, with more than 1 million tourist arrivals and more than 3 million overnight stays. The recorded turnover was achieved by the slightly increased participation of domestic (52%) guests. Similar to other countries and in North Macedonia in pre-COVID months, there was a slight increase in demand compared to the previous year, more modest than Montenegro and Serbia, but higher than Bosnia and Herzegovina.

March turnover declined at a rate of 45.72%, which was within the regional average. In April and May, turnover decreased by 97% and 98%, respectively, with the same guest structure. Similar to other countries, the busiest month was August, which recorded a drop of only 24% (2020/2019), with a significant change in favor of domestic guests who accounted for 97% of total demand. As a result, the annual tourist turnover decreased by 47.97%, a more modest decline than the world, European and even regional averages.

Table 8. Touristic turnover in North Macedonia in 2019, 2020 and first half of 2021 (monthly)

M/Y	Arrivals			Overnights			ALS
	Domestic	International	Total	Domestic	International	Total	
1/2019	19,598(40)	29,423(60)	49,021(100)	46,921(46)	55,770(54)	102,691(100)	2.09
1/2020	19,787(36)	35,479(64)	55,266(100)	47,611(43)	62,122(57)	94,883(100)	1,99
1/2021	17,401(62)	10,710(38)	28,102(100)	40,329(62)	24,702(38)	65,031(100)	2,31
2/2019	16,533(38)	27,133(62)	43,666(100)	38,660(42)	53,071(58)	91,703(100)	2,10
2/2020	17,565(37)	29,723(63)	47,288(100)	39,026(41)	55,857(59)	94,883(100)	2,01
2/2021	15,734(57)	11,835(43)	27,569(100)	33,239(55)	26,774(45)	60,013(100)	2,18
3/2019	17,234(31)	37,592(69)	54,826(100)	39,835(35)	72,935(65)	112,770(100)	2,06
3/2020	6,815(38)	11,128(62)	17,943(100)	19,797(47)	22,151(63)	41,948(100)	2,34
3/2021	12,053(52)	10,947(48)	23,000(100)	26,858(52)	25,198(48)	52,056(100)	2,26
4/2019	25,099(30)	59,918(70)	85,017(100)	60,743(37)	105,495(63)	166,238(100)	1,96
4/2020	570(77)	171(33)	741(100)	2,358(50)	2,332(50)	4690(100)	6,33
4/2021	9,961(52)	9,103(48)	19,064(100)	21,849(52)	20,268(48)	42,117(100)	2,21
5/2019	30,118(30)	68,880(70)	98,998(100)	66,120(32)	139,236(68)	205,356(100)	2,07
5/2020	655(78)	183(22)	838(100)	2,202(45)	2,744(55)	4,946(100)	5,90
5/2021	18,993(52)	17,527(48)	36,520(100)	38,209(48)	41,204(100)	79,413(100)	2,17
6/2019	30,022(25)	89,312(75)	119,334(100)	78,559(30)	186,262(70)	264,821(100)	2,22
6/2020	3,347(64)	1,863(36)	5,210(100)	7,805(55)	6,374(45)	14,179(100)	2,72
6/2021	22,252(47)	24,915(53)	47,167(100)	61,923(53)	55,778(47)	117,701(100)	2,50
7/2019	74,196(43)	97,666(57)	171,862(100)	449,291(66)	233,563(34)	682,854(100)	3,97
7/2020	70,600(93)	4,991(7)	75,591(100)	420,847(96)	15,333(4)	436,180(100)	5,77
8/2019	116,189(54)	100,132(46)	216,321(100)	656,249(73)	248,491(27)	904,740(100)	4,18
8/2020	126,509(95)	7,195(5)	133,704(100)	663,185(97)	21,534(3)	684,719(100)	5,12
9/2019	27,662(23)	94,983(77)	112,645(100)	78,683(29)	197,209(71)	275,892(100)	2,25
9/2020	36,990(83)	7,323(17)	133,704(100)	663,185(85)	21,534(3)	684,719(100)	2,64
10/2019	28,516(29)	68,831(71)	97,345(100)	70,877(35)	129,150(65)	200,027(100)	2,05
10/2020	25,276(74)	8,653(26)	33,929(100)	60,939(76)	19,673(24)	80,612(24)	2,38
11/2019	21,362(33)	43,096(67)	64,485(100)	52,790(39)	83,076(61)	135,866(100)	2,11
11/2020	16,035(75)	5,481(25)	21,516(100)	34,849(72)	13,333(28)	48,182(100)	2,24
12/2019	20,841(34)	40,627(66)	61,468(100)	45,899(38)	73,513(62)	119,412(100)	1,94
12/2020	25,159(81)	6,016(19)	31,175(100)	46,822(78)	13,523(22)	48,182(100)	3.63
Total							
2019	427,370(36)	757,593(64)	1,184,963(100)	1,684,627(52)	1,505,565(46)	3,262,398(100)	2.75
2020	349,308(75)	118,206(25)	467,514(100)	1,444,605(85)	252,930(15)	1,697,535(100)	3.63
1-6/2021	96,394(53)	85,028(47)	181,422(100)	222,407(53)	193,924(47)	416,331(100)	2.29

Note: numbers in brackets are percentages

Source: Republic of North Macedonia, State Statistical Office, 2021.

The recovery, recorded in the first six months of 2021, was moderate and increased at a rate of 42.53%. The main characteristic of tourist demand is that it is structurally approaching the position of 2019. The average length of stay also lowered from 3.63 in 2020 to 2.29 in the first half of this year.

Source markets in North Macedonia have been changed in the observed period. Serbia is the only country that remains a leader, while the number of visitors from Greece, Germany, and Bulgaria declined. In the first half of 2021 number of visitors from Kosovo* and the USA increased.

Table 9. Leading source markets in North Macedonia
 (2019, 2020 and the first half of 2021)

2019	2020	1-6/2021
Turkey, Serbia, Greece, Bulgaria, Poland, Germany, Netherland, Albania	Poland, Serbia, Albania, Czech Republic, Turkey, Greece, Netherlands, Hungary	Serbia, Poland, Albania, Germany, Kosovo*, Turkey, Greece, USA

Note: markets are aligned descending by overnight stays volume

Source: Republic of North Macedonia, State Statistical Office, 2021.

Like other countries, North Macedonia introduced measures designed to suppress the crisis's adverse effects. In the area of worker protection, the following measures have been introduced - Unemployment benefits for the citizens who lost their jobs as a consequence of the global pandemic, amounting to 50% of the employee's average salary, and up to 80% of the average salary on a national level. Moreover, the unemployed and those who worked in the informal economy were provided with quick access to the social protection system during April and May 2020. To provide liquidity establishment of a Tourism Fund to support the tourism industry, a Macedonian government requested ZAMP to stop claims on restaurants and hotels. Finally, to facilitate liquidity problems, they exempted the most severely affected enterprises from monthly income tax advance payments and cancelled advance VAT payments for three months (April-June 2020). The Macedonian tourism industry is not highly developed, so the measures introduced have managed to preserve the business side of tourism to a greater or lesser extent. However, long-term and clearly defined policies and investment projects need to achieve the right impetus.

5.4. Serbia

In the last fifteen years, Serbia has made significant strides in reforming the legislative framework, building extensive planning documentation for more than fifteen priority regions, and starting an investment cycle for a series of capital projects. Systematic investment in development resulted in a 5.14% increase in tourist traffic at an average annual rate during the period 2010-2019. The tourism sector is an essential component of the Serbian national brand (Novčić, et al., 2020). Serbia's main tourist products can be divided into urban tourism, health/spa tourism, mountain, and lake tourism, Podunavlje (nautical and other complementary products), and rural tourism. According to the Tourism Development Strategy of the Republic of Serbia for the period 2016-2025, the comparative advantages of Serbian tourism are a diverse resource and attraction structure as the basis for a diversified tourism product portfolio development (thermal springs, pristine nature, cultural heritage, internationally recognized protected natural areas and monuments, gastronomy), as well as the geostrategic position of Belgrade and a country as a whole (intersection of European western and eastern cultures, transit position, European river corridors and developed network of waterways). The development of eco-tourism (Bradić-Martinović, Miletić, 2018) and rural tourism (Chroneos Krasavac et al., 2018) also represent potential. On the other hand, the most critical drawback is a failure to recognize the importance of tourism as an essential economic growth factor while ignoring modern trends on the global tourism market and the absence of their implementation in the programming and tourism development of the country. Moreover, passive attitude towards tourism and failure to establish consensus among stakeholders around crucial issues of tourism development in Serbia, underdevelopment of incentive measures, non-financial and financial support to businesses entities in tourism and activities related to tourism, small and insufficient investments, insufficient/modest presence of the Republic Serbia on the global map of tourism (undeveloped national tourist identity/tourist brand of the Republic of Serbia) represent further obstacles.

Table 10. Touristic turnover in Serbia in 2019, 2020 and first half of 2021 (monthly)

M/Y	Arrivals			Overnights			ALS
	Domestic	International	Total	Domestic	International	Total	
1/2019	94,811(53)	82,939(47)	177,750(100)	320,808(58)	230,385(42)	551,193(100)	3,10
1/2020	113,959(52)	106,774(48)	220,733(100)	393,006(57)	296,576(43)	689,582(100)	3,12
1/2021	104,909(80)	26,677(20)	131,586(100)	351,051(78)	98,280(22)	449,331(100)	3,41
2/2019	115,429(59)	80,503(41)	195,932(100)	408,953(67)	198,780(33)	607,733(100)	3,10
2/2020	141,597(61)	91,398(39)	232,995(100)	493,980(68)	235,751(32)	729,731(100)	3,13
2/2021	112,698(78)	31,810(22)	144,508(100)	371,982(78)	102,798(22)	474,780(100)	3,29
3/2019	121,268(52)	112,034(48)	233,302(100)	377,548(59)	257,290(41)	634,838(100)	2,72
3/2020	64,306(63)	38,317(37)	102,623(100)	237,182(69)	107,414(31)	344,596(100)	3,36
3/2021	95,223(74)	33,180(26)	128,403(100)	310,310(74)	107,747(26)	418,057(100)	3,26
4/2019	169,731(56)	131,196(44)	300,927(100)	491,510(63)	284,985(37)	776,495(100)	2,58
4/2020	5,241(83)	1,052(17)	6,293(100)	29,724(71)	11,932(29)	41,656(100)	6,62
4/2021	100,015(73)	37,058(27)	137,073(100)	285,658(72)	112,970(28)	398,628(100)	2,91
5/2019	220,824(57)	164,016(43)	384,840(100)	643,280(66)	336,856(34)	980,136(100)	2,55
5/2020	44,091(92)	3,639(8)	47,730(100)	151,934(89)	18,754(11)	170,688(11)	3,58
5/2021	140,950(72)	53,529(28)	194,479(100)	437,759(75)	148,039(25)	585,798(100)	3,01
6/2019	174,384(49)	184,145(51)	358,529(100)	606,375(61)	382,239(39)	988,614(100)	2,76
6/2020	145,970(86)	24,441(14)	170,411(100)	501,908(90)	58,271(10)	560,179(100)	3,29
6/2021	171,407(68)	81,520(32)	252,927(100)	564,785(72)	215,595(28)	780,380(100)	3,09
7/2019	175,521(45)	215,866(55)	391,387(100)	692,342(60)	457,654(40)	1,149,996(100)	2,94
7/2020	169,587(87)	24,325(13)	193,912(100)	670,189(91)	67,209(9)	737,398(100)	3,80
8/2019	210,509(47)	237,801(53)	448,310(100)	812,505(62)	490,339(38)	1,302,844(100)	2,91
8/2020	263,719(90)	30,615(10)	294,334(100)	1,000,516(93)	80,160(7)	1,080,676(100)	3,67
9/2019	148,865(43)	195,173(57)	344,038(100)	508,136(56)	397,841(44)	905,977(100)	2,63
9/2020	162,186(83)	33,447(17)	195,633(100)	603,912(87)	94,196(13)	698,108(100)	3,57
10/2019	157,553(47)	174,491(53)	332,044(100)	473,750(56)	371,837(44)	845,587(100)	2,55
10/2020	124,877(74)	43,620(26)	168,497(100)	403,157(76)	125,620(24)	528,777(100)	3,14
11/2019	124,030(49)	129,472(51)	253,502(100)	356,088(55)	287,987(45)	644,075(100)	2,54
11/2020	71,367(73)	26,851(27)	98,218(100)	253,187(73)	92,032(27)	345,219(100)	3,51
12/2019	130,507(48)	138,915(52)	269,422(100)	371,626(54)	314,185(46)	685,811(100)	2,55
12/2020	67,410(76)	21,232(24)	88,642(100)	198,037(72)	76,643(28)	274,680(100)	3,10
Total							
2019	1,843,432(50)	1,846,551(50)	3,689,983(100)	6,062,921(60)	4,010,378(40)	10,073,299(100)	2.73
2020	1,374,310(76)	445,711(24)	1,820,021(100)	4,936,732(80)	1,264,558(20)	6,201,290(100)	3.41
1-6/2021	725,202(73)	263,774(27)	988,976(100)	2,321,545(75)	785,429(25)	3,106,974(100)	3.14

Note: numbers in brackets are percentages

Source: Statistical Office of the Republic of Serbia, 2021.

After a record 2019, the first two months of 2020 began with very high overnight growth rates – 25.11% and 20.07%, respectively. As a result of declaring a total lockdown in the country, total turnover declined at a rate of 45.72% in March. The first devastating impact of the ongoing health crisis came in April, when the number of overnight stays dropped by 95%. Nevertheless, tourist demand increased slightly by August when it recorded its highest value which was only 17% lower than the same month 2019. Domestic guests represented 62%. The change also affected the increase in ALS from 2.91 (2019) to 3.67 (2020).

Serbia experienced a recovery in tourist demand in the first half of 2021 by 22.49% (y/y). Despite a much more liberal situation regarding the ongoing pandemic, the turnover structure still had not returned to 2019 when 40% of foreign guests generated overall demand. After falling to 20% in 2020, it rose to 25% in 2021. The average length stays remained similar to 2020 (3.14 days).

The main source markets in Serbia did not change considerably during the observed period. Bosnia and Herzegovina remained first, followed by Montenegro and China.

Table 11. Leading source markets in Serbia
 (2019, 2020 and the first half of 2021)

2019	2020	1-6/2021
B&H, China (incl. Hong Kong), Montenegro, Turkey, Russia, Germany, Croatia, Romania	B&H, Turkey, Russia, Montenegro, Romania, China (incl. Hong Kong), Germany, Croatia	B&H, Turkey, Russia, Montenegro, China (incl. Hong Kong), Germany, Croatia, Romania

Note: markets are aligned descending by overnight stays volume

Source: Statistical Office of the Republic of Serbia, 2021

Shortly after the crisis outbreak, the Serbian government introduced measures to help the national economy. The Government approved direct payments to the companies by paying three minimum wages. It was set to pay minimum wage for entrepreneurs, micro, small and medium-sized enterprises in the private sector; and subsidy of 50 % of the minimum wage to large enterprises whose employees were sent on forced leave. Also, the State paid three minimum wages for each employee to all entrepreneurs and small businesses. Additionally, affordable loan programs with one percent interest for maintaining liquidity and working capital were introduced for entrepreneurs, micro, small and medium-sized economic entities, agricultural households and cooperatives, registered in the relevant register through the Development Fund of the Republic of Serbia. Tourism, catering, and passenger traffic companies could obtain loans from the Development Fund for current liquidity and working capital, including a repayment period of up to five years and a grace period of up to two years. Also, several measures have addressed tax reliefs, arranging deferred tax payments due to delaying paying taxes through instalments. We believe that the Government’s efforts were satisfactory, especially considering that Serbian tourism had the smallest drop in traffic, compared to other countries in the Western Balkans.

6. CONCLUSION

The COVID-19 pandemic has had a devastating impact on the tourism sectors of Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia. Based on the analysis of tourist traffic in selected WB countries during the period 2019 M1 – 2021 M6, it can be concluded that the country with the most developed tourism sector, Montenegro, has suffered the largest loss. Tourism in Montenegro is predominantly based on the “sun and beach” component, with a very high proportion of foreign guests (92% of overall tourist demand at the peak of the tourist season). Consequently, the imposed restrictions on international tourists’ arrivals have affected the sector profoundly. However, the attractiveness of Montenegrin coastal destinations has contributed to the fastest sector’s recovery compared to the other observed WB economies - traffic in June 2021 in comparison to the same month last year soared at a rate of 388%, which is still a decrease of 35% compared to 2019.

Compared to the other three WB countries, Serbia has suffered the lowest drop in tourist demand, primarily due to the relatively uniform distribution of guests’ arrivals in the main three types of destinations (cities, spas, and mountains). During 2020 when the sector was facing the strictest restrictions, the level of development and attractiveness of the Serbian tourism offer enabled domestic guests to flexibly set up and substitute their visits to foreign destinations with domestic ones. The most severely affected were cities, where the predominant part of tourist traffic was generated by foreign guests (77%).

Tourism demand in Bosnia and Herzegovina and North Macedonia has declined more moderately in comparison to the world and European average. However, it should be noted that the recovery of tourism demand in Bosnia and Herzegovina has been lower (263%) compared to Montenegro (388%) and North Macedonia (730%). According to the data presented, all the observed WB countries are currently walking down the path of successful tourism recovery. Nevertheless, bearing in mind the pronounced seasonality of tourism demand, more accurate conclusions will be made after realizing data that also include the summer season.

The ongoing health crisis has emphasized the fundamental problems of tourism sectors in selected WB countries: very high seasonality (with August as a peak-season month) and insufficient attractiveness of certain types of destinations. Consequently, policymakers should make a special effort to overcome these limitations in order to enable balanced and regionally harmonized development of the tourism sector in the years to come. Moreover, improving the attractiveness of destinations (especially cities) for domestic guests through the development of modern tourism products, implementation of advanced ICT solutions (Mihailović, et al., 2020), and customized marketing and promotional activities has the potential to improve the structure of guests and consequently mitigate sector's resistance to similar shocks in the future. Finally, policymakers should focus their efforts on developing regional protocols and unified responses to create an inter-regional WB market as a strategy for sustainable regional growth and better international recognition.

FUTURE RESEARCH DIRECTIONS

The application of more advanced statistical and econometric methods could provide deeper insights into the flows and factors that have affected tourist demand during the COVID-19 pandemic and indicate the pace of its recovery after the crisis.

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REFERENCES

- Albu, C.E. (2016). *Tourism and Terrorism: A Worldwide Perspective*. CES Working Papers, 1-19. <http://hdl.handle.net/10419/198440>.
- Arbulu, I., Razumova, M., Rey-Maqueira, J. & Sastre, F. (2021). Can domestic tourism relieve the COVID-19 tourist industry crisis? The case of Spain. *Journal of Destination Marketing & Management*, 20, 1-12. <https://doi.org/10.1016/j.jdmm.2021.100568>.
- Bahtić, S. (2015). Tourism and its Importance for Economic development of B&H. *Univerzitetska hronika*, 14, 135-143.
- Bank of England (2020). *The impact of Covid-19 on businesses' expectations: Evidence from the Decision Maker Panel*. Quarterly Bulletin - Q3/2020.
- Bausch, T., Gartner, W.C. & Ortanderl, F. (2020). How to avoid a COVID-19 research paper tsunami? A tourism system approach. *Journal of Travel Research*. *Journal of Travel Research*, 60(3), 467-485. <https://doi.org/10.1177/0047287520972805>.
- Bradić-Martinović, A., Miletić, B. (2018). Odgovorni i održivi razvoj turizma u Srbiji: eko-turistički park Palić. *Ecologica*, 25(92). 777-781. <http://ebooks.iien.bg.ac.rs/1321/>.

- Bradić-Martinović, Aleksandra (2021) Tourism 4.0: Data-Driven Covid-19 Recovery. *Innovative Aspects of the Development Service and Tourism*. Book of proceedings of IX International scientific-practical conference (Stavropol, 22 April 2021), Part II. Stavropol. <http://ebooks.ien.bg.ac.rs/1622/>.
- Calderón M.M., Esquivel, K.Ch., Garcia, M.M.A. & Lozano, C.B. (2021). Tourist behaviour and dynamics of domestic tourism in times of COVID-19, *Current Issues in Tourism*, 1-5. <https://doi.org/10.1080/13683500.2021.1947993>.
- Chamber Investment Forum Western Balkans 6, (2020), Studies on obstacles and opportunities for doing business in the region, Study no,1 Prospects for Travelling and Tourism Sector in the Western Balkans in 2020 (impact of the coronavirus pandemic), Available at: <https://www.wb6cif.eu/wp-content/uploads/2020/11/WB6-CIF-Study-Prospects-for-Travelling-and-Tourism-Sector-in-the-Western-Balkans-in-2020.pdf>. Accessed: 9/20/2021.
- Chronos Krasavac, B., Radosavljević, K., Bradić-Martinović, A. (2018) Swot Analysis of the Rural Tourism as a Channel of Marketing for Agricultural Products in Serbia. *Economics of Agriculture*, 65(2). 1573-1584. <http://ebooks.ien.bg.ac.rs/1271/>.
- Cvetkoska, V & Barišić, P, (2017), The Efficiency of the Tourism Industry in the Balkans, In Proceedings of the Faculty of Economics in East Sarajevo Year 2017, 14, 31-41. <https://doi.org/10.7251/ZREFIS1714031C>.
- Dukić, M., Jovanoski, I., Munitlak Ivanović, O., Lazić, M. & Bodroža, D. (2016). Cost-benefit analysis of an infrastructure project and a cost-reflective tariff: A case study for investment in wastewater treatment plant in Serbia. *Renewable and Sustainable Energy Reviews*, 59, 1419-1425. <https://doi.org/10.1016/j.rser.2016.01.050>.
- Duro, J.A., Perez-Laborda, A. Turrion-Prats, J. & Fernandez-Fernandez, M. (2021). Covid-19 and tourism vulnerability. *Tourism Management Perspectives*, 38, 1-12. <https://doi.org/10.1016/j.tmp.2021.100819>.
- ETC, European Travel Commission, (2021), European Tourism: Trends and Prospects, Quarterly Report – Q4/2021.
- Feridun, M. (2011). Impact of terrorism on tourism in Turkey: empirical evidence from Turkey. *Applied Economics*, 43, 3349-3354. <https://doi.org/10.1080/00036841003636268>.
- Freifer, R. (2021). *Why 2020 was the worst year in the history of tourism*. Available at: <https://www.hospitalitynewsmag.com/2020-worst-year-in-tourism-history/>, Accessed: 9/20/2021.
- Gossling, S., Scott, D. & Hall, C.M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. <https://doi.org/10.1080/09669582.2020.1758708>.
- 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>.
- Hamilton, J.M., Maddison, D.J. & Tol, R.S.J. (2005). Effects of climate change on international tourism. *Climate Research*, 29, 245–254. <https://doi.org/10.3354/cr029245>.
- Hang, H., Aroean, L. & Chenc, Z. (2020). Building emotional attachment during COVID-19. *Annals of Tourism Research*, 83, 103006. doi:10.1016/j.annals.2020.103006.
- Hussain, A. & Fuste-Forne, F. (2021). Post-Pandemic Recovery: A Case of Domestic Tourism in Akaroa (South Island, New Zealand). *World*, 2(1), 127-138. <https://doi.org/10.3390/world2010009>.
- Kaličanin, T. & Lazić, M. (2018). Evaluating the Level of Market Concentration in Insurance Sector: the case of Serbia. In: *Western Balkans Economies in EU Integration: past, present and future* (202-221), Publisher: CEMAFI International, Nice, France. ISBN - 979-10-96557-18-9.
- Kapiki, S. (2012). The Impact of Economic Crisis on Tourism and Hospitality: Results from a Study in Greece. *Central European Review of Economics and Finance*, 2(1), 19-30. <https://ssrn.com/abstract=2150604>.

- Kovachevski, D., Hristova, S., Tomovska Misoska, A. (2019) Change Management in Tourism: The Case of North Macedonia. *Sarajevo Business and Economic Review*, 37, 76-89. doi:10.2478/cjot-2019-0001.
- Leon, C.J., Lam-Gonzales, Y.E., Galindo, C.G. & Hernandez, M.M.G. (2020). Measuring the Impact of Infectious Diseases on Tourists' Willingness to Pay to Visit Island Destinations. *Atmosphere*, 11, 1-13, doi:10.3390/atmos11101117.
- Li, X.R., Cheng, Ch-K., Kim, H. & Petrick, J. (2008). A systematic comparison of first-time and repeat visitors via a two-phase online survey. *Tourism Management*, 29(2), 278-293. doi:10.1016/j.tourman.2007.03.010.
- Lončar, D., Đorđević, A., Lazić, M., Milošević, S. & Rajić, V. (2016). Interplay Between Market Concentration and Competitive Dynamics in The Banking Sector. *Ekonomika preduzeća*, 44 (5/6). 332-346. Available at: <https://scindeks-clanci.ceon.rs/data/pdf/0353-443X/2016/0353-443X1606332L.pdf>, Accessed: 9/21/2021.
- Marinovski, N., Korunovski, S. (2012). Tourism in Macedonia in Changing Environment. *Procedia – Social and Behavioural Science*, 44, 19-31. <https://doi.org/10.1016/j.sbspro.2012.05.001>.
- McKinsey (2021). *COVID-19: Briefing note #72*. Available at: <https://www.mckinsey.com/business-functions/risk/our-insights/covid-19-implications-for-business>, Accessed 9/20/2021.
- Mihailović, B., Radić Jean, I., Popović, V., Radosavljević, K., Chroneos Krasavac, B., Bradić-Martinović, A. (2020). Farm Differentiation Strategies and Sustainable Regional Development. *Sustainability*, 12(17). 1-18. <http://ebooks.iien.bg.ac.rs/1477/>.
- Miletić, B., Petković, G., Kovačević, I., Imbsen, C., Bradić-Martinović, A., Bradić, P., Petković, J. (2020) WB6 Tourism and Travel Industry Assessment: COVID-19 Diagnostic and Future Prospects, Final project report funded by EU through RCC - Regional Cooperation Council Secretariat initiative.
- Ministry of tourism and environment protection of Montenegro (2008). Tourism Development Strategy in Montenegro by 2020. Available at: <https://wapi.gov.me/download-preview/b6dc2ef4-ecce-4efd-96dd-8da1f9139a42?version=1.0>, Accessed 9/20/2021.
- Moreno-Luna, L., Robina-Ramirez, R., Sanchez-Oro Sanchez, M. & Castro-Serrano, J. (2021). Tourism and Sustainability in Times of COVID-19: The Case of Spain. *International Journal of Environmental Research and Public Health*, 18(4), 1-21. <https://doi.org/10.3390/ijerph18041859>.
- Nardi, V.A.M., Teixeira, R., Ladeira, W.J. & de Oliveira Santini, F. (2020). A meta-analytic review of food safety risk perception. *Food Control*, 112, 1-16. <https://doi.org/10.1016/j.foodcont.2020.107089>.
- Nientied, P. & Shutina, D. (2020). Tourism in Transition, the Post COVID-19 Aftermath in the Western Balkans. *Annual Review of Territorial Governance in the Western Balkans*, II, 46-60. <https://doi.org/10.32034/CP-TGWBAR-I02-04>.
- Novčić Korać, B., Bradić-Martinović, A., Miletić, B. (2020) Constructing a Nation Branding Model – the Case of Serbia. *Geographica Pannonica*, 24(4). 311-324. <http://ebooks.iien.bg.ac.rs/1532/>.
- OECD (2021). Western Balkans Regular Economic Report: Fall 2021. No. 20. Available at: <https://www.worldbank.org/en/region/eca/publication/western-balkans-regular-economic-report>. Accessed: 3/7/2022.
- Opute A.P., Irene B.O. & Iwu C.G. (2020). Tourism Service and Digital Technologies: A Value Creation Perspective. *African Journal of Hospitality, Tourism and Leisure*, 9(2), 1-18. Available at: https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_5_vol_9_2__2020_germany.pdf, Accessed: 9/21/2021.
- Palomino, J., Rodriguez, J. & Sebastian, R. (2020). Wage inequality and poverty effects of lockdown and social distancing in Europe. *European Economic Review*, 129, 103564. <https://doi.org/10.1016/j.eurocorev.2020.103564>.

- Peštek, A., Lazović-Pita, L., Pijalović, V. (2021). The Effects of the COVID-19 Outbreak on the Tourism in Sarajevo Canton. *ToSEE – Tourism in Southern and Eastern Europe*, 6, 607-621. <https://doi.org/10.20867/tosee.06.41>.
- Prayag, G. (2020). Time for Reset? Covid-19 and Tourism Resilience. *Tourism Review International*, 24(2-3), 2020, 179-184. <https://doi.org/10.3727/154427220X15926147793595>.
- Ritchie, B.W. & Jiang, Y. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Annals of Tourism Research*, 79, 102812. <https://doi.org/10.1016/j.annals.2019.102812>.
- Rogerson, C.M & Rogerson, J.M. (2021). COVID-19 and Changing Tourism Demand: Research Review and Policy Implications for South Africa. *African Journal of Hospitality, Tourism and Leisure*, 10(1), 1-21. <https://doi.org/10.46222/ajhtl.19770720-83>.
- Rossello, J., Becken, S. & Santana-Gallego, M. (2020). The effects of natural disasters on international tourism: A global analysis. *Tourism Management*, 79, 104080. <https://doi.org/10.1016/j.tourman.2020.104080>.
- Scheyvens, R. (2007). Poor cousins no more: Valuing the development potential of domestic and diaspora tourism. *Progress in Development Studies*, 7(4), 307-325. doi:10.1177/146499340700700403.
- Scott, N., Laws, E. & Prideaux, B. (2008). Tourism crises and marketing recovery strategies. *Journal of Travel & Tourism Marketing*, 23(2–4), 1-13. https://doi.org/10.1300/J073v23n02_01.
- Selimi, N., Sadiku, Lj., Sadiku, M. (2017), The Impact of Tourism on Economic Growth in the Western Balkan Countries: An Empirical Analysis, *International Journal of Business and Economic Sciences Applied Research*, 10(2), 19-25,
- Sheldon, P. & Dwyer, L. (2010). The Global financial crisis and tourism: Perspectives of the academy. *Journal of Travel Research*, 49(1), 3-4. doi:10.1177/0047287509353191.
- Siddiqui, S. & Imran, M. (2018). Impact of Climate Change on Tourism. In book: *Impact of Climate Change on Tourism* (68-83), Publisher: IGI Global. doi:10.4018/978-1-5225-5843-9.ch004.
- UN (2020). The UN Socioeconomic response to COVID-19 plan in Montenegro.
- UNWTO (2021a). *2020: Worst year in tourism history with 1 billion fewer international arrivals*. Available at: <https://www.unwto.org/news/2020-worst-year-in-tourism-history-with-1-billion-fewer-international-arrivals>, Accessed: 9/20/2021.
- UNWTO (2021b). *Tourism and Covid-19 – Unprecedented Economic Impacts*. Available at: <https://www.unwto.org/tourism-and-covid-19-unprecedented-economic-impacts>, Accessed: 9/20/2021.
- Vitić-Četković, A., Jovanović, S., Krstić, B. (2012). Determinante unapređenja konkurentnosti turizma Crne Gore i Srbije u uslovima globalizacije. *Ekonomске teme*, 1, 47-62. Available at: http://www.economic-themes.com/pdf/et20121_04.pdf. Accessed: 9/27/2021.
- Volgger, M., Taplin, R. & Aebli, A. (2021). Recovery of domestic tourism during the COVID-19 pandemic: An experimental comparison of interventions. *Journal of Hospitality and Tourism Management*, 48, 428-440. <https://doi.org/10.1016/j.jhtm.2021.07.015>.
- WTTC (2021). *Travel & Tourism Economic Impact 2021: Global Economic Impacts and Trends 2021*. Available at: <https://wttc.org/Portals/0/Documents/Reports/2021/Global%20Economic%20Impact%20and%20Trends%202021.pdf>, Accessed: 9/20/2021.
- WTTC (2020). *Economic impact report 2019*. Available at: <https://wttc.org/Research/Economic-Impact>, Accessed: 6/17/2021.
- Zenker, S. & Kock, F. (2020). The coronavirus pandemic—A critical discussion of a tourism research agenda. *Tourism Management*, 81, 104164. <https://doi.org/10.1016/j.tourman.2020.104164>.



Impact of Terrorism on Tourism Demand in the EU and the Mediterranean*

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Abstract: *The impact of terrorism on tourism causes the specific context in which tourism trips are realised. The relationship between terrorism and tourism was researched many decades ago. There are many open questions regarding the stated impact.*

The main goal of this paper is to find out some important facts considering the impact of terrorism regarding global and regional tourist demand. The article emphasises that security is an important factor for stable tourism growth. Security is certainly one of the most important factors for a tourist when deciding for a destination. However, this is all more important in the countries where the political and economic situation is not stable. There are still doubts what is the reason for a greater negative effect on tourism in the countries that are not considered western. Is it only about perception and media coverage or are non-western countries negating the effects with better responses and PR activities?

Using methodology applied in this research, country statistical offices can estimate when tourism will return to its pre-terrorist period.

1. INTRODUCTION

The relationship between tourism and terrorism was established many decades ago and has been described in several published papers (for more detailed content, please see: Enders & Sandler, 1991; Ryan, 1993; Sönmez & Graefe, 1998; Sönmez, Sevil F., Apostolopoulos, & Tarlow, 1999; Pizam & Smith, 2000; Pizam, 2002; Pizam & Fleischer, 2002; Lepp & Gibson, 2003; Bianchi, 2006; Dolnicar, 2007; Fletcher & Morakabati, 2008; Llorca-Vivero, 2008; Feridun, 2011; Thompson, 2011; Korstanje & Clayton, 2012; Baker, 2014; Crenshaw, 2014; Saha & Yap, 2014; Seabra, Abrantes, & Kastenholz, 2014; Afonso-Rodríguez, 2016; Adeloye & Brown, 2017; Bassil, Saleh, & Anwar, 2017; Buigut, Braendle, & Sajeewani, 2017; Goldman & Neubauer-Shani, 2017; Liu & Pratt, 2017; Samitas, Asteriou, Polyzos, & Kenourgios, 2018; Walters, Wallin, & Hartley, 2018). In the present paper, we would like to take into account that terrorism is affecting different regions of the world differently (economically, by the number of visitors, etc.).

Tourism is by definition (Vukonić, 1985; Middleton, 1986; Kobašić & Senečić, 1989; Slobodan Unković, Bakić, Čačić, & Popesku, 1991; Bakić, 2008; Radović, 2010; Kotler, Bowen, & Makens, 2010; S. Unković & Zečević, 2011) the movement of people caused by many reasons, but mostly the purposes of tourism are leisure and recreation or in general, looking for some kind of excitement to escape from daily routine. Besides, the tourists want to rest in peace and get to know the local culture and cuisine. This is exactly the point that we are interested in; the relationship between tourism and terrorism.

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According to Pizam & Smith, “Terrorism is a systematic and persistent strategy practiced by a state or political group against another state, political or social group through a campaign of acts of violence, such as assassinations, hijacking, use of explosives, sabotage, murder and the like, with the intent of creating a state of terror and public intimidation to achieve political, social or religious ends” (Pizam & Smith, 2000). Even terrorism as a phenomenon is not something new.

At some of the most attractive tourist destinations in the world, that will be presented in this paper, occurred terrorist attacks. In relation to that issue, the following question could be raised: Is the fear of terrorist attacks stronger than the level of excitement by tourist attractions?

There are several answers to the question. Risk perception concerning terrorist attacks could lead to “travel anxiety” and consequently to the search for a new tourist destination. Baker explained that “different levels of risk perception together with other internal factors may determine a tourist’s motivation to travel ... An individual with negative attitudes toward a certain destination due to a terrorist incident may exhibit high levels of safety concern, and this is likely to result in a negative outcome for the travel decision” (Baker, 2014).

However, there might be additional factors influencing risky travel decisions such as attitude toward international travel, level of risk perception and income (Sönmez & Graefe, 1998). Yet another opinion stresses determination of perceived risk by the potential act of terrorism by the sense of hazard seekers to be on risky travel rather than those who prefer familiarity, or in other words, as Lepp and Gibson explain “what may be a source of fear for the organised mass, tourist may be a source of excitement for the drifter” (Lepp & Gibson, 2003).

There is a dilemma that the question regarding the relationship between crime (terrorism) and tourism might be a false question because both are reflections of some fundamental social forces, found in urban lifestyle as responses to the complex network of work, family and peer groups. Those are derived patterns of action caused by “the social mores, cultures and economic systems”. Both tourism and crime are “mechanisms of escape from a status quo” with the main difference in social acceptability concerning the behaviour patterns (Ryan, 1993).

A. Pizam raises the question “whether these acts of terrorism should be considered as factors caused by wider social and political circumstances and therefore uncontrollable by tourism destinations” (Pizam, 2002).

On the other hand, the efforts in creating “a risk-free” environment for tourism could lead to “a myopic form of global travel which does little to reveal the true nature of uncertainty in which significant numbers of people at the world’s destinations live” (Bianchi, 2006), and consequently, make an unclear perspective in the travel decision process.

Another study confirms that terrorism has stronger negative effects in developing countries than in developed countries, due to the reason that developed countries recover more quickly from terrorist attacks, with “more resources to provide additional security to prevent future attacks” (Thompson, 2011).

The findings in one study regarding tourism’s vulnerability and resilience to terrorism point out the fact that more open destinations are more resilient to the impact of terrorism than nations who are not; destinations with higher income per capita are also more resilient compared to

less income per capita countries. This means low-income countries that need tourism are more impacted by terrorist attacks, which could “deter international tourists from traveling to these countries”(Liu & Pratt, 2017). In relation to what has been just mentioned, we are dealing with similar research.

Another consequence due to terrorist attacks on tourist destinations is an increase in operating costs of tourism companies. They have to “hire trained security personnel, install metal detectors, search the belongings of their guests, devise crisis plans and educate their guests to spot suspicious behaviours (Pizam, 2016). A. Pizam poses a question regarding the ability to accept these additional costs of operating activities, especially when it comes to smaller tourism and hospitality businesses (Pizam, 2016).

Therefore, the research frame of the subject and nature of terrorism impact on tourism in this paper highlights and investigates this dilemma via three hypotheses by searching for the answers to what are the main observations considering the impact of terrorism on global and regional tourist demand.

Returning to the above-mentioned question, it could be stressed that the tourist’s risk perception against expected satisfaction is the frame for the mentioned dilemma and influences on tourist demand.

2. LITERATURE REVIEW

Both tourism and terrorism are following different philosophies, as Korstanje and Clayton point out (Korstanje & Clayton, 2012), although they have some “disturbing commonalities” such as a need for modern technology, media management and use of the manipulation of perceptions and attitudes. Tourists are at the same time critical terrorism targets and travellers who very gladly visit sites known for terrorist attacks in the context of so-called “dark tourism”.

In the nature of “systematic terrorism” is the fact that it is “usually aimed at territorial autonomy, often with an additional political ideology or religion. Besides, the killing of political or religious opponents, to repress dissent, is also a form of “systematic terrorism”. However, “random terrorism” in its nature (al-Qaeda, for example) is “usually aimed at the destabilisation or destruction of the existing political, religious or ideological order and seeks maximum destruction in terms of killing and property damage” (Korstanje & Clayton, 2012).

In one paper concerning the literature about terrorism, there were stressed four interrelated areas: “the effectiveness of terrorism as a strategy of the opposition, the determinants and consequences of counterterrorism policies, how campaigns or waves of terrorism end, and how analysis of terrorism can be situated in a broader theoretical framework rather than treated as a phenomenon sui generis” (Crenshaw, 2014).

In a different study, it was found that “the fear of terrorism and contagious diseases is present in today’s tourist’s mind and has the power of dramatically modifying tourist behaviour” (Dolnicar, 2007).

Another study reveals factors which stimulate the decisions to travel despite the terrorism risk: the one-off nature of previous attacks, the presence of security services, the reason for travel,

the determination not to let the terrorist win and finally, previous experiences of terrorism (Adeloye & Brown, 2017).

One study confirmed that the level of terrorism threat has an impact on the tourist's choice behaviours in relation to the general tendency that tourist is not willing to travel as the level of terrorist threat increases. Detailed insights from this research show that "while the low-level threat of terrorism condition (attack has occurred, but a future attack is unlikely) did not see a change in tourist package considerations, there was a shift toward increased choices of not to travel in response to the threat of terrorism. The impact of the high possibility (attack has not occurred but an attack is likely) and the extreme condition (attack has occurred and another is likely) resulted in notable changes to tourist package preferences" (Walters, Wallin, & Hartley, 2018).

In terms of investigating the influence of terrorism risk perception on purchase involvement in the domain of tourism, the researchers in a separate study revealed that "the interest in and attention given to terrorism in the media by tourists increase the risk perception in international travel, their involvement in seeking information for travel and the consequent safety concern" (Seabra, Abrantes, & Kastenholz, 2014).

The researcher of terrorism and international tourism, Rafael Llorca-Vivero, stated that "both domestic and international terrorism has a moderate but significant negative influence on tourist flows" (Llorca-Vivero, 2008).

Baker stressed that the fear caused by the danger of terrorism tends to "intimidate potential tourists more severely" than natural and human-caused disasters and impact on tourism flow (Baker, 2014).

There is also a difference between random and persistent acts of terrorism concerning the consequences for the tourism industry, in a sense that random acts of terrorism could gradually become forgotten by the public but persistent terrorism could severely harm the tourism industry in terms of perceptions of destinations and travel behaviour (Sönmez, Sevil F., Apostolopoulos, & Tarlow, 1999).

The frequency and the level of organisation regarding terrorist acts have a significant influence on tourism demand flows. Some researched findings point out that the highest influence on tourist demand flow has in background frequent and organised terrorist acts and the lowest influence have the opposite effects. Consequentially, the countries such as Turkey and Israel, with organised and frequent terrorism acts, are perceived as the riskiest destinations. The countries such as Spain (ETA) where were infrequent but organised terrorist acts or countries such as the USA (gun-downs at high schools) where unorganised but more frequent terror is present, would be perceived as moderately risky countries. Last but not least, the countries such as the Nordic Countries or Germany, where terrorist acts were infrequent and unorganised, are perceived as the safest destinations (Wolff & Larsen, 2017).

It has been demonstrated that the magnitude and length of an expected negative effect, like the number of tourists visiting the destinations struck by terrorists, depend on the stability of such a country and the government reaction. In the case of Turkey, it was found that terrorism negatively affected the positive economic growth, but this negative impact was concentrated between three and six months after the event occurrence and "thereafter vanished". However, as

the author of this article stated, “the increasing violence in Turkey and neighbouring countries would, after the Arab Spring, compromise its long-run economic growth if policy measures that aim to increase safety and to restore the safe image after a terrorist attack, be not implemented” (Afonso-Rodríguez, 2016).

The negative effect of terrorism on tourism demand could be followed by the reduction of revenues in other main economic sectors of the attacked country such as oil production and foreign direct investments, which was the case in Nigeria (Ajogbeje, Adeniyi, & Folarin, 2017).

The results of the study concerning the terrorist attack in Mumbai, India, confirm that these attacks have a significantly negative impact on tourism demand (Gunasekar, Patri, & Narayanan, 2017).

In another study, it was found that terrorist attacks in Lebanon lead to positive spillover effects on visitor arrivals to Turkey and Israel, which indicates that those countries are perceived as substitute destinations. Looking at other countries, the researchers found that terrorist attacks in one country have a negative spillover effect on visitor arrivals in other countries (Bassil, Saleh, & Anwar, 2017).

There is also an insight into a “stable, long-run relationship between terrorist attacks in the MENA region and inbound tourist arrivals in Spain”, which points towards possible “cross-country substitution effects of tourism in the Mediterranean area as a consequence of the Arab Spring (AS) and subsequent rise of instability”. In this research, it was observed that “the MENA region is a natural tourist competitor to Spain, and the safer the area, the fewer tourist arrivals in Spain”. It was also concluded that the Arab Spring “has diverted tourists from the MENA region to Spain” with one remark that this effect could vanish when terrorism and instability disappear in this region (Afonso-Rodríguez & Santana-Gallego, 2017).

The next survey regarding the cruising industry revealed that passengers considered terrorism as a serious safety issue, and the cruise shipping industry sees that any terrorist attack on a vessel could have a devastating effect on business. In case of simultaneous attacks on several vessels, it would be the cause to cancel trips or delay the booking of a cruise holiday and in the case of smaller cruise shipping companies, it would be the moment for reconsidering their business operations to form the aspect of sustainability (Bowen, Fidgeon, & Page, 2014).

In a dynamic panel model research, it was found that terrorist attacks (fatalities and casualties) decrease tourism demand. It was also found that casualties (or fatalities) without travel advisory lead to significantly lower tourism demand. The casualties (or fatalities) combined with travel advice also significantly lower up tourist arrivals but with a higher effect than in previous case (casualties or fatalities alone). Travel advice alone without any casualties (or fatalities) is generally not significant in the combined dataset. Taking into account the country’s income level, it was revealed that casualties (or fatalities), as well as travel advice, significantly affect tourism demand for low-income countries but have no significant impact on high-income countries. Travelers from high-income countries show more concern regarding terrorist attacks in the countries that are “less able to contain the aftermath of such an event” (Buigut, Braendle, & Sajeewani, 2017).

Using the dataset from 1985 to 1998, it was found that in 71% of terrorism incidents also tourists were victims of the attacks and not only citizens. Further, it was found some relationship between terrorism characteristics and tourism demand, such as (Pizam & Smith, 2000):

1. “Acts of terrorism motivated by “social injustice” had a stronger negative effect on tourism demand than those motivated by “independence”.
2. Acts of terrorism that victimized both tourists and residents had a stronger impact on tourism demand than those that victimized residents only.
3. Acts of terrorism that resulted in bodily harm had a longer negative effect on tourism demand than acts that resulted in property loss.
4. Acts of terrorism committed with guns had a more negative and longer-lasting effect on tourism demand than those committed with bombs.
5. No statistically significant differences were found between the location of the terrorist act and the effect on tourism demand. “

In some research, it was observed the fact that a large portion of terrorist attacks (79%) “caused a significant decline in tourism demand that lasted from 1 to 6 months, with recovery in approximately 50% of the cases within three months or less” (Pizam & Smith, 2000).

Another study shows that the effect of a terrorist attack is particularly strong in high season. In the same study, it was found a shorter period (1 to 3 months) for German tourists to book again a tourist trip to Israel compared to all other destinations (3 to 4 months). The study explains the reasons for the changing safety and security at that destination (Karl, Winder, & Bauer, 2017).

It could be noted that tourist destinations may recover from a strong terrorist attack as long as that attack is not repeated (Pizam & Fleischer, 2002). The international tourism industry is vulnerable to terrorism but there is a directly proportional relationship between the level of vulnerability and the country’s reliance on peace and stability (Sönmez & Graefe, 1998), and there is long-run equilibrium level relationship between tourism and terrorism (Feridun, 2011). However, in another research, it was confirmed: “international tourism, measured by several arrivals to a country, has a positive effect on transnational terrorism”. It was found that the relationship between tourism and terrorism is reciprocal, meaning that “terrorism could be influenced by tourism as well” (Goldman & Neubauer-Shani, 2017).

In one research regarding the consequences of terrorism on tourism, which were observed in the case of Spain, where in one study, by using VAR methodology, in a period from 1970 to 1988, there were found opposite research results meaning that transnational terrorism significantly reduced Spanish tourism, and “the causality was unidirectional: terrorism affects tourism but not the reverse” (Enders & Sandler, 1991). Yet another research confirms the mentioned by stating that “the effect is unidirectional (terrorist incidents affect tourism demand and not vice versa) and persistent in the long run”, which is demonstrated in the case of Greece, (Samitas, Asteriou, Polyzos, & Kenourgios, 2018).

The next important topic considering the impact of terrorism on tourism is research on the impact of terrorism and political instability. It was observed that political instability has a “more lasting negative effect” concerning tourism than “one-off terrorist” attacks. Additionally, it was found which are some factors that influence recovery periods: the timing of the attack, the stage of tourism development, the scale of the attacks, the frequency of the attacks and the response to the attacks (Fletcher & Morakabati, 2008).

In another similar study, it was found that “political instability reduces tourist arrivals at any level of terrorism. Terrorism has a mixed effect on the number of tourists in a country if terrorism

increases and decreases depending if a country has low or high political risk level.” This means that countries with the below-average terrorist attack but with high political instability attract fewer international tourists, and in countries with lower political risks, terrorist attacks do not cause a decline in tourist arrivals due to the speed of recovery from such events (Saha & Yap, 2014).

Finally, if we look at the global data prepared by WTTC, one can observe the fact that the frequency of terrorist attacks might be detrimental to tourism sustainability and openness. This is supported by cognition that “there is substantial variation in the relationship between tourism decline and terrorism depending on the region: South Asia, Sub-Saharan Africa, MENA (the Middle East and North Africa), South America and the Asia-Pacific. Those regions correlate with higher levels of the Tourism Index and lower levels of terrorism, while Europe, Russia and Eurasia, North America, Central America and the Caribbean show the opposite relationship (WTTC, 2016).

Some key findings from this report suggest (WTTC, 2016):

- The countries with more sustainable and open tourism industries tend to be more peaceful.
- In non-conflict-affected countries, tourism sustainability and openness are resilient to deteriorations in violence, conflict and positive peace.
- In conflict-affected countries, tourism sustainability and openness are vulnerable to even small deteriorations in violence and conflict.
- The Tourism Index is a good predictor of levels of external peace and a reasonable predictor of overall levels of violence and conflict. This result is driven by non-conflict-affected countries.
- Both conflict-affected and non-conflict-affected countries show a correlation between the Tourism Index and higher positive peace, indicating that higher scores on the Tourism Index correlate with higher levels of positive peace. The strength of the correlation is significantly higher for non-conflict-affected countries.
- The Tourism Index is a good predictor of future levels of overall positive peace: the countries that have more open and sustainable tourism sectors will likely enjoy higher levels of positive peace in the future.
- Europe and North America are historically the strongest performers on Tourism, Global Peace and Positive Peace Indexes, while sub-Saharan Africa and South Asia are the weakest performers.
- Tourism sustainability is resilient to deteriorations in terrorism even when terrorism is targeted at tourists.

On the ground of the above-presented literature review, three hypotheses were formed to find out whether:

Hypothesis One: Comparable terrorist attacks in European countries would have a smaller negative effect on tourist arrivals than in the North African or Arabic countries.

Hypothesis Two: Negative effects of terrorism are longer-lasting in North African or Arabic countries compared to European countries.

Hypothesis Three: Terrorist attacks have not stopped the growth of tourism in any European, North African and Arabic countries.

In the subsequent chapters, we will present our methodological approach to test the above three hypotheses, the research done and in conclusion frame the whole topic of terrorism’s impact on tourism.

3. METHODOLOGY

Sample

The chosen countries were included in the sample according to the number of arrivals in these countries in the past 20 years (from 2018). The countries with a big number of tourists' arrivals were considered major tourist destinations. We covered the main tourist countries of the Mediterranean and the United Kingdom. The reason for that is because most terrorist attacks have occurred in the mentioned tourist countries. After the inclusion of the countries in the sample, those were split into two groups. The first group consisted of countries considered to be western: Spain, Italy, the UK and France. The second group of countries considered more exotic ones: Turkey, Tunisia and Egypt. Turkey, Tunisia and Egypt can also be classified as MENA (the Middle East and North Africa) countries. Italy was added as an example of an important tourist destination without recent terrorist attacks and we used it as a benchmark for other countries.

All of the data used was secondary data. It was collected from the World Bank database that is available online. We also used some indexes calculated by the Vision of Humanity. They include Peace Index, Terror Index, and Positive Peace Index.

Design

By using the predictions based on the year where the most significant terrorist act was committed and later comparing it with the actual values, we tried to show what was the effect of a terrorist act compared with actual predictions. The difference between predicted values and actual values serves as the size of the effect. The long-term effect can again be seen from the predictions based on the last year available. By combining the actual data, predicted data based on the year of a significant terrorist act and the predictions based on the last available year where data is available, we try to see the real effect of a terrorist attack on the number of arrivals to the country.

Data analysis

Software package Tableau (Tableau, 2014) was used to make comparison and forecasts with obtained data used in this paper. The software uses method called exponential smoothing. The most important thing we have to know is that the all the observations are not weighed equally. Later observations are given more weight. The method implies that the predictions should be taken as a rule of thumb. More advanced predictive models such as ARIMA were not made as we did not have enough data. Besides, in this case the application would also be difficult as it requires many more assumptions to be complied with.

Evaluation

The quality of the predictions was still found to be a bit poor as we did not get access to monthly or weekly arrival data for all countries, which we needed to compare. In any case, the goal of this paper is to show the short and, in some cases, long-term effects of terrorism on different countries. For this goal, the exponential smoothing models were deemed sufficient. The quality of predictions can also be seen in the tables attached to the paper. Statistics such as RMSE (Root Mean Square Error), MAE (Mean Absolute Error), MASE (Mean Absolute Scaled Error),

MAPE (Mean Absolute Percentage Error) and AIC (Akaike Information Criterion) are used to evaluate the quality of the models.

Forecasting process

Forecasting is the process of estimating the unknown. It can be defined as the science of predicting future outcomes. Forecast should have the following characteristics: it should be timely; as accurate as possible; reliable; and meaningful units. In order to do the forecasting process, the following steps should be computed (Nolan 1994; Armstrong 2001):

1. definition of the purpose of forecasting;
2. data preparation;
3. preliminary analysis;
4. choosing and fitting the best model;
5. forecasting;
6. evaluation.

Data preparation

For analysing the data on tourist arrivals each year from 1995–to 2017 we use the data of the World Bank Database.

Preliminary analysis

A good way to understand the data is a visualisation to find out some consistent patterns or a significant trend. With the help of Tableau 10.4, a powerful statistic tool for exploration and visualisation of the datasets, the graphics for different periods are constructed (Tableau, 2014).

Choosing and fitting the model

The next step is to determine the appropriate model that fits the data. For that purpose, we used the Box and Jenkins approach (Box, Jenkins, Reinsel, & Ljung, 2015) which allows selecting from a group of forecasting models the one that is the best to fit the time series data. The ARIMA (autoregressive integrated moving average) modeling can be applied to most types of time series data. The forecasting accuracy of the ARIMA model is considered by scientists to be of a high degree (Beliaeva, Petrochenkov, & Bade, 2013).

Forecasting

The data comparison is done from the period 2017 to 2020 and then forecasting (1) for the period from 2020 to 2027. The results of the prediction concerning the year are presented in Figures 1–7.

$$\begin{aligned}
 \hat{y}_{t+h|t} &= \ell_t + s_{t-m+h_m^*} \\
 \ell_t &= \alpha(y_t - s_{t-m}) + (1 - \alpha)\ell_{t-1} \\
 s_t &= \gamma(y_t - \ell_{t-1}) + (1 - \gamma)s_{t-m}
 \end{aligned} \tag{1}$$

Comparing the performance

This is the last and final step of the proposed methodology. We have given the screenshots, which were obtained at the time of analysing the dataset.

Evaluation

The evaluation was made by using the Mean absolute scaled error (MASE) which is the most reliable according to Hyndman and Koehler (table 1).

If the MASE is lower than 1, the forecast model is right (Hyndman & Koehler, 2006). In table 1, you will see that in some cases MASE is higher than 1. From this point of view, the forecast is not reliable. On the other hand, MAPE measures the magnitude of the error compared to the magnitude of data, as a percentage. So, a MAPE of 10% is better than a MAPE of 60%. As we see, a MAPE is between 4.90% and 18.80%. These results represent the mean value accuracy of the forecast.

Below we can see the summary of all models used.

In the charts, we can see the actual arrivals as the coloured area in the chart, while predictions are seen as lines. Two predictions were made for each analysed country. The first one is made based on all the available data, while the other tries to show how many arrivals there would be if the terrorist act had not happened.

Table 1. Forecast error measures

	Model			Quality Metrics				Smoothing Coefficients			
	Level	Trend	Season	RMSE	MAE	MASE	MAPE	AIC	α	β	γ
Egypt 2018	Additive	None	None	1.79	1.40	1.01	18.80%	33	0.50	0.00	0
Egypt 2010	Additive	Additive	None	0.89	0.77	0.81	13.80%	6	0.50	0.50	0
Spain 2018	Multiplicative	Multiplicative	None	3.60	3.20	1.13	6.30%	69	0.50	0.50	0
Spain 2003	Additive	Additive	None	2.76	1.92	0.86	5.20%	28	0.50	0.03	0
France 2018	Additive	Additive	None	2.74	2.27	1.04	3.10%	56	0.50	0.00	0
France 2014	Additive	Additive	None	2.83	2.34	1.08	3.20%	52	0.50	0.00	0
Great Britain 2018	Additive	Additive	None	1.77	1.54	1.27	5.80%	36	0.50	0.00	0
Great Britain 2004	Additive	None	None	1.19	0.85	0.81	3.70%	10	0.00	0.00	0
Italy 2018	Additive	Additive	None	2.24	1.70	0.96	4.20%	47	0.50	0.00	0
Tunisia 2018	Additive	None	None	0.75	0.60	1.07	10.00%	-7	0.50	0.00	0
Tunisia 2010	Multiplicative	Multiplicative	None	0.32	0.25	0.77	4.90%	-27	0.50	0.07	0
Turkey 2018	Additive	Additive	None	3.18	2.27	0.88	12.80%	63	0.50	0.50	0
Turkey 2014	Additive	Additive	None	2.13	1.85	0.88	13.10%	40	0.50	0.50	0

Source: Authors

4. FINDINGS AND RESULTS

Firstly, we will present all the countries and their actual arrivals compared with our predictions for the time after the terrorist attacks that most shook the countries in our sample.

In the second part, we will present the findings in general. Some basic descriptive statistics were calculated to show how each country performed.

Aggregated data by country shows how different countries performed after the terrorist acts. Some terrorist attacks happened lately and therefore we, unfortunately, do not have a 10-year window to analyse the effects of the attacks, but we can still compare the countries to each other.

We start by examining Egypt (Figure 1). We can see the country enjoyed steady growth in the number of arrivals in the country until the revolution in 2011. The predictions suggest the big growth would continue, but the actual number of arrivals show that the revolution had a strong negative impact on the number of tourist arrivals.

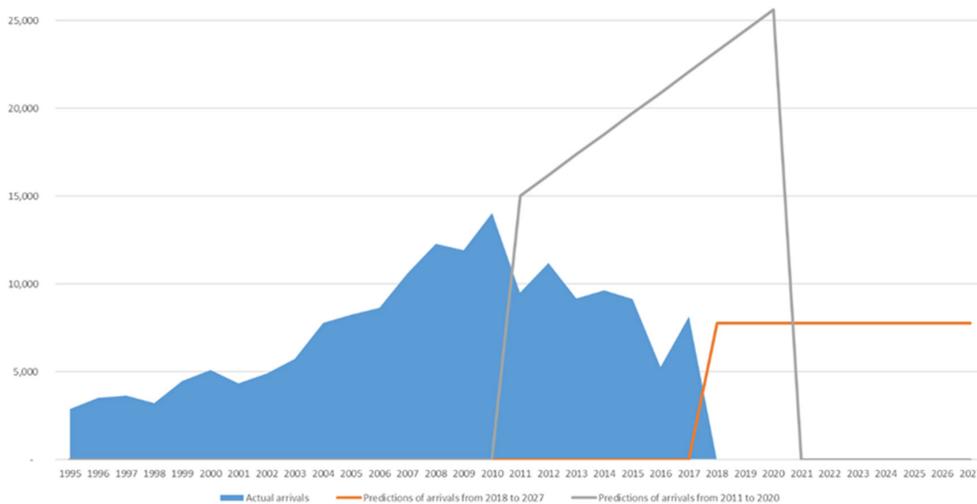


Figure 1. Egypt Tourist Arrivals and Forecasts (1995–2027)

Source: Authors

As the revolution was followed by another coup and also other instabilities, the growth has still not returned and the number of arrivals has not reached pre-revolution numbers. Our model predicted that the future looks uncertain and that the number of arrivals will be steady for the foreseeable future.

Tunisia is next. We can see (Figure 2) that similarly to Egypt and according to our model, Tunisia was supposed to continue the growth they were experiencing before the revolution. The revolution then struck and the number of tourist arrivals declined instead of growing. Similarly, for Egypt, our model predicts that the number of arrivals will hover around the number of arrivals achieved in 2017.

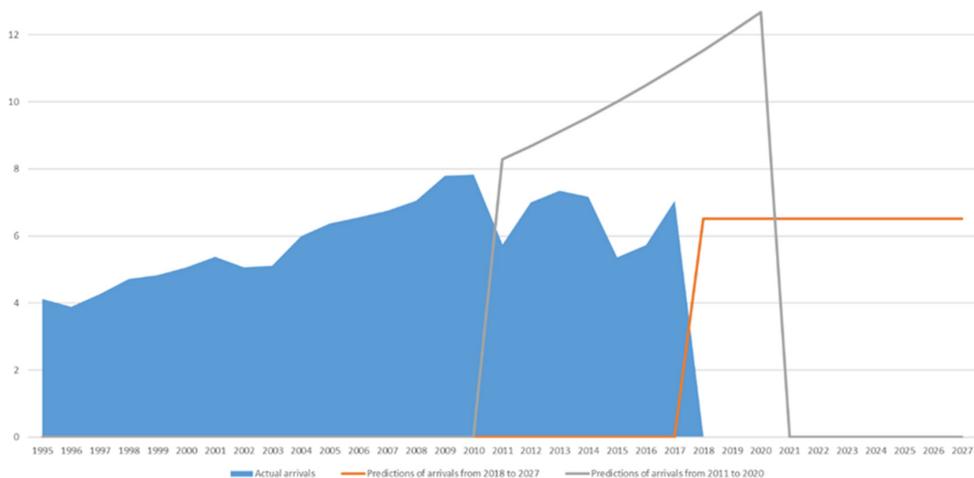


Figure 2. Tunisia Tourist Arrivals and Forecasts (1995–2027)

Source: Authors

Turkey showed a big trend of a constant increase in arrivals to the country until 2015 when the Ankara bombings were conducted (Figure 3). They were followed by the New Year’s Eve shooting and a coup attempt in 2016. The number of arrivals fell instead of the growth that was predicted by our model. The current prognosis of our model is that the arrivals to the country will continue to fall for the next couple of years.

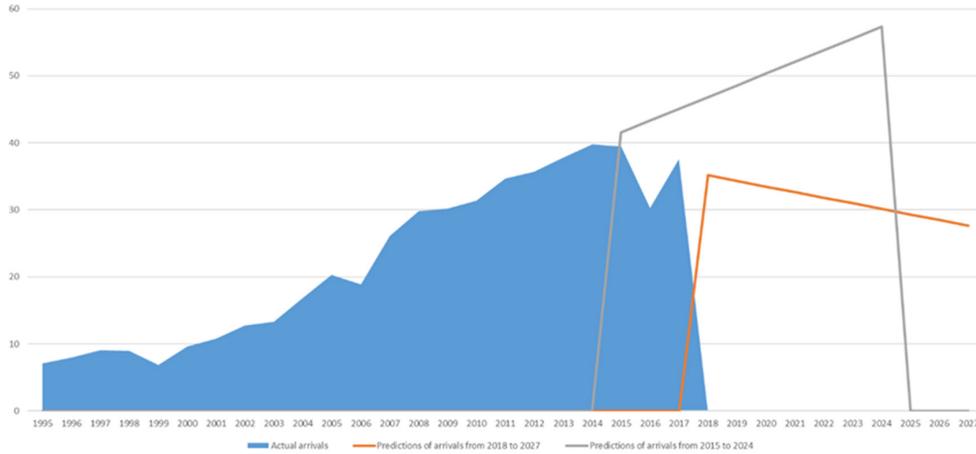


Figure 3. Turkey Tourist Arrivals and Forecasts (1995–2027)

Source: Authors

Spain experienced (Figure 4) a deadly attack on the Madrid subway in 2004. The bombings were not followed by other terrorist acts and Spain kept to the predicted number of arrivals until 2007 when the growth stopped. Lately, Spain has again been experiencing a big uptick in the number of arrivals to the country. Because of that, our model shows that the number of arrivals will continue to grow very fast in the foreseeable future.

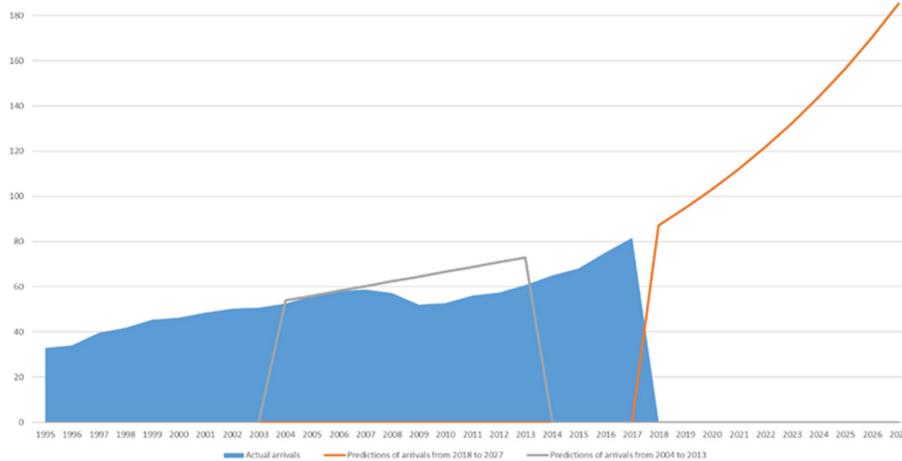


Figure 4. Spain Tourist Arrivals and Forecasts (1995–2027)

Source: Authors

France experienced a terrorist attack on the Bataclan theatre at the end of 2015. But as we can see from the chart, the terrorist attacks did not decrease the number of arrivals greatly and the prognosis shows the number of arrivals to the country will continue to grow (Figure 5). We must also add that France also experienced a Nice truck attack and the attack on Charlie Hebdo so we cannot claim that Bataclan shootings were an isolated attack.

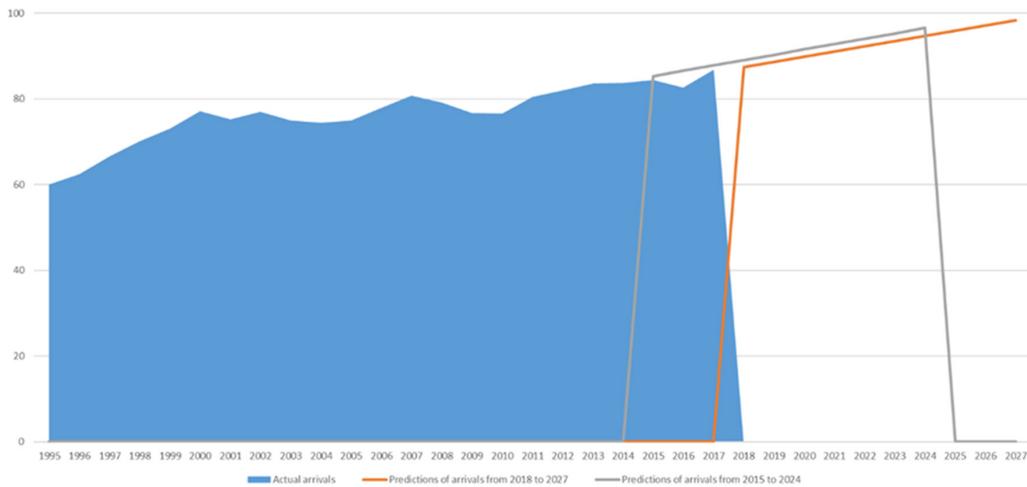


Figure 5. France Tourist Arrivals and Forecasts (1995–2027)

Source: Authors

The 7th July bombing in London at the underground trains was the most significant terrorist act London has experienced lately (Figure 6). Manchester shootings happened in 2017, but the data for tourist arrivals have not been analysed well. 2005 was supposed to be the year when the number of arrivals to the UK would stop growing and be kept that way for 10 years. But even despite the London bombings, the UK outperformed the predictions and posted big growth in the number of tourist arrivals which, as our model shows, will continue into the foreseeable future.

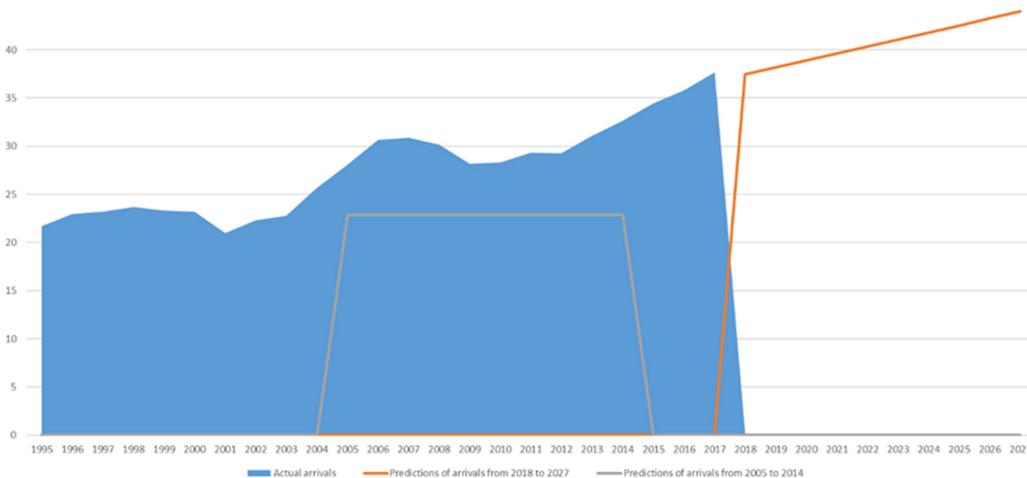


Figure 6. Great Britain Tourist Arrivals and Forecasts (1995–2027)

Source: Authors

Italy was the analysed country that did not experience a serious terrorist act in the last 25 years (Figure 7). The growth of arrivals has been present since 1995 and as our model shows will continue.

Because the growth in tourism on the world stage has been big since 1995, we can expect that all the reviewed countries on average will experience growth in the number of tourist arrivals. Between 2018 and 2027, the number of arrivals to Turkey will decrease on average by 2.6 %, while it will not grow nor fall in Egypt and Tunisia. In Spain, France, Italy and the UK, the number of arrivals will grow according to our model.

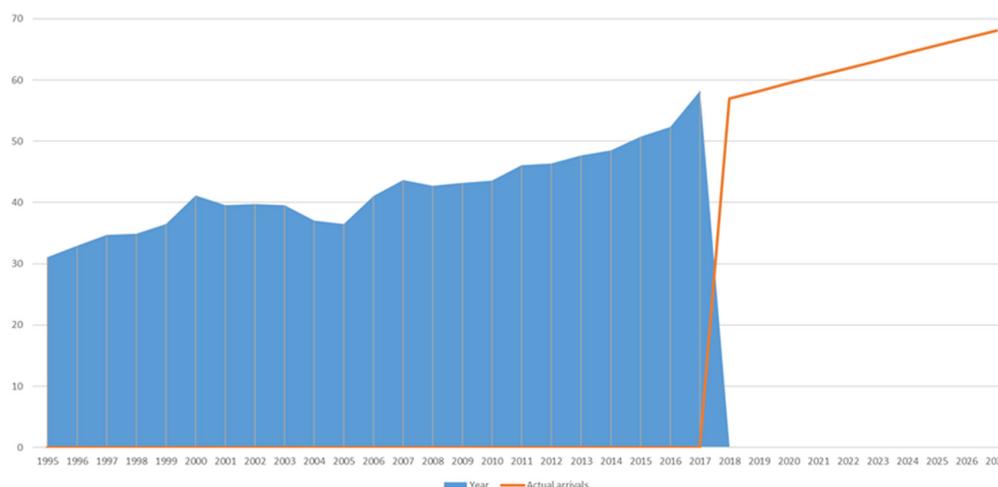


Figure 7. Italy Tourist Arrivals and Forecasts (1995–2027)

Source: Authors

What is interesting by looking at the summary tables (2 and 3), is that even after the terrorist attacks, on average, the growth was present in all the analysed countries but was much smaller in the cases of Egypt and Turkey. In the case of Spain, it was a bit smaller, while it stayed the same in France and Tunisia. In the case of the UK, it even increased.

Table 2. Average growth of tourist arrivals after terrorist attacks (in percentages)

	Egypt	Spain	France	UK	Italy	Tunisia	Turkey
The number of years after terrorist attacks with data	7	10	3	10	0	7	3
Actual average growth between 1995 and 2017	7.4%	4.3%	1.7%	2.7%	3.0%	3.2%	9.0%
Average predicted growth between 2018 and 2027	0.0%	8.7%	1.3%	1.8%	2.0%	0.0%	-2.6%
Actual average growth for the time after terrorist attacks	2.1%	1.7%	1.5%	1.8%	/	4.9%	0.4%
Predicted average growth for the time after terrorist attacks	6.6%	3.4%	1.4%	0.0%	/	4.8%	4.1%
Difference between predicted and actual average growth for the time after terrorist attacks	-4.6%	-1.7%	0.0%	1.8%	/	0.0%	-3.7%

Source: Authors

If we also take a look at the actual number of arrivals, we see that all countries except for the UK experienced a decrease in the number of arrivals when compared to the predictions from the time before the attacks.

Table 3. Average growth of tourist arrivals after terrorist attacks (in thousands)

	Egypt	Spain	France	UK	Italy	Tunisia	Turkey
Years after terrorist attacks with data	7	10	3	10	0	7	3
Actual Arrivals for the period after terrorist attacks	62.0	561.4	254.0	298.5	/	45.4	107.4
Predicted arrivals for the period after terrorist attacks	129.8	634.1	259.8	229.0	/	67.1	130.0
Difference between actual arrivals after terrorist attacks and predicted arrivals for terrorist attacks	-67.8	-72.8	-5.8	69.5	/	-21.8	-22.6

Source: Authors

We also calculated correlations between the number of arrivals and some key factors that measure violence in each country (Table 4). Statistically, significant correlations are coloured red. The variable year is also added, which shows correlations of arrivals with the time. We see that the relationship is always positive, which indicates growth over the years.

We see that the lower Peace Index (lower score indicates higher peacefulness) negatively correlates with arrivals to the country for each one of the analysed countries that were expected.

What is more surprising is that the relationship between the Terror Index and arrivals to the country is not as straightforward. We only identified a negative correlation between the number of arrivals and the terror index (higher score indicates more terrorist activity) in Spain, Italy, and Tunisia.

The correlations between the Positive Peace Index and the number of arrivals to a country show that the relationship was negative in the case of MENA countries and the UK and positive in the case of Italy, France and Spain.

We also found that the correlation between the number of departures and arrivals to a country in our sample is positive, which means that the factors influencing the choice to travel to a country could also influence the number of arrivals to a country.

Table 4. Correlation table

		Year	Peace Index	Terror Index	Positive peace	Departures
Spain arrivals	Pearson corr.	0.854	-0.911	-0.690	0.849	0.771
	p	0.000	0.001	0.004	0.000	0.000
Italy arrivals	Pearson correlation	0.895	-0.233	-0.210	0.780	0.761
	p	0.000	0.547	0.453	0.003	0.000
France arrivals	Pearson corr.	0.837	-0.066	0.408	0.449	0.778
	p	0.000	0.866	0.131	0.143	0.000
Egypt arrivals	Pearson corr.	0.473	-0.778	0.073	-0.553	0.663
	p	0.055	0.014	0.797	0.062	0.013
UK arrivals	Pearson corr.	0.898	-0.773	0.591	-0.162	0.478
	p	0.000	0.015	0.020	0.615	0.052
Turkey arrivals	Pearson corr.	0.942	-0.186	0.377	-0.849	0.397
	p	0.000	0.633	0.166	0.000	0.115
Tunisia arrivals	Pearson corr.	0.447	-0.141	-0.530	-0.154	0.729
	p	0.072	0.718	0.042	0.633	0.001

Source: Authors

5. DISCUSSION AND CONCLUSION

The results are hard to generalise as every country is different and has a different perception in the mind of a tourist. What we can see from our sample, is that continuous terrorist or violent activities in a non-European country have a bigger negative impact on the number of tourist arrivals when compared with rarer such events in a European country, which is consistent with the research results dealing with random and persistent acts of terrorism (Sönmez, Sevil F. et, al., 1999) and the frequency and level of the organisation regarding terrorist acts (Wolff & Larsen, 2017). We can observe that the more they are politically and economically stable, the faster they normalise, as already established in previous studies (Thompson, 2011).

On the other hand, some findings show a pattern similar to the things happening in the other parts of the world as well. The latest attacks in Sri Lanka had a different effect on the arrivals of tourists to the country like the ones in New Zealand. The news coverage was also different. After all the data is in, that case would be interesting to analyse.

We discover a similar pattern as Liu & Pratt (Liu & Pratt, 2017) because the high income per capita countries were less affected by terrorist acts even if they were repeated as in the case of France. It was also shown that the effects were longer-lasting in lower-income per capita countries, but that could also be the case of overall political instability, which Fletcher & Morakabati (Fletcher & Morakabati, 2008) showed - can be even a greater factor than terrorism.

The observation about the relationship between the Terror Index and arrivals is partially consistent with WTTC report regarding higher levels of Tourism Index and lower levels of terrorism in the MENA countries and the opposite relationship in the European countries (WTTC, 2016), which could be explained by limitations in this research; that will be explained in the section below.

The findings regarding the negative correlation between the number of arrivals and the Terror Index in Spain and Tunisia confirm the results of some previous research related to the unidirectional causality between terrorism and tourism (Enders & Sandler, 1991; Samitas et al., 2018), which is, on the other hand, opposite to the findings in relation to the reciprocal relationship between tourism and terrorism (Goldman & Neubauer-Shani, 2017).

Many factors have an influence on the tourists' decision and we cannot claim that only terrorist attacks were the reason for a decrease in arrivals in war-torn countries, but we can show a decrease in tourist arrivals in the years following the terrorist attacks even in cases where the number of arrivals had steadily been rising in the years before the attack.

The strongest point of our article is to show a hypothetical scenario where the terrorist attacks did not happen. In such a case, we see if now the increase/decrease of arrivals to a country was expected or not; when combined with the data about the terrorist attacks that show great value in demonstrating the effect size of the terrorist act. One weakness is a lack of a statistically proven causality link between terrorism and tourism. In this area, there is still room for improvement.

After looking at the result, we have to find out what is the reason for a bigger negative effect on the countries that are not considered western. If it is only about the perception and media coverage, non-western countries should try to negate the effects with better responses and PR activities that should be cultivated all the time and not only after the attacks. Longitudinal research of all countries affected by terrorism would greatly contribute to knowledge in this field. Right now, the focus of this study was only on high-profile tourist destinations. Maybe the effect would be different in countries that are not so popular with tourists.

We have confirmed all three hypotheses. Comparable terrorist attacks in European countries did have a smaller negative effect on tourist arrivals than in the North African or Arabic countries. Negative effects of terrorism were also longer-lasting in North African or Arabic countries compared to European countries. But the terrorist attacks have not stopped the growth of tourism in any European, North African and Arabic countries.

The article emphasises that security is an important factor for stable tourism growth (Fletcher & Morakabati, 2008; Saha & Yap, 2014; Wolff & Larsen, 2017). However, this is all the more important in countries where the political and economic situation is not stable. Using this method, country statistical offices can estimate when tourism will return to pre-terrorist status. Security is certainly one of the most important factors for a tourist in deciding on a destination because only a few tourists search for dangerous areas.

Even traditional tourist destinations can greatly suffer from a surge of violence or even from a single terrorist attack as can be seen in the case of Sri Lanka. A short-term drop of tourist arrivals seems impossible to avoid for non-western tourist destinations. Western countries show that recovery after a terrorist attack is possible if the violence is not constant. In the case of the analysed non-western countries, those had other problems as the terrorist attacks or revolutions were usually followed by more violence. Even in the case of Turkey, where the violence levels did not reach the ones of Syria, we can see that the tourism industry was hit harder and is recovering more slowly.

We have found no case study on how to soften the blow of violent acts in a non-western country. Especially in the case of Turkey, it would be interesting to see what is the biggest reason as France had a similar level of violent activity as Turkey, but their tourism industry did not suffer nearly as much from it.

Our research and results are backed up by the current literature and the data used – violent activity negatively influences tourism in countries. In some countries, tourism is a big part of the economy and therefore an important part of society. In those countries, targeting tourists is a viable option for terrorists as it is an easy way to get attention. How to resolve a complicated political question and guarantee safety, is outside of the scope of this article.

6. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Some shortcomings of our study have to be pointed out. Repeated attacks are not accounted for in this research. As several studies have found, repeated attacks can have a strong impact on tourism where the attacks are committed. As only the variable arrivals to the country are used, control variables are missing. But we can counter that by saying that exact predictions are not the goal of this article. What we tried to show was the difference in the effect of terrorism on tourism between developed European countries and the most popular destinations outside of Europe for European tourists.

Also, we were not able to obtain weekly or monthly data for all countries and all variables, which would have been more accurate. The immediate effect of arrivals was therefore not possible to study. Our models would have also worked better on more detailed data. When talking about data, we would have also liked to see a cross-national survey of countries' safety perception over time. Comparing it with objective indices would be interesting as it would have shown us the differences between perception and actual violence levels in analysed countries.

Another aspect that would be interesting to research is after how many years do the effects of a significant terrorist attack stop being felt. It is possible that a big terrorist act only has a short-term effect on the arrival of tourists to the affected country.

Finally, the analysis of how the attacks were communicated in the media and also by affected governments would also be interesting to see. Analysing official responses would provide an insight into how to react in the case of a terrorist attack. Maybe a different kind of response shortens the time in which the number of arrivals returns to pre-terrorist attack levels. It can maybe even soften a short-term drop in the number of arrivals. Tourists' perception of safety in a country may not be as strongly correlated with actual safety in a country. That problem would be interesting to research.

REFERENCES

- Adeloye, D., & Brown, L. (2017). Terrorism and domestic tourist risk perceptions. *Journal of Tourism and Cultural Change*, 16(3), 217–233. <https://doi.org/10.1080/14766825.2017.1304399>
- Afonso-Rodríguez, J. A. (2016). Evaluating the dynamics and impact of terrorist attacks on tourism and economic growth for Turkey. *Journal of Policy Research in Tourism, Leisure and Events*, 9(1), 56–81. <https://doi.org/10.1080/19407963.2016.1231196>
- Afonso-Rodríguez, J. A., & Santana-Gallego, M. (2017). Is Spain benefiting from the Arab Spring? On the impact of terrorism on a tourist competitor country. *Quality and Quantity*, 52(3), 1371–1408. <https://doi.org/10.1007/s11135-017-0527-2>
- Ajogbeje, K., Adeniyi, O., & Folarin, O. (2017). The effect of terrorism on tourism development in Nigeria. *Tourism Economics*, 23(8), 1–6. <https://doi.org/10.1177/1354816617692477>
- Armstrong, J. S. (2001). *Principles of forecasting: a handbook for researchers and practitioners* (Vol. 30). Springer Science & Business Media.
- Baker, D. (2014). The Effects of Terrorism on the Travel and Tourism Industry. *International Journal of Religious Tourism and Pilgrimage*, 2(1), 58–67. Retrieved from <http://arrow.dit.ie/ijrtp%5Cnhttp://arrow.dit.ie/ijrtp/vol2/iss1/9>
- Bakić, O. (2008). *Marketing u turizmu* (7. izdanje). Novi Sad: Educons University.
- Bassil, C., Saleh, A. S., & Anwar, S. (2017). Terrorism and tourism demand: a case study of Lebanon, Turkey and Israel. *Current Issues in Tourism*, 0(0), 1–21. <https://doi.org/10.1080/13683500.2017.1397609>
- Beliaeva, N., Petrochenkov, A., & Bade, K. (2013). Data set analysis of electric power consumption. *European Researcher*. Series A, (10–2), 2482.
- Bianchi, R. (2006). Tourism and the Globalisation of Fear: Analysing the Politics of Risk and (in)Security in Global Travel. *Tourism and Hospitality Research*, 7(1), 64–74. <https://doi.org/10.1057/palgrave.thr.6050028>
- Bowen, C., Fidgeon, P., & Page, S. J. (2014). Maritime tourism and terrorism: Customer perceptions of the potential terrorist threat to cruise shipping. *Current Issues in Tourism*, 17(7), 610–639. <https://doi.org/10.1080/13683500.2012.743973>
- Box, G. E. P., Jenkins, G. M., Reinsel, G. C., & Ljung, G. M. (2015). *Time series analysis: forecasting and control*. John Wiley & Sons.
- Buigut, S., Braendle, U., & Sajeewani, D. (2017). Terrorism and travel advisory effects on international tourism. *Asia Pacific Journal of Tourism Research*, 22(10), 991–1004. <https://doi.org/10.1080/10941665.2017.1359193>
- Crenshaw, M. (2014). Terrorism Research: The Record. *International Interactions*, 40(4), 556–567. <https://doi.org/10.1080/03050629.2014.902817>
- Dolnicar, S. (2007). “Crises” that scare tourists: investigating tourists' travel-related concerns. In K. (eds. B, Laws, & Chon (Ed.), *Crisis management in tourism* (pp. 98–109). <https://doi.org/10.1079/9781845930479.0098>

- Enders, W., & Sandler, T. (1991). Causality between transnational terrorism and tourism: The case of Spain. *Terrorism*, 14(1), 49–58. <https://doi.org/10.1080/10576109108435856>
- Feridun, M. (2011). Impact of terrorism on tourism in Turkey: Empirical evidence from Turkey. *Applied Economics*, 43(24), 3349–3354. <https://doi.org/10.1080/00036841003636268>
- Fletcher, J., & Morakabati, Y. (2008). Tourism activity, terrorism and political instability within the commonwealth: The cases of Fiji and Kenya. *International Journal of Tourism Research*, 10(November), 537–556. <https://doi.org/DOI: 10.1002/jtr.699>
- Goldman, O. S., & Neubauer-Shani, M. (2017). Does International Tourism Affect Transnational Terrorism? *Journal of Travel Research*, 56(4), 451–467. <https://doi.org/10.1177/0047287516649059>
- Gunasekar, S., Patri, R., & Narayanan, B. (2017). International Tourist Arrival in India: Impact of Mumbai 26/11 Terror Attack. *Foreign Trade Review*, 53(1), 12–28. <https://doi.org/10.1177/0015732516681882>
- Hyndman, R. J., & Koehler, A. B. (2006). Another look at measures of forecast accuracy. *International Journal of Forecasting*, 22(4), 679–688.
- Karl, M., Winder, G., & Bauer, A. (2017). Terrorism and tourism in Israel: Analysis of the temporal scale. *Tourism Economics*, 23(6), 1343–1352. <https://doi.org/10.1177/1354816616686417>
- Kobašić, A., & Senečić, J. (1989). *Marketing u turizmu*. Zagreb: Školska knjiga.
- Korstanje, M. E., & Clayton, A. (2012). Tourism and terrorism: Conflicts and commonalities. *Worldwide Hospitality and Tourism Themes*, 4(1), 8–25. <https://doi.org/10.1108/17554211211198552>
- Kotler, P., Bowen, J. T., & Makens, J. C. (2010). *Marketing for hospitality and tourism* (5th ed.). New Jersey: Pearson Prentice Hall, International Edition.
- Lepp, A., & Gibson, H. (2003). Tourist roles, perceived risk and international tourism. *Annals of Tourism Research*, 30(3), 606–624. [https://doi.org/10.1016/S0160-7383\(03\)00024-0](https://doi.org/10.1016/S0160-7383(03)00024-0)
- Liu, A., & Pratt, S. (2017). Tourism's vulnerability and resilience to terrorism. *Tourism Management*, 60, 404–417. <https://doi.org/10.1016/j.tourman.2017.01.001>
- Llorca-Vivero, R. (2008). Terrorism and international tourism: New evidence. *Defence and Peace Economics*, 19(2), 169–188. <https://doi.org/10.1080/10242690701453917>
- Midleton, V. T. C. (1986). *Marketing in travel and Tourism*. London: Heinemann.
- Nolan, B. (1994). *Data analysis: an introduction*. Polity.
- Pizam, A. (2002). Editorial Tourism and terrorism. *International Journal of Hospitality Management*, 21(1), 1–3. [https://doi.org/10.1016/s0278-4319\(01\)00037-8](https://doi.org/10.1016/s0278-4319(01)00037-8)
- Pizam, A. (2016). The Orlando nightclub massacre: Why radical Islam hates us? *International Journal of Hospitality Management*, 57, 152–153. <https://doi.org/10.1016/j.ijhm.2016.08.001>
- Pizam, A., & Fleischer, A. (2002). Severity versus frequency of acts of terrorism: Which has a larger impact on tourism demand? *Journal of Travel Research*, 40(3), 337–339. <https://doi.org/10.1177/0047287502040003011>
- Pizam, A., & Smith, G. (2000). Tourism and Terrorism: A Historical Analysis of Major Terrorism Acts and Their Impact on Tourism Destinations. *Tourism Economics*, 6(62), 123–138. Retrieved from <http://stars.library.ucf.edu/cgi/viewcontent.cgi?article=1379&context=rosenscholar>
- Radović, M. (2010). *Turistička geografija Crne Gore*. Bar, Kotor: Fakultet za turizam, hotelijerstvo i trgovinu, Bar; Fakultet za turizam i hotelijerstvo, Kotor.
- Ryan, C. (1993). Crime, violence, terrorism and tourism. An accidental or intrinsic relationship? *Tourism Management*, 14(3), 173–183. [https://doi.org/10.1016/0261-5177\(93\)90018-G](https://doi.org/10.1016/0261-5177(93)90018-G)
- Saha, S., & Yap, G. (2014). The Moderation Effects of Political Instability and Terrorism on Tourism Development: A Cross-Country Panel Analysis. *Journal of Travel Research*, 53(4), 509–521. <https://doi.org/10.1177/0047287513496472>

- Samitas, A., Asteriou, D., Polyzos, S., & Kenourgios, D. (2018). Terrorist incidents and tourism demand: Evidence from Greece. *Tourism Management Perspectives*, 25(October 2017), 23–28. <https://doi.org/10.1016/j.tmp.2017.10.005>
- Seabra, C., Abrantes, J. L., & Kastenholz, E. (2014). The influence of terrorism risk perception on purchase involvement and safety concern of international travellers. *Journal of Marketing Management*, 30(9–10), 874–903. <https://doi.org/10.1080/0267257X.2014.934904>
- Sönmez, Sevil F., Apostolopoulos, Y., & Tarlow, P. (1999). Tourism in Crisis: Managing the Effects of Terrorism. *Journal of Travel Research*, 38(1), 13–18.
- Sönmez, S. F., & Graefe, A. R. (1998). Influence of Terrorism Risk on Foreign Tourism Decisions. *Annals of Tourism Research*, 25(1), 112–144.
- Tableau. (2014). *Visual Analysis Best Practices*. Tableau Software, 41.
- Thompson, A. (2011). Terrorism and tourism in developed versus developing countries. *Tourism Economics*, 17(3), 693–700. <https://doi.org/10.5367/te.2011.0064>
- Unković, S., & Zečević, B. (2011). *Ekonomika turizma* (22. izdanje). Beograd: Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu.
- Unković, Slobodan, Bakić, O., Čačić, K., & Popesku, J. (1991). *Savremeni tokovi u turizmu*. Beograd: Univerzitet u Beogradu, Ekonomski fakultet.
- Vukonić, B. (1985). *Marketing u turizmu*. Zagreb: Vjesnik.
- Walters, G., Wallin, A., & Hartley, N. (2018). The Threat of Terrorism and Tourist Choice Behavior. *Journal of Travel Research*, 58(3), 370–382. <https://doi.org/10.1177/0047287518755503>
- Wolff, K., & Larsen, S. (2017). A Taxonomy of Terror - About the Effect of Different Kinds of Terror on Risk Perceptions. *Scandinavian Journal of Hospitality and Tourism*, 17(2), 111–128. <https://doi.org/10.1080/15022250.2015.1137487>
- WTTC. (2016). *Tourism as a Driver of Peace*. World Travel Tourism Council. <http://peacetourism.org/wp-content/uploads/2018/05/Tourism-as-a-Driver-of-Peace.pdf>



Application of the Concept of Target Costing in Hospitality

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Abstract: *In recent decades, the service sector has become a fast-growing world economic activity, and hospitality organizations are a key element of the service sector. Providing high-quality services in this sector at lower prices than the competition is an important factor and the basic goal of companies' business success. In order for hospitality organizations to achieve this goal, it is necessary to find an adequate way to calculate costs and determine the cost price of services provided. The application of modern costing methods enables hospitality organizations to increase profits, increase labor productivity, shorten service delivery time and reduce costs. One of the concepts of cost management in a given business environment is target costing. The concept is focused on reducing costs, primarily in the product design phase to the target amount. The paper analyzes the possibility of applying the modern concept - target costing in a hospitality company.*

1. INTRODUCTION

The competitive advantage of a company can be seen as the superiority of a particular market participant, resulting from the proper use of resources and the use of key competencies that are reflected in the creation of required or higher value for customers than other market participants. The required value is usually shown through lower prices or unique product/service characteristics that will best bring customer satisfaction. It should be borne in mind that the notion of competitive advantage has changed over time and has encompassed different product and service characteristics. Initially, the emphasis was on low costs, quality and fast delivery, but later it included reliability, flexibility, speed of response to requests, the time required to place a new product/service, quality of after-sales services and the like. Such an upgrade of the concept of competitive advantage is a result of changes in customer needs over time as well as the sector that provides the product/service.

In order to achieve and maintain a competitive advantage, company managers in both the manufacturing and service sectors formulate a company strategy that will be a kind of guide to achieving all aspects of competitiveness in production and service delivery. For these needs, they need appropriate information support coming from concepts, tools and techniques of modern management accounting. The reason for looking for new information support is that the traditional approach has shown its shortcomings in a modern business environment with pronounced local and international competition, rapid technological progress, different customer requirements, short product life cycle. One of the concepts of modern management accounting that aims to rationalize costs and provide greater value for customers by integrating activities performed primarily in the product design phase, but also in other phases of the product life cycle is target costing (TC).

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Target costing as a market-oriented concept is aimed at integrating strategic variables within the product concept. It is the difference between the target selling price and the target profit. The target selling price is formed during product planning in a market-oriented manner and reflects product specifications or features that the customer expects and evaluates (product functionality), while the target profit is determined during product planning, and is aligned with the planned corporate strategic plan, meaning that future product/service should generate a profit that correlates with the company's long-term profit plan. If the target cost is less than the allowable cost amount, management must find a way to reduce the cost, thereby moving the amount of actual cost to the amount of the target cost that will be competitive. Finding ways to reduce these costs is a strategic challenge of cost reduction, i.e. the main challenge of the concept of target costing.

The research subject in this paper is to examine the possibility of applying the target costing concept with special emphasis on calculating and achieving the desired amount of cost in service organizations in order to achieve a competitive price of the product/service.

This paper aims to consider the possibility and highlight the importance of applying the concept of target costing in the service sector and emphasize the importance of its application.

In that sense, the work is divided into three parts. The first part points out the specifics of doing business in the service sector. The second part of the paper deals with the concept of target costing and target cost management. Finally, a hypothetical example shows the application of the concept of target costing in a hotel.

2. SPECIFICS OF DOING BUSINESS IN THE SERVICE SECTOR

In the past decades, structural changes in the field of economy and technology have strengthened the importance and role of the service sector. The twenty-first century is characterized by a slowdown in the growth of the primary and secondary sectors, a decline in labor productivity in material production, and a change in the structure of world trade by increasing the share of trade in services at the expense of reducing trade in goods. The service sector has become the key to the development of a country's economy, as it generates large revenues and participates in GDP. The development of the service sector contributes to economic growth and increased employment. What is more, three-quarters of the gross domestic product in the EU countries comes from the service sector, with on average 50% in developing countries. Over three-quarters of employees in the European Union work in the service sector. No country can prosper without an efficient and developed service infrastructure, so the existence of services is the basis for economic success. According to National Employment Strategy for the period 2011-2020 the relative share of employment in the service sector in total employment increased from 51.4% in 2010 to 52.1% in 2020.

However, defining the term "service" precisely is not at all simple. From the period in which the criterion for defining the concept of services arose, there is also a difference in definitions. In the 1930s, Allen Fisher and Colin Clark defined services. Fisher (1939) defines services as something that is different from a tangible good and provides direct customer satisfaction. He singles out an intangible property as a criterion for defining services, which a large number of authors also use. Clark (1960) points out that the term "services" should include production services such as product transportation services, maintenance of business facilities, business services, etc.

A service is any activity or benefit that one party offers to the other and that is essentially intangible and does not result in ownership of anything. Its production may or may not be associated with a physical tangible good (Vargo et al., 2005). Kotler (1997) means by service activity or performance that one participant can offer to another, which is essentially intangible and does not result in ownership of something.

We note that the term “service” encompasses a range of heterogeneous and intangible products and activities that are difficult to encompass within a single definition. Therefore, a distinction should be made between services and products using the following characteristics (Kalač et al., 2010):

- *Intangibility of services* – means that the service is physically invisible, and cannot be felt in space, touched or tried, as is the case with products. Based on tangibility, we distinguish between services of a purely intangible nature, services that provide added value for tangible products and services that make a tangible product available.
- *Indivisibility of service provision and service use* – services have short or almost no distribution channels. The customer must come to the service center or the service provider will go to the customer.
- *Heterogeneity of service* – implies diversity in the quality of services, because the quality of service varies from company to company.
- *Inability to own services* – is the basic difference between services and products. The customer only has access to or can use the capacity (hotel room, the seat on the plane, swimming pool within the hotel, etc.) so that he pays for the use.

How to achieve the desired or required quality is a common topic in modern theory and practice, which has contributed to understanding the nature of services and customer satisfaction. Customers have the final say and assess the quality of services which is a means of meeting service needs. Two approaches to quality were identified in the 1990s. One approach is technical and product-oriented, and the other is customer-oriented. On the one hand, the manager in a service organization wants to adhere to the set standards, but on the other hand, to achieve appropriate customer satisfaction. The technically oriented approach implies the least possible involvement of employees who are directly involved in the delivery of the service. In this way, we can achieve maximum efficiency, but it is necessary to establish good coordination and control. The second approach is customer-oriented. Specifically, customer expectations are the basis for satisfaction. The customer can predict service standards in line with their expectations and their expectations determine their satisfaction. So the customer satisfaction rating is actually his feeling after the purchase.

In order to provide the quality that today’s purchasers/customers expect, we must distinguish between two aspects of quality (Oakland, p.10 quoted according to: Gržinić, 2007): quality of design and quality of compliance with design. Design quality implies the presentation of a product/service that is geared to the needs of customers. The hotel industry can meet the requirements of customers only if customers are included in product design or customer requirements should be “embedded” in the product/service that the hotel provides. For the aforementioned requirement, it is necessary to conduct a good and quality market analysis. Quality in line with the design actually complements the first aspect of quality, because it means the level to which the product/service satisfies the market. In order for hotels to maintain the required quality and meet the requirements of customers, they need to, in line with their capabilities, constantly look for opportunities for improvement.

To ensure the required quality service, an approach that increases the competitiveness, efficiency and flexibility of the whole company is needed (Oakland, quoted according to: Gržinić, 2007). Quality of service is a way of managing business processes to ensure customer satisfaction. Good quality enables better market positioning, as shown by the results of a survey conducted in the United States on a sample of 2,600 companies. It revealed a direct connection between the level of service quality and financial performance, i.e. different indicators of company performance (market share, return on investment, asset turnover ratio) show a higher value for companies with a higher level of services (Grove et al., 1997, p.63). Quality is a very complex concept that requires analyzing customer requirements, defining and controlling business processes, but also implementing continuous improvement. It consists of several criteria and elements (Holjevac, 2002) (availability, guarantee, communication, expertise of employees, standard products and services are at the level of prescribed standards, kindness to clients, flaws, duration, employee engagement to the client, customer self-esteem, expected effects of the product/service, reliability of the service, responsibility for the duration of the product/service and safety – services do not cause risk or danger, so they are provided safely) which are equally important because the absence of one element jeopardizes full quality. In addition to the main elements, the product/service should also include elements that are in line with customer needs, new technology, competition and market globalization.

Today, hospitality, its basic and specific services encourage the development of tourism. The provision of services in the hospitality industry requires a large number of employees and uses the products of a large number of industries, which enables greater participation in the overall economic and social development of the areas in which it operates.

Hospitality is an economic activity that organizes, provides and meets the needs of guests for accommodation, food and drink (Ćerović, 2003). Hospitality can be viewed as a manufacturing and service industry. Food and beverage preparation is a manufacturing industry, while providing accommodation and serving prepared food and beverages is in the service industry (Ratkajec, 2008). Hospitality is an economic activity that differs from others not only in the scope of business entities (providing accommodation, food and beverages), but also in its specifics. Hospitality has a special technological and production and service process, a separate organization, special ways, content and form of service (Pirija, 2003). Based on the above definitions, we notice that hospitality is a complex production and service activity that, in addition to accommodation, food and beverages, offers a range of complementary and ancillary services in order to meet the modern needs, requirements and desires of tourists.

The concept of hospitality gives rise to the hospitality service because it is realized in the hospitality system through catering hospitality and activities. An important element of the hospitality service are the costs because the offer of the service at the right price is a monetary expression of the incurred hospitality costs that are included in that price.

To have a more complete view of and assess the quality of services, employment in accommodation and food services should be considered regarding quality, because we have applied the selected method to hotels. Hotel management is a complex economic and production activity because, in addition to accommodation, food and beverages, it offers a range of complementary and ancillary services to meet modern customer requirements. Customers' need for safety and preservation of health has been growing in recent years, with an emphasis on ecology and healthy food, staying in nature, adventure activities, congress facilities, and various city tours.

Wellness and all-inclusive spa hotels are just some of the trends of successful hotels. For each new trend, the hotel management examines and creates a development policy in accordance with the new requirements and needs of the market. The trend of changes in the number of employees in accommodation and food services in the Republic of Serbia in the period from 2017 to 2019 is given in Table 1. We notice that employment in accommodation services records a continuous growth, while employment in food and beverage preparation and serving is also growing.

Table 1. Employees in accommodation and food services

Type of service	Employees		
	2017	2018	2019
Accommodation and food services	71.744	78.487	82.459
Accommodation	14.222	15.492	16.561
Food and beverage service activities	57.522	62.995	65.898

Source: Statistical Yearbook of the Republic of Serbia (2020).
Statistical Office of the Republic of Serbia, Belgrade.

In support of this, we add data on the growth rate of gross value added and gross domestic product in the activity of accommodation and food in the Republic of Serbia (Table 2). The growth rate of gross value added and gross domestic product increased in 2017 (10.6%), in relation to 2016, while in 2018 (6.8%) and 2019 (6.0%) it decreased compared to 2017.

Table 2. Gross value added and gross domestic product

Type of service	Real growth rate in %		
	2017	2018	2019
Accommodation and food	10.6	6.8	6.0

Source: Statistical Yearbook of the Republic of Serbia (2020).
Statistical Office of the Republic of Serbia, Belgrade.

Thus, the service sector has growing importance and increasing participation in the national economy. The basic task of service organizations is to provide differentiated services of high quality at an appropriate price with minimal costs. The service sector is becoming the dominant sector offering products/services in line with customer needs.

3. TARGET COSTING AND TARGET COST MANAGEMENT

The beginning of the application of the concept of target costing (TC) is related to the third decade of the 20th century (Antić et al., 2019). Most authors point out that target costing originates from the Japanese manufacturing industry in the 1960s. Target costing was established by Toyota to manage car costs in response to customer demands for lower market prices (Kato, 1993; Ansari et al., 1997). After World War II and due to a lack of economic resources, General Electric adopted the principle of improving product quality and reducing production costs, a principle known as value engineering. The authors of texts in English on this concept were Hiromoto (1988) and Sakurai (1989). Hiromoto identified target costing as a technique used by Japanese companies to align strategies with cost reduction programs, while Sakurai defined the main steps in applying the concept of target costing.

Target costing is a cost management concept that aims to manage the costs of all products through the design phase. At the same time, by calculating the target cost, it is ensured that the product is profitable enough to justify its production. In this sense, it can be used as a profit planning mechanism. Target costing is much more than a cost accounting system, because it

respects the wishes and requirements of customers, focuses on product design, involves the cooperation of employees from different fields and departments not only within the company but throughout the value chain to minimize costs throughout the product life cycle.

The concept of target costing can also be well applied to reduce the cost of new products as well as products that are already in the production and sales range of the company. This is because there is a whole set of tools and techniques that can be applied separately or in combination to achieve the desired goals. Some of the techniques are value engineering, value analysis, kaizen costing and quality function deployment.

Atkinson et al. (1997) point out that target costing is a cost planning method that deals with products with discrete production processes and reasonably short life cycles. During the production phase of the product life cycle, companies would gradually improve processes through kaizen costing.

Cooper and Slagmulder (1997) focus on the application of target costing as a profit management technique. The concept of target costing is defined as a process that allows a new product to be produced at a price that will enable the realization of the planned level of profitability. The authors assume that the company sets long-term sales and profit goals and structures product lines accordingly.

Computer-Aided Manufacturing International's concept of target costing is a set of management methods and tools that allow the inclusion of cost objectives, design activities and planning of new products to provide a basis for control during the operational phase and to ensure that these products achieve profitability targets in the life cycle.

In addition to the above, numerous researchers have identified the concept of target cost, which can be explained in five groups:

- *The first group of authors* points out that target costing is a tool that provides support and manages new and future products, focused on the design phase (Feesler & Fisher, 2000) or process of price estimates at the design stage, while the company undertakes to produce within the target cost in order to make a profit when selling at the desired target price.
- *The second group of authors* views the concept of target costing as part of a strategic cost management system per unit of product or service. Horngren (2006) defines the target cost per unit of product and presents an accurate estimate of the prices of components or related parts in each unit of product/service. The target cost is used to achieve the operating target revenue per unit when the sale is made at the target price, while the target cost is realized through all phases of the product life cycle.
- *The third group of authors* defines the concept of target costing as a tool for determining the price of a product based on the price defined in the market with a focus on customer needs because Drury (2008) defines target cost as a customer-oriented technique used as a cost management tool to improve pricing decisions and reduce costs.
- *The fourth group of authors* says that the target costing method includes all product life cycle costs (Sakurai, 2004). Costs should be managed to reduce the total cost of the product life cycle and contribute to the following categories: manufacturing, manufacturing engineering, product research and development, marketing and accounting.
- *The fifth group of authors* points out that the concept of target costing improves company profitability and reduces costs. Garrison & Noreen (2008) define the concept as the

process of determining the maximum allowable costs for a new product or developing an original product in order to achieve sales growth and make a profit that is greater than the maximum amount of the target cost.

Based on the previously presented definitions, we can single out the following characteristics of the concept of target costing (Ansari & Bell, 2006):

- *Customer focus* – the concept of target costing is focused on customers and their requirements. It implies continuous communication between the company and customers as well as “trade off” between costs and value.
- *Focus on reducing costs in the early stages of product development* – requires detailed financial analysis at the earliest stage of product development, which eliminates the risk and uncertainty of introducing a new product/service.
- *Consideration of the entire product life cycle* – costs should be managed at all stages of the life cycle.
- *Interoperability* – implies the involvement of all sectors in cost analysis and decision making. The most important role is played by finance, procurement, research and development, production, engineering, sales and distribution sectors.
- *Involvement of the entire value chain* – active participation of suppliers of materials and raw materials requires the concept of “expanded enterprise” which allows locating suppliers in the immediate vicinity, which facilitates cooperation and forms inter-company teams.
- *Iterativeness* – the concept of calculating the target cost is an iterative method of reaching the set goal by achieving a balance between functionality, price, volume, cost and investment.

A large number of authors have examined the process of establishing the concept of target costing. Cooper and Slagmulder (1997) identify different stages of this process as follows: market level, product level, and component level. For the needs of this paper, we have opted for the approach proposed by Zengin and Ada (2010). According to them, there are three key levels in establishing the target cost: determining the amount of the target cost, reaching the target cost and continuous improvement for the needs of future cost reduction.

The beginning of target costing is the specification of the wishes and requirements of customers. Customers often have a wide range of desires and requirements, and all of them need to be turned into goals when designing products. At this level, the cooperation of sales managers with designers and engineers is required. A very useful technique at this level is quality function deployment (QFD). This technique transforms customer requirements in terms of product quality and functionality into technical product attributes. QFD takes into account customer data, showing the relationship between competitive offers, customer requirements and technical attributes of products using a matrix that summarizes information on product function and customer rankings. (Al-Qady & El-Helbawy, 2016). Given that there is a wide range of wishes and requirements of customers, it is necessary to rank them by importance. In this way, the value that customers are willing to pay will be added to the products. At the same time, this value will become the basis for defining the target selling price. This pricing approach can be defined as value-based pricing. Based on the determined selling price, the target profit margin is established. The target profit is determined by applying the target profit margin to the target selling price. Of course, the target profit should be in line with the strategic plans of the company, and as such must receive support from the top managers of the company (Novičević Čečević, 2016). It is important to emphasize that the target profit at the level of the company and the level

of individual products is not constant. Following the changes of other relevant factors, the target profit can change, both in the phase of product development and later during the following phases of its life cycle (Novičević et al., 2013, p.132). The difference between the target selling price and the target profit is the amount of allowable product cost. Allowable cost is the cost at which the observed product must be produced, in order for the company to reach the target cost limit and achieve the target profit. It often does not represent a realistically achievable value, because when determining it, the current possibilities and potentials of the company and its suppliers to reduce costs are not taken into account (Antić, Stevanović, & Novičević Čečević, 2019).

The second level is reaching the target cost. In order to achieve the target cost, the current information base must first be analyzed in terms of product costs, design, capacity and the like. For these purposes, it is best to apply a cost matrix that will contain detailed cost estimates of materials, equipment, technology and other resources needed for production. This current cost matrix will show how achievable the cost level is for a specific product. Compiling this cost matrix is important because in most cases the allowable target cost is lower than most businesses can achieve. For this reason, the allowable amount of target cost in a particular company is replaced by the term achievable target cost. The difference between the higher achievable cost and the allowable target cost represents the cost gap to which managers must pay attention because it represents the current inefficiency and inability of the company to achieve a long-term profit goal. The cost gap can be divided into two parts: achievable and unachievable parts of the target cost reduction (Cooper, 2002). Achieving the achievable part of the target cost reduction depends on the ability of designers and suppliers to find ways to eliminate unnecessary costs. Establishing relationships with suppliers aims at an early assessment of product selling prices, and if possible, a change in product design while maintaining quality and functionality at a reduced cost. The unachievable part of the target cost reduction is called the strategic cost reduction challenge. The strategic challenge of cost reduction shows the inability and inefficiency of the company in achieving competitive advantages and taking a leading position. A suitable technique for application at this level is value engineering. In this sense, we can say that value engineering is a systematic and multidisciplinary approach for examining the factors that affect product costs, in order to find ways to: reduce them, while maintaining the same level of quality and functionality; maintained at the same level, with improved product quality and functionality (Sekerez, 2005, p.169). Value engineering is focused primarily on production functions, and only then on product costs. The task of this technique is to ensure that the product achieves primary functionality that will satisfy customers at an acceptable cost. Thus, value engineering reduces costs by identifying those parts of products or services that do not add value. The value consists of use-value (the ability of a product or service to satisfy its function) and esteem value (the status that ownership or use gives). For example, if we sell perfume, we assume that the packaging design is important. The perfume can be kept in an ordinary glass or plastic bottle so as not to reduce the use-value of the product, as well as the value of esteem. In this case, the company must not reduce the cost of packaging.

The last level is continuous improvement. This step is especially important when reaching the target cost because the concept of target costing is a continuous process. When a product enters the production phase, efforts are still made to identify potential opportunities for product quality improvement and cost reduction with the application of the Kaizen technique. Kaizen implies small, incremental improvements at every step before making major innovations. It is better to improve the company's business immediately by 10% than to wait for the moment when the business can be 100% improved. Waiting for the moment to come when the business can be

fully improved requires a lot of time, and market conditions are relentlessly changing so that the company can be late with reactions to demand and thus lose the race with the competition.

The application of the concept of target costing results in the following advantages (Applicability of target costing):

- Leads to cost reduction;
- Focus is on end-users;
- Promotes teamwork between different departments;
- Increases the skills and expertise of staff for the application of new costing methods;
- Demonstrates management's commitment to improving process and product innovation to gain a competitive advantage;
- The product is created based on customer expectations, and the costs are in line with that. So, the customer feels a higher delivered value;
- Over time, the company's business improves by achieving economies of scale;
- The company's approach to product design and production is becoming market-oriented and
- New market opportunities can be turned into savings to achieve value and lower costs.

The concept of target costing can and should be applied in the hotel industry. Specifically, uncertainty in business and the presence of risk in the hotel industry are high. Customer behavior is also changeable and unpredictable (Kocsoi, 2009, p.47). Today's competitive environment, construction of new hotels, expansion of the range of services, new management system, and increasing responsibility require the hotel industry to maintain its competitive advantage, which requires directing accounting activities to cost management. Efficient use of costs as a factor of competitive advantage is possible only by identifying and controlling costs. Costing methods applied in the hotel industry should be based on customers' ability to pay and their expectations. Applying the concept of target costing in the hotel industry will enable production and services at lower costs (Ansari, 1997). Since the price of the hospitality industry is determined by the market, the target cost can be achieved by reducing the profit margin. It is necessary to continuously consider the requirements and expectations of customers. The design must be market-oriented because the investment costs are high and can be influenced in advance. It is necessary to establish long-term cooperation with suppliers, travel agencies and service providers, i.e. develop good relations with all members of the value chain (Avlonitis & Indounas, 2006, p.54). However, the application of the concept of target costing in the hotel industry is enough to lead to business success. There is a small number of papers and research in the academic literature on this topic. Therefore, the paper aims to indicate the relevance of the application of the concept of target costing.

4. APPLICATION OF THE CONCEPT OF TARGET COSTING IN A HOTEL

The extremely competitive market of the hotel industry and the high costs of hotel services make it difficult for hotels to achieve the planned rate of profit while providing services to customers at affordable prices and expected quality. Application of the concept of target costing, as one of the modern and efficient cost management techniques, could help hotels meet the previous requirements.

The application of the concept of target costing as a basis for cost reduction in the hotel industry will be shown on a hypothetical example of a hotel as a service provider (adapted according to Ansari et. Al, 1997). We assume that the hotel has three stars, and provides excellent quality

of services, but that users of hotel services always opt for a competitive hotel because their hotel has four stars (due to the pool within the hotel). Accordingly, the hotel management has decided to provide a new service to customers – the use of the hotel pool. Using the pool requires: cleaning the pool; water maintenance chemicals; water heating (appropriate pumps) and electricity. The planned profit from the provision of pool services is 10% of the selling price, while overhead costs amount to 590 monetary units (monetary unit – m.u.).

For the hotel management to determine the target price of the new service, it is necessary for the employees in the marketing department to conduct market research to come to the conclusion of what customers expect from the provision of the new service. We assume that the marketing analysis has been performed and that marketing employees have come to the following characteristics of the pool (large number of pool functions, design, dimensions, economic characteristics and ease of use) which are ranked according to importance when making hotel selection decisions. The users of the hotel services agree that the decision to choose a hotel with a pool is influenced by: the design of the pool and a large number of different pool functions (they have a special section for children, a mini-bar within the pool, the possibility of organizing celebrations, etc.). Through the research, they conclude that users will allocate 2,950 monetary units for such a service that meets their requirements and expectations.

The amount of the target cost must cover all costs incurred in the production or purchase of the product. Per the formula for calculating the target cost, it is necessary to determine the target price. As mentioned earlier, the target price is the result of market research by the marketing department. So, information on planned costs of products or services does not affect the target price. Cooper (1997) points out that the determination of the target selling price is influenced by a large number of internal and external factors. Internal factors should focus on the positioning of the new model in the matrix, the company image, strategic and profitable goals of top management for the observed model. External factors include customer loyalty, the expected degree of quality and functionality of the model compared to the competition and the expected price of the competition model.

In addition to the target price, to calculate the target cost, it is necessary to determine another element – the target profit. Cooper (1997) lists two ways to determine profits:

- The target profit for a particular product/service can be determined based on the actual margin percentage of its predecessor, but then we have to adjust the profit to changes in the market.
- Determine the average revenue of a product line with a margin that we then increase or decrease depending on market conditions.

When setting the target price, care should be taken to cover all costs over the life of the product or service, while the target profit varies depending on market conditions. The introduction of standard costs when applying the concept of target costing is an important category because standard costs show how much the costs in a given business environment should amount to. They are determined per unit of performance following standards (ideal standards, standards based on past performance, normal standards, standards based on future performance and standards based on achievable performance). Standard costs show how much the actual cost of direct material, labor, and overhead costs should be under normal conditions. Standard costs make sense of actual costs, because the deviations that occur are an indicator of loss or potential savings. The amount costs incurred when using the pool are given in Table 3.

Table 3. Amount of direct costs

Components	Functions	Standard costs (m.u.)	Share in the overall standard costs (%)
Pool cleaning	Tidiness	1.328	20,30
Water maintenance chemicals	Maintenance of pH value	2.375	36,31
Water heating	Ensuring adequate temperature	1.065	16,28
Electricity	Ensuring consumption	1.773	27,11
Total		6.541	100,00

*m.u. – monetary units

Source: Authors based on: Ansari et al. (1997). Target Costing: the next Frontier in Strategic Cost

We will calculate the target price of the product using the net selling price defined on the market. We calculate the target cost as the difference between the net selling price, the target profit and the overhead cost. We compare the obtained target cost with the amount of standard costs and measure the deviation (Table 4).

Table 4. Target costing

Elements	Amount
Net selling price	2.950
Target profit	295
Overhead costs	590
Target cost	2.065
Standard costs	6.541
Deviation	4.476

Source: Authors based on: Ansari et al. (1997). Target Costing: the next Frontier in Strategic Cost

The deviation between the amount of standard costs and the target cost is 4,476 monetary units, and as the standard costs are above the target cost, appropriate measures need to be taken to achieve savings and reduce service costs. The reduction process should focus on components that are important to customers. The data in Table 5 is the basis for the analysis of the impact of individual components on customer satisfaction.

Table 5. Influence of individual components on customer satisfaction.

Service characteristics	Components			
	Pool cleaning	Water maintenance chemicals	Water heating	Electricity
Wide choice	25	35	28	12
Design	38	20	22	28
Dimensions	70	33	12	32
Economic characteristics	27	30	18	28
Ease of use	22	23	0	0

Source: Authors based on: Ansari et al. (1997). Target Costing: the next Frontier in Strategic Cost

The influence of components on product characteristics and market assessment of the importance of certain pool characteristics are shown in Table 6. The obtained results show that according to the answers of potential service users, the most important component is pool cleaning (35.67%) and water heating (17,53%).

Table 6. Influence of individual components on customer satisfaction

Service characteristics	Components			
	Pool cleaning	Water maintenance chemicals	Water heating	Electricity
Wide choice	7,47	10,45	8,36	3,58
Design	9,55	5,03	5,03	7,04
Dimensions	12,13	5,72	5,72	5,55
Economic characteristics	2,34	2,60	2,60	2,43
Ease of use	4,18	4,37	4,37	0
Total	35,67%	28,17%	17,53%	18,60%
Ranking	1	2	4	3

Source: Authors based on: Ansari et al. (1997). Target Costing: the next Frontier in Strategic Cost

The analysis of components conducted in this way allows managers to come to a conclusion about which components should be used in order to reduce costs. The manager can conduct a more detailed analysis for decision making and realization of the target cost by measuring the deviations of the target costs from the standard costs at the component level. The target cost per component is calculated by multiplying the percentage value of their contributions (Table 6) and the amount of the total target cost (Table 4).

Table 7. Target cost per component and deviation

Components	Target cost	Standard costs	Deviation
Pool cleaning	736,59 ⁴	1.328	-591,41
Chemicals	581,59	2.375	-1,793,31
Water heating	362,03	1.065	-702,97
Electricity	384,00	1.773	-1,389,00
Total	2.064,31	6.541	-4,476,69

Source: Authors based on: Ansari et al. (1997). Target Costing: the next Frontier in Strategic Cost

We conclude that the application of the concept of target costing in hospitality companies allows a clearer determination of resources and costs. Calculating costs in this way is a good basis for making strategic and operational decisions. Decisions made at the design stage can affect the price of the product (Garrett): product characteristics; switching off “over design”; number of required components; whether the components are standard or specialized; complexity of machining and construction; where the product can be produced; what to produce in the company and what outside it (i.e. to include outsourcing activity); product quality and size of the batch in which the product can be produced.

The application of the concept of target costing in hospitality shows that it is justified to use it in this sector as a basis for encouraging cost management. It also enables the reduction of service costs and in that way, better positioning in the market is achieved. So, a well-established concept of target costing allows for teams inside and outside the hotel to work together to meet customer demands, thus increasing hotel value and performance. Therefore, it is very important to consider in detail the business process as a whole, and identify the key processes and their resources.

However, there may be limitations when applying the concept of target costing (Banham 2000): lack of understanding in the corporate community; cultural barriers against cross-functional cooperation; organizational barriers to teamwork; the existence of irrelevance regarding the effects, the process of developing a new product/service takes a long time because the design

⁴ 2.065 (total target cost)×0,3567 (percentage value of contribution).

team implements several changes to meet the amount of the target cost; reducing the amount of costs can affect employee morale; it is difficult to achieve balance because a large number of people are involved in the decision-making process; if the estimated costs are low, an unnecessary burden is created on the production team; sometimes a company may opt for quality and lower-rank design to achieve the target cost and errors in the calculation of the target cost can lead to financial loss to the company.

5. CONCLUSION

Hospitality is a specific economic activity because, in addition to food and beverage services, it offers various social, cultural and health services to meet the wishes and needs of customers. New needs, requirements and wishes of customers have brought new trends in design. Continuous market research is a basic prerequisite for creating new services, achieving customer satisfaction and competitive advantage in the market.

The concept of target costing manages product costs through the design phase but ensures that the product/service is profitable enough to justify its production. The concept of target costing takes into account customer wishes and requirements and emphasizes product design and cooperation of employees from different fields

Managers should focus on the cost and quality of services provided. One way to manage costs is the concept of target costing. Given the concept of target costing, managers in service companies can:

- Define what characteristics the product should have in order to meet the requirements of customers.
- Define the selling price of a product/service at a level that can provide them with a competitive advantage.
- Plan profit and rate of return.
- Identify and manage costs at all stages of the process, not just the production phase.
- Develop close partnerships between hotel employees, but also with other hotels in the supply chain.
- Assess the market share of the product/service.
- By what advantage will the product/service differ from the competition?
- Identify product/service features to differentiate them from competitors.
- Identify resources a company can save without jeopardizing the competitive advantage of the product/service.
- Reduce business risk and encourage innovation.
- Provide a basis for strategic decision making

Thus, the concept of target costing has replaced traditional methods for determining market prices of services. It enables the reduction of service costs while maintaining the required quality. It is mainly aimed at reducing or eliminating costs that do not affect the value of products/services.

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REFERENCES

- Al-Qady, M. & El-Helbawy, S. (2016). Integrating Target Costing and Resource Consumption Accounting. *The Journal of Applied Management Accounting Research*, 14 (1), 39-54.
- Ansari, S. L., Swenson, D. & Bell, J. (1997). Target Costing: The Next Frontier in Strategic Cost Management. USA: Mac Graw-Hill Inc.
- Ansari, Sh., Bell, J. (2006). A Template for Implementing Target Costing. *Cost Management*; 20 (5): 20-27.
- Antić, Lj., Stevanović, T. & Novičević Čečević, B. (2019). Koncepti obračuna i upravljanja troškovima u lean poslovnom okruženju. Ekonomski fakultet Niš.
- Atkinson, R. Banker, R. Kaplan. & S. M. Young. (1997). Management Accounting (Upper Saddle River). New Jersey: Prentice-Hall.
- Avlonitis, G. J. & Indounas, K. A. (2006). Pricing Practices of Service Organizations. *The Journal of Services Marketing*, 20(5), 346-356.
- Clark, C. (1960). The Concitions of Economic Progress. *Mc Milan and Cooperation Ltd.* London.
- Cooper, R. & Slagmulder, R. (1997). Target Costing and Value Engineering. *Productivity Press*, Portland OR. Available at: http://www.tx.ncsu.edu/jtatm/volume2issue4/articles/hergeth/3902_full.pdf
- Cooper, R. (2002). Target costing for new-product development: product-level target costing. *Journal of Cost Management*, 16 (3), 5-12.
- Čerović, Z. (2003). *Hotelski menadžment*. Fakultet za hotelski i turistički menadžment, Opatija.
- Drury, C. (2008). Management and Cost Accounting. *South- Western, G. Canale & Italy Business*.
- Fessler, G. B. Allan (1939). Production Primary, Secondary and Tertiary. *Economic Record*, Melbourne.
- Garrett, K. Target costing and lifecycle costing. *ACCA*, Available at: <https://www.accaglobal.com/hk/en/student/exam-support-resources/fundamentals-exams-study-resources/f5/technical-articles/target-lifestyle.html>
- Garrison, R. & Eric, W. (2008). Managerial Accounting. Singapore.
- Grove, S. J., & Fisk, R. P. (1997). The impact of other customers on service experiences: a critical incident examination of “getting along”. *Journal of retailing*, 73(1), 63-85.
- Gržinić, D. (2007). Concepts of service quality measurement in hotel industry. *Concepts of Service Quality Measurement in Hotel Industry*, 1, 81-98.
- Hiromoto, T. (1988). Another Hidden Edge-Japanese Management Accounting, *Harvard Business Review*, 66(4), 2-26.
- Holjevac, I. A. (2002). *Upravljanje kvalitetom u turizmu i hotelskoj industriji*. Fakultet za turistički i hotelski menadžment.
- Horngren, C. Foster, G. & Datay, S. M. (2006). Cost Accounting: Managerial Emphasis. 12thed, Pearson Prentice Hall.
- Kalač, B., Elfić, E. & Ujkanović, E. (2010). Značaj usluga u savremenoj privredi i društvu. *University Review*, 9, 50-61.
- Kocsoy, M., Gurdal, K. & Karabayir, M. E. (2009). Target Costing In Turkish Manufacturing Enterprises. *Problems and Perspectives in Management*, 7 (1), 197-207.
- Kotler, P. (1997). Marketing Management, Prentice Hall.
- Novičević Čečević, B. (2016). Upravljačko-računovodstvena podrška menadžmentu preduzeća u lean poslovnom okruženju. *Doktorska disertacija*. Niš: Ekonomski fakultet.
- Novičević, B., Antić, Lj. & Stevanović, T. (2013). Koncepti upravljanja troškovima u funkciji realizacije konkurentskih strategija. Niš: Ekonomski fakultet.

- Official Gazette of the Republic of Serbia (2011). National Employment Strategy for the period 2011-2020. Belgrade.
- Pirija, D. (2003). Standardni u turističkom ugostiteljstvu. Visoka poslovna škola za turizam, Šibenik.
- Ratkajec, D. (2008). *Ugostiteljstvo*. Školska knjiga, Zagreb.
- Sekerez, V. (2005). Koncept upravljanja na bazi ciljnih troškova, zbornik sa XXXVI simpozijuma Saveza računovođa i revizora Srbije, *Računovodstvo i poslovne finansije u savremenim uslovima poslovanja- stanje i perspektive*, Zlatibor.
- Statistical Office of the Republic of Serbia (2020), Statistical Yearbook of the Republic of Serbia. Belgrade.
- Swenson, D., Ansari, S., Bell, J. & Kim, I., (2003). Best Practices in Target Costing, *Management Accounting Quarterly*, 4(2), 12-17.
- Vargo, S. & Morgan F.W. (2005). Services in Society and Academic Thought: An Historical Analysis. *Journal of Macromarketing*, 25(1), 42-53.
- Zengin, Y. & Ada, E. (2010). Cost management through product design: Target costing approach, *International Journal of Production Research*, 48(19), 5593-5611.



Purchasing Power Parity under Tourism Price Indices: An Analysis for Euro Area

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Abstract: *This chapter examines the relevance of PPP for a panel of 19 Eurozone economies. The research produces four novelties. First, instead of employing general price indices as a standard proxy for price variables in the PPP model, it uses two disaggregated tourism price indicators: consumer price indices for catering services and consumer price indices for accommodation services. Second, it scrutinizes the PPP thesis with respect to the euro and the US dollar. Third, in order to check the stationary properties of real exchange rates, the study adopts a battery of panel unit root tests. Fourth, the mean reversion process in real exchange rates is tested on a new data set covering the period from January 2001 to September 2021. The empirical results are strongly within the spirit of PPP; they are robust to the selection of time intervals, applied unit root tests, chosen base currencies and tourism price indices.*

1. INTRODUCTION

The concept of purchasing power parity (PPP) is an essential part of models of international trade and financial markets. The theory encapsulates the idea of the law of one price according to which the price of a particular good transformed to the same currency is the same in any country, on all markets. The absolute PPP, therefore, suggests that a unified basket of goods and services should cost the same in both countries when the given exchange rate is taken into account. Whereas the absolute PPP indicates an equalization of national price levels when they are expressed in the same currency, the relative PPP suggests that shifts in exchange rates correspond to the equal changes in national price levels. The relative version of PPP, therefore, illustrates differences in the inflation rates between economies. The PPP theory explains the behaviour of exchange rates with the shifts in relative prices and it presupposes an effective arbitrage on goods markets as well as on markets for services; under instantaneous arbitrage among sub-markets and sufficient cross-border mobility of goods and services the price differences between countries and individual markets tend to be at least in the long run unsustainable.

The arbitrage among markets usually takes time and besides this short-run adjustment process, there are additional market frictions and structural factors which can cause prolonged deviations from PPP equilibrium. Parity-determined price adjustment can be blocked because of high transport costs, tariffs and nontariff barriers (Taylor & Taylor, 2004; Drissi & Boukhatem, 2020). Substantial deviations from PPP equilibrium can arise due to the trade with differentiated goods, due to the specificities of nontradable goods or owing to the pricing to market strategies of firms. The adjustment of real exchange rates towards PPP rates can also take a nonlinear path. Taylor (2006) and Vo and Vo (2020) discuss several sources of nonlinearity of real exchange rates, notably high sunk costs of investments which force the traders to enter the markets only in case of significant arbitrage opportunities, and different expectations about the appropriate

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exchange rate adjustment among market makers that typically trade very infrequently but with large volumes in order to target long-run dynamics of exchange rates and among intraday traders which are primarily interested in realising short-run above-average returns. Nonlinear dynamics of real exchange rates can arise when under general exchange rate misalignments central bank interventions trigger decisive coordination signals among the main traders to enter the market and rectify the exchange rate deviations. In addition, permanent departures from PPP standards can be induced by divergent productivity shocks, shocks from fundamental economic crises, diverse shocks from monetary and fiscal policy or due to structural metamorphosis of economies (Taylor & Taylor, 2004; Abioglu & Hasanov, 2021).

In spite of temporary breakdown of equilibrium parity relationship due to above-elaborated reasons, the existence of the long-run PPP mechanism is frequently empirically verified. For the period between 1960 and 2015 Rabe and Waddle (2020) report on the increase in the speed of adjustment of international prices towards PPP targets. According to their estimates, the average rate of convergence between aggregate price levels of 61 countries to the PPP anticipated levels takes 3 years. Calculations by Vo and Vo (2020) reveal that for the 7 most important international currencies the PPP dictum is valid at a horizon longer than 5 years. Furthermore, Abioglu and Hasanov (2021) emphasize that shifts in the levels of real exchange rates due to a variety of shocks are only a transitory phenomenon; in the long run, the equilibrium PPP rates tend to remain intact. After a proper specification of nonlinearities and structural breaks their analysis of the trade-weighted real effective exchange rates of 60 countries shows that in the long run the examined real exchange rates are capable of reverting to their pre-shock PPP trajectories.

The purpose of this study is to expand the empirical evidence about the PPP concept by concentrating on a sample of 19 Eurozone countries. Countries in the euro area have at least three important features. First, officially they all share the single European currency and have a common monetary policy but display important differences in levels of economic development. The levels of real GDP per capita are markedly higher than the Eurozone average level of development in Luxembourg (152%), Ireland (104%), Netherlands (27%) and Austria (18%). On the other hand, real output per capita in Greece reaches only 61% of the Eurozone average output per capita, in Slovakia at 68%, Latvia at 69% and Portugal at 72% (Eurostat, 2021). Second, the countries under inspection in this study are all strongly involved in international trade and global production chains with strong intra-industry connections. The share of exports and imports of goods and services in GDP is largest in Luxembourg (380%), Malta (271%), Ireland (252%) and Slovakia (184%), whereas members of the euro area with the lowest, though significant trade to GDP ratio are Italy (60%), France (64%), Spain (67%) and Finland (80%) (The World Bank, 2021). Third, an important engine of the Eurozone economy is its tourism industry be it in the form of domestic flows of tourists, as registered travellers and tourism services among Eurozone economies or as tourism services recorded with non-Eurozone members. The growth impact of the tourism industry on the general economy can be transmitted through various channels directly or indirectly. Besides a direct expenditure effect in terms of adding to aggregate demand, a vibrant tourism sector also creates more employment possibilities, increases business innovations, generates economies of scale and cost advantages, and is a major source of foreign exchange reserves (Pascariu & Ibănescu, 2018; Gavurova et al., 2021). Statistical evidence shows that among all the Eurozone members the share of the travel and tourism industry in GDP surpasses 4%, whereas in 2019 the travel and tourism industry was the largest contributor to country's GDP in Greece (20%), Portugal (17%), Malta (16%), Spain (14%), and in Cyprus and Italy (both 13%) (Statista, 2021).

Our research offers the reader four novelties. First, instead of employing general price indices as a standard proxy for price variables in the PPP model, it uses two disaggregated tourism price indicators: consumer price indices for catering services and consumer price indices for accommodation services. Second, it scrutinizes the PPP thesis with respect to two numeraire currencies; the euro and the US dollar. Third, in order to check the stationary properties of real exchange rates, the study adopts a comprehensive set of panel unit root tests: Levin, Lin and Chu test, Breitung test, ADF-Fisher test, PP-Fisher test, and Im, Pesaran and Shin test. Fourth, the PPP model for the euro area is tested on a new data set covering the period from January 2001 to September 2021 and to isolate the effects of the Covid-19 pandemic outbreak, the analysis is also experimenting with a shorter sample that runs from January 2001 to February 2020.

The study is divided into the following seven sections. Following the introduction, the most exhaustive PPP studies for the group of Eurozone countries are reviewed in the second section. After a compact style description of the PPP theory, the third section also presents the implemented econometric methodology. The definition of the pertinent data set is given in the fourth section. Results of the empirical inquiry and possible extensions of the current research are discussed in sections five and section six, respectively. The central conclusions of the study are summarized in the final section.

2. RELATED LITERATURE

Although the collection of in-depth studies on PPP is extremely plentiful, the debate about the empirical merit of this exchange rate theory remains unsettled (Taylor, 2006). The forward march of globalization, steady increase of competition from developing and emerging countries, the dynamic growth of international trade in services, and integration of money and financial markets worldwide are just a few of many factors which nurture the interest of academia, market analysts and policy makers in the phenomenon of PPP. The review of empirical studies which directly analyse the relevance of PPP for the euro area shows a pronounced diversity in used estimation techniques, quality of data sets elaborated, length of the period observed, and degree of methodological rigour. Among one of the first comprehensive PPP studies concerning the euro is the research published by Koedijk et al. (2004). They tested the PPP between synthetic euro and eight major currencies using the SURADF model for the period 1979-2003. The researchers found proof of the PPP-based exchange rate theory for the full panel of real exchange rates, but after allowing for heterogeneity in the rates of mean reversion, the stationarity was established only for the Euro-Swiss franc exchange rate.

The rejection of the unit root assumption is reported in the study prepared by Lopez and Papell (2007) within the Eurozone and between Eurozone and other industries as well as other EU countries in the period 1996-1999. In their study, Giannellis and Papadopoulos (2010) scrutinized national exchange rates per euro for 12 Eurozone countries between 1980-2000 and discovered that the majority of real exchange rates converge to PPP equilibrium levels. For the period 1988-2013, Emirmahmutoglu and Omay (2014) verified nonlinear stationarity of real exchange rates for 8 out of 15 EU countries against the US dollar. The nonlinear reversion in real exchange rates within the EU economies is also confirmed from 1975 onward by Zhou et al. (2008). When the period under observation is extended to 2006, the significance of PPP increases for EU and non-EU economies after the introduction of the Eurozone's common currency. Despite these results Zhou et al. (2008) stress that they cannot infer that euro has an indispensable role in the functioning of the PPP mechanism in the Eurozone, nor can they conclude the estimates that PPP is more relevant in the euro area than in other economies.

The PPP model is further supported when bilateral exchange rates of 9 original members of the euro area concerning Germany from 1973 to 2016 are examined by Bergin et al. (2017). Following Bergin et al. (2017), the convergence of real exchange rates towards their long-run PPP equilibrium is statistically significant, whereas the estimated half-life of the real exchange rate becomes shorter after the introduction of the euro. The authors of the quoted study emphasize that the distinction between the nature of shocks is critical for pinpointing the changes in the half-life of the real exchange rates between different periods.

Zhou and Kutan (2011) applied nonlinear unit root tests on the EU as well as on other non-EU economies in order to discover the relevance of PPP notion for a diverse cluster of countries. The empirical outcomes of their study are rather heterogeneous. As Zhou and Kutan (2011) show the stationarity of real exchange rates depends on the selection of period and the chosen numeraire currencies, although the stationarity results for countries included in the Eurozone are less sensitive to these selection criteria. Christidou and Panagiotidis (2010) report that the PPP relation could not be corroborated for the exchange rates of the original members of the Eurozone against the US dollar neither for the sample 1973-2009 nor for the post-1998 euro currency regime. Studies by Wu and Lin (2011) and Huang and Yang (2015) rely on panel unit root tests allowing for cross-sectional dependencies but their outcomes are to a certain degree consistent with the findings of Christidou and Panagiotidis (2010). Wu and Lin (2011) and Huang and Yang (2015) are able to detect the mean-reversion of real exchange rates against the US dollar before the introduction of the euro, whereas the PPP adjustment does not hold in the post-euro era.

Su et al. (2014) tested monthly real effective exchange rates of 61 countries in the period 1994-2012 and also obtained only weak evidence about the mean-reverting process of real exchange rates. After inspecting heteroscedasticity and nonlinearity, the testing procedures indicate that the real effective exchange rates for the Eurozone as well as for most of other countries in the sample reveal nonstationary characteristics. In addition, results found in the study by Kavkler et al. (2016) are unfavourable to the PPP proposition. Kavkler et al. (2016) utilized a nonlinear unit root test based on the ESTAR model to evaluate the exchange rate theory for 11 original Eurozone countries concerning two numeraire currencies for the period 1998-2012. The outcomes of the nonlinear unit root tests in this research do not back the PPP hypothesis either for the Japanese yen-calculated real exchange rates or for the US dollar real exchange rates.

Valuable support for the PPP process can be found in the works of Macedoni (2021) and Xie et al. (2021). Macedoni (2021) evaluates the entry of Cyprus, Malta, Slovakia and Slovenia to the Economic and Monetary Union and estimates the thresholds of the bands of the inaction of the deviations from PPP employing a threshold autoregressive model with monthly disaggregated price indices. Macedoni (2021) demonstrates that admission of the previously mentioned four countries to the Economic and Monetary Union is related to the reduction in the thresholds of the bands of inaction. The calculations show that the regions without a dominant tendency of adjustment of relative prices for the country pairs that were set up using the Eurozone's official currency have decreased by 17%. Consequently, the author emphasizes the positive impact that the European monetary integration has on relative PPP convergence.

Xie et al. (2021) exploit various advanced unit root tests on monthly real effective exchange rates of 23 OECD economies plus the Eurozone for the period 1994-2019 to inspect four types of exchange rate specifications; standard PPP, trend PPP, qualified PPP and trend qualified PPP. Four paramount conclusions can be derived from the study. First, except for Ireland, at least one of the four specifications of PPP is corroborated for all of the economies analysed in

Xie et al. (2021). The majority of tests confirm the validity of the trend PPP in the sample observed. Second, the estimates of the ordered probit models indicate that more specifications of PPP are approved for economies with smaller GDP. Third, economic (monetary) integration counts. When the country is a Eurozone member, then the number of empirically confirmed PPP specifications increases. Fourth, the government debt to GDP has in the elaborated group of economies a significant negative effect on the validity of PPP propositions.

3. THE PPP CONCEPT AND RELATED ECONOMETRIC METHODOLOGY

The relative version of purchasing power parity theory states that the exchange rate movements should offset the relative price dynamics among the countries in question. The theory can be empirically presented by Equation 1 (Froot and Rogoff, 1995):

$$e_t = \alpha_0 + \alpha_1 p_t + \alpha_2 p_t^* + \xi_t \quad (1)$$

where e_t stands for the logarithm of nominal exchange rates, p_t represents the logarithm of domestic price index and p_t^* for the logarithm of the foreign price index. The error term ξ_t denotes deviations from PPP. It is important to note that the nominal exchange rates are defined as the price of foreign currency in the units of the domestic currency.

In this empirical study, the strict version of PPP is tested, assuming that $\alpha_0=0$, $\alpha_1=1$ and $\alpha_2=-1$ and implying that the variations in relative prices should be adjusted by nominal exchange rates. Hence, the real exchange rates should be constant over the long run and we anticipate that the real exchange rate series are stationary, not containing a unit root (Parikh & Wakerley, 2000).

Due to several disadvantages of the time series unit root test, we apply a set of panel unit root tests in pursuance of the validity of PPP in the observed set of countries within the selected period. According to Bekó and Boršič (2018) the main autoregressive panel model is expressed by Equation 2:

$$y_{i,t} = \rho_i y_{i,t-1} + X_{i,t} \delta_i + \varepsilon_{i,t} \quad (2)$$

where the subscript i designates N cross-section units observed over T periods denoted by subscript t , $X_{i,t}$ presents any fixed effects or individual trends (exogenous variables), ρ_i stands for autoregressive coefficients, while $\varepsilon_{i,t}$ symbolizes idiosyncratic errors, which are assumed to vary over cross sections and over time. Panel of y_i is weakly stationary if the absolute value of ρ_i is less than one. On the other hand, y_i contains a unit root if the absolute value of ρ_i is 1.

There are two assumptions about the ρ_i in panel unit root tests in our analysis. Methods developed by Levin et al. (2002) and Breitung (2000) incorporate common unit root processes, assuming common autoregressive coefficients across cross-sections ($\rho_i=\rho$). On the other hand, procedures elaborated by Fisher ADF and Fisher PP tests' (Maddala & Wu, 1999; Choi, 2001) and Im et al. (2003) consider individual unit root processes with individual autoregressive coefficients (ρ_i) differing across cross-sections. In line with the description in Boršič and Bekó (2020) the following subsections encapsulate the main features of each panel unit root test implemented in the preceding empirical study.

3.1. Specific features of Levin, Lin and Chu test, and Breitung test

The ADF regression in Levin, Lin and Chu test (Levin et al. 2002) is specified as:

$$\Delta y_{i,t} = \alpha y_{i,t-1} + \sum_{j=1}^{p_i} \beta_{i,j} \Delta y_{i,t-j} + X'_{i,t} \delta + \varepsilon_{i,t} \quad (3)$$

where a common α is assumed for which $\alpha = \rho - 1$ holds, p_i stands for the lag order for difference terms and it varies across cross-sections. The null hypothesis is stated as $H_0: \alpha = 0$ and indicates a unit root. The alternative hypothesis is defined as $H_1: \alpha < 0$ and it indicates stationarity. In Levin et al. (2002) approach auxiliary regressions of $\Delta y_{i,t}$ and $y_{i,t}$ on lagged terms $\Delta y_{i,t-j}$ and on exogenous variables X_{it} are estimated. The estimates of α are developed from the pooled equation:

$$\Delta \tilde{y}_{i,t} = \alpha \tilde{y}_{i,t-1} + \eta_{i,t} \quad (4)$$

where standardized proxies (denoted by \sim) for $\Delta y_{i,t}$ and $y_{i,t}$ are used with autocorrelations and deterministic components removed. Since the standard t-statistic for testing the hypothesis $\hat{\alpha} = 0$ diverges to negative infinity, Levin et al. (2002) developed the modified t statistics (t^*):

$$t^* = \frac{1}{\sigma^*} \left(t - NT \cdot \hat{S}_N \hat{\sigma}^{-2} \hat{\sigma}_\alpha \mu^* \right) \quad (5)$$

where μ^* and σ^* denote the adjustment terms for the mean and standard deviation as calculated by Levin et al. (2002), $\hat{\sigma}_\alpha$ presents the standard error of $\hat{\alpha}$, $\hat{\sigma}^2$ stands for the estimated variance of the error term from equation (4). \hat{S}_N is the average of individual ratios of long-run to short-run standard deviations and it is estimated with kernel-based techniques. The authors prove that t^* is asymptotically normally distributed.

The Breitung test is similar to Lin, Levin and Chu test as it is based on the same ADF specification stated in Equation 3. However, it calculates auxiliary regressions of $\Delta y_{i,t}$ and $y_{i,t}$ on lagged terms $\Delta y_{i,t-j}$ only, while proxies are transformed and detrended (Δy_{it}^*). In order to estimate the persistence parameter α panel proxy equation is applied:

$$\Delta y_{it}^* = \alpha y_{it-1}^* + v_{it} \quad (6)$$

Breitung (2000) proves that the estimate of the persistence parameter α is asymptotically normally distributed under the null hypothesis.

3.2. Specific features of Fisher ADF and Fisher PP tests

Based on the results of Fischer (1932), Maddala and Wu (1999) and Choi (2001) developed tests that integrate the individual p-values. In Equation 7 π_i presents the p-value from individual unit root test for cross-section i . Taking into account the findings of Hurlin (2010) the corresponding p-values are uniform $[0, 1]$ variables. Maddala and Wu (1999) determine their χ^2 test statistic:

$$\chi^2 = -2 \sum_{i=1}^N \log(\pi_i) \quad (7)$$

and show that it follows an asymptotic χ^2 -distribution with $2N$ degrees of freedom. Choi (2001) developed a similar Z statistic:

$$Z = -\frac{\sum_{i=1}^N \log(\pi_i) + N}{\sqrt{N}} \quad (8)$$

In both sets of the tests, the null hypothesis is:

$$H_0 : \alpha_i = 0, \quad \text{for all } i \quad (9)$$

and the alternative hypothesis determined by:

$$H_1 : \begin{cases} \alpha_i = 0 & \text{for } i = 1, 2, \dots, N_1 \\ \alpha_i < 0 & \text{for } i = N_1 + 1, \dots, N \end{cases} \quad (10)$$

Under the null hypothesis, Z -statistic is normally distributed.

3.3. Specific features of Im, Pesaran and Shin test

Im et al. (2003) estimate individual ADF regression for each cross-section taking into account individual unit root processes:

$$\Delta y_{i,t} = \alpha y_{i,t-1} + \sum_{j=1}^{p_i} \beta_{i,j} \Delta y_{i,t-j} + X'_{i,t} \delta + \varepsilon_{i,t} \quad (11)$$

with the null hypothesis, which is the same as in Equation 9, while the alternative hypotheses are the same as in Equation 10.

In Equation 12 \bar{t} stands for the average of the t -statistics for α_i from individual ADF regressions:

$$\bar{t} = \frac{1}{N} \sum_{i=1}^N t_i \quad (12)$$

Im et al. (2003) provide a procedure to standardize the \bar{t} -statistic and empirically demonstrate that the new statistic W is asymptotically normally distributed.

4. DEMONSTRATION OF EMPLOYED DATA

The empirical assessment attempts to find evidence of PPP in 19 members of the Eurozone: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia and Spain. The database consists of monthly data covering the period from January 2001 to September 2021, resulting in 19 cross-sections, 249 time periods and 4731 total panel observations.

The source for monthly averages of nominal exchange rates with reference currencies of euro (EUR) and US dollar (USD) is the database of the International Monetary Fund (2021). To test PPP in the tourism sector, we gathered the CPI for catering (CPI C111) and CPI for accommodation (CPI C112) from Eurostat (2021). Due to the limited availability of US CPI data at Eurostat and in pursuance of observing the longest possible period, we have assembled the US CPI time series data from the U.S. Bureau of Labor Statistics (2021). That is CPI for “food away from home” (BLS series code: CUUR0000SEFV) in place of CPI C111 (catering)

and CPI for “lodging away from home” (BLS series code: CUUR0000SEHB) as a proxy for CPI C112 (accommodation).

Preparing data for assessing the validity of the strict version of PPP requires the calculation of real exchange rates from nominal exchange rates (RER) and domestic (P) and foreign (P*) price indices:

$$RER = NER \frac{P^*}{P} \quad (13)$$

The preceding empirical analysis deals with four sets of real exchange rates. Namely, the real exchange rates are calculated for Eurozone member states taking into account two reference currencies (EUR and USD) and two different price deflators (CPI CP111 for catering and CPI C112 for accommodation). The level data of real exchange rates are expressed in terms of national currencies before EUR for members who joined the euro area after December 2020. For the founding members of the Eurozone, the exchange rates are determined by 1 for the EUR reference rate and the USD reference rate by the official nominal exchange rate among EUR in USD. Therefore, the real exchange rates in Eurozone member states vary only due to different relative prices. Despite the common currency, the real value of EUR differs across individual Eurozone member states.

Figures 1 and 2 display the level data of real exchange rates determined by CPI for catering (CPI CP111), while Figures 3 and 4 report the level data of real exchange rates measured by CPI for accommodation (CPI CP112). The level data for EUR real exchange rates are denominated in terms of national currencies before EUR. In the empirical analysis logarithmic values of real exchange rates are analysed.

When CPI for catering is a deflator for real exchange rates in the case of EUR reference rates Figure 1 shows that the series are rather stable in the long run in the case of Austria, Belgium, Finland, France, Germany, Ireland, Netherlands and Portugal. Also in Cyprus, Greece, Italy, Luxembourg and Spain the real exchange rates deflated by catering prices show a relatively steady long-run trend but with higher volatility compared to the first set of countries. Latvia and Slovenia had experienced real depreciation in the first part of the observed period. After the introduction of the EUR, the real exchange rates stabilized and are very steady thereafter. Similarly, in the case of Slovakia, there was a real appreciation of the currency before introducing EUR and a very stable real exchange rate afterward.

Taking into account the catering prices in calculating real exchange rates for USD reference rate (Figure 2), interestingly, almost all observed countries exhibit very similar movement of real exchange rates. The initial appreciation was followed by a period of relatively stable trend in the period of 2008 to 2014, with depreciation in 2015 and relatively stable real exchange rates afterward with a mild appreciation in 2017. Only Slovakia has recorded a very stable real exchange rate since 2008 with similar movements thereafter as in other countries but with much smaller amplitude.

Figure 3 demonstrates real exchange rates for EUR reference rate in case of accommodation prices. Again almost all real exchange rates exhibit a very stable long-run trend but with much higher volatility compared to data presented in Figure 1 (the same real exchange rates calculated by catering prices). Only Latvia and Slovenia had experienced real depreciation at the beginning of the observed period and a very stable long-run trend thereafter. Similarly, Slovakia had recorded initial real appreciation followed by the most stable real exchange rates afterward.

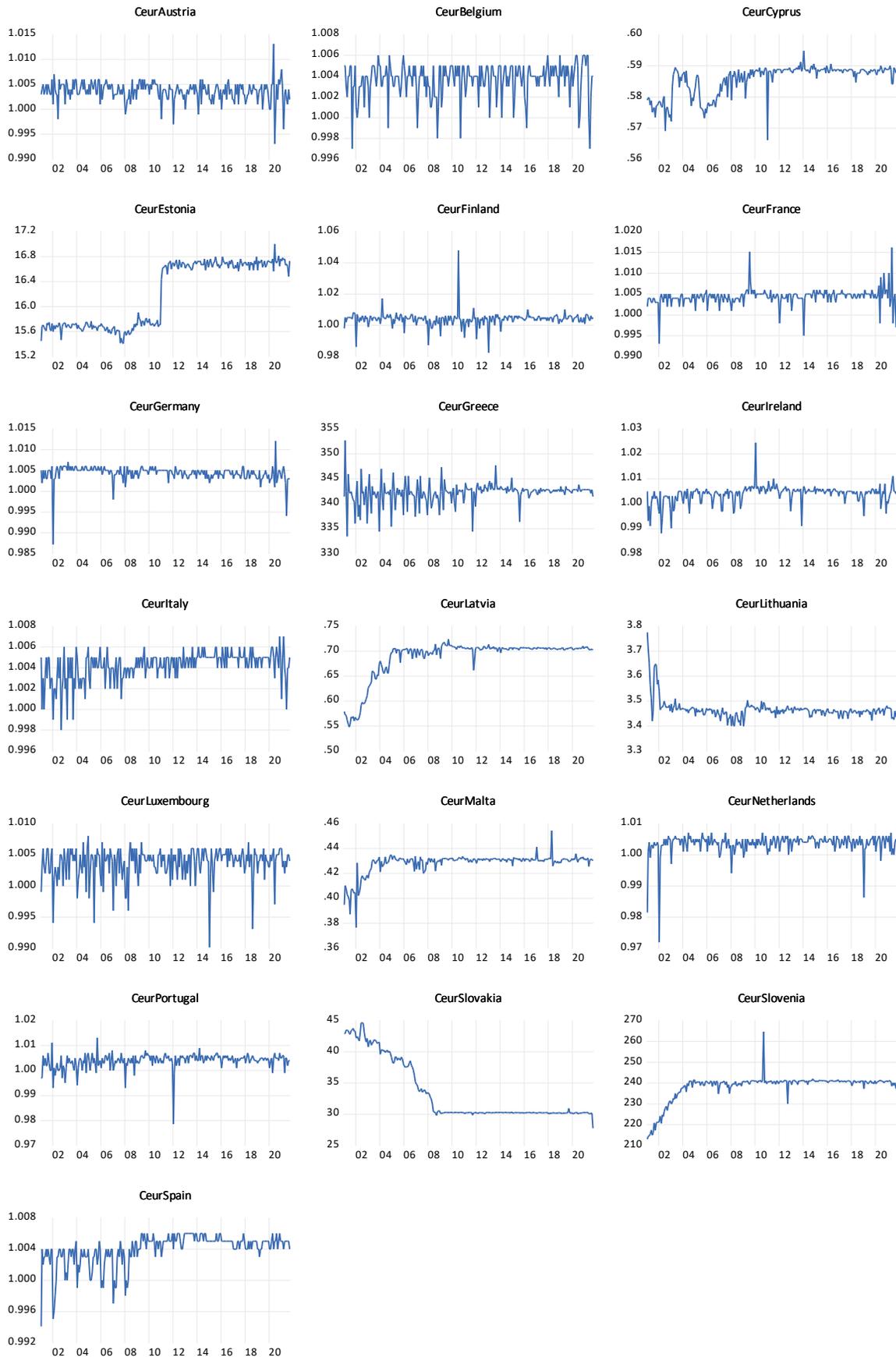


Figure 1. Real exchange rates with EUR reference rate based on catering prices

Source: Authors' compilation based on IMF (2021) and Eurostat (2021) data

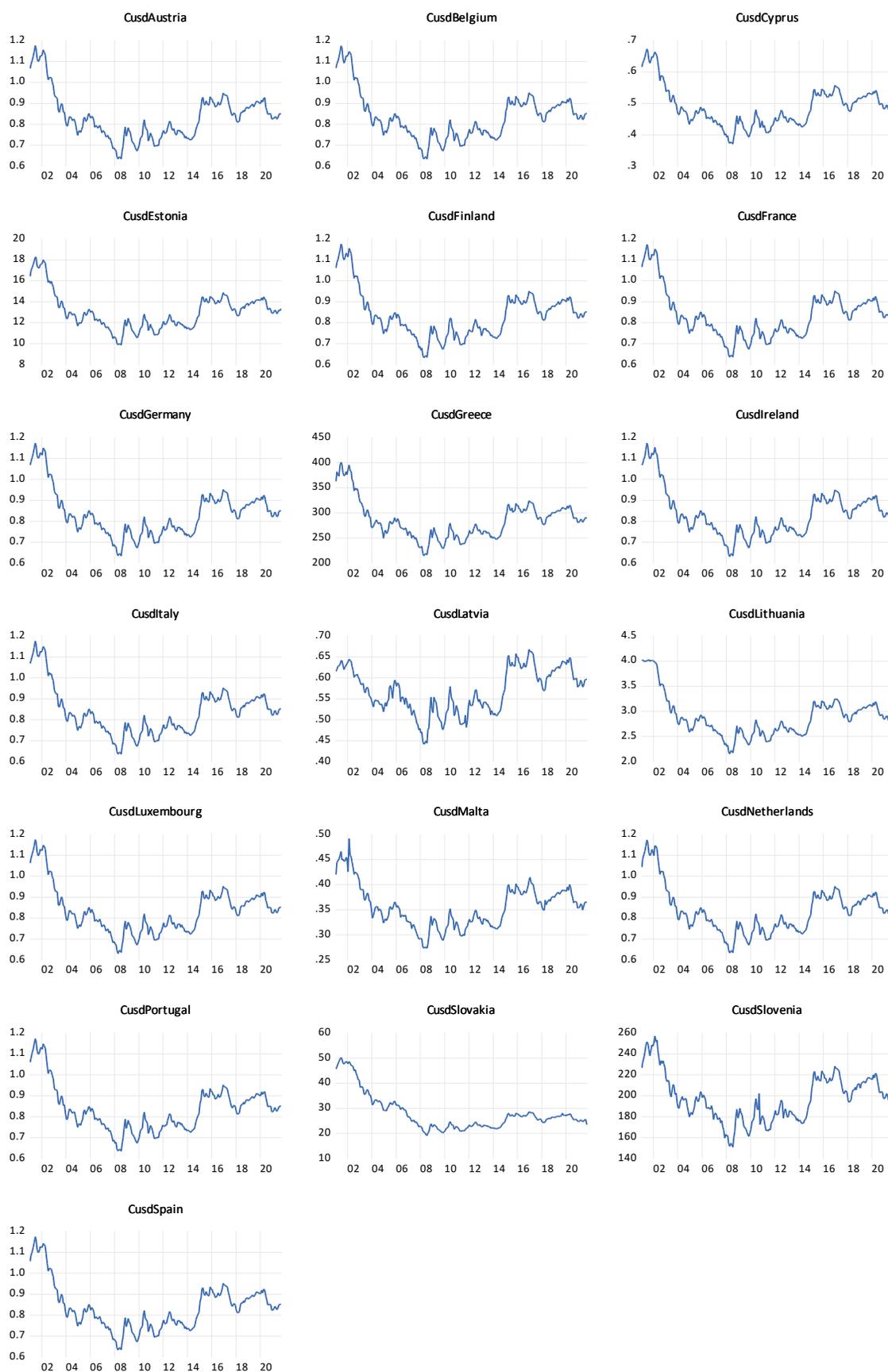


Figure 2. Real exchange rates with USD reference rate based on catering prices

Source: Authors' compilation based on IMF (2021) and U.S. Bureau of Labor Statistics (2021) data

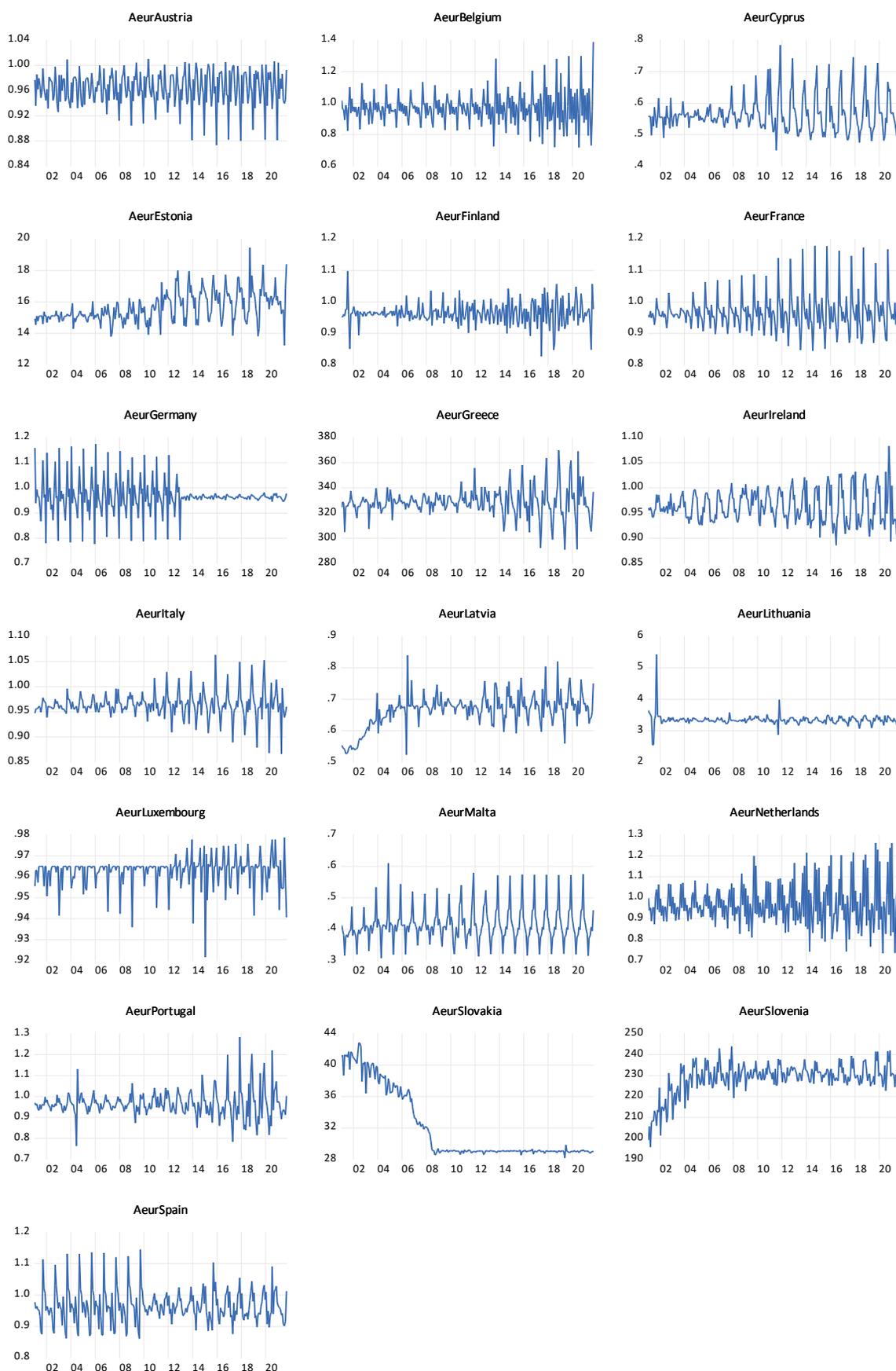


Figure 3. Real exchange rates with EUR reference rate based on accommodation prices

Source: Authors' compilation based on IMF (2021) and Eurostat (2021) data

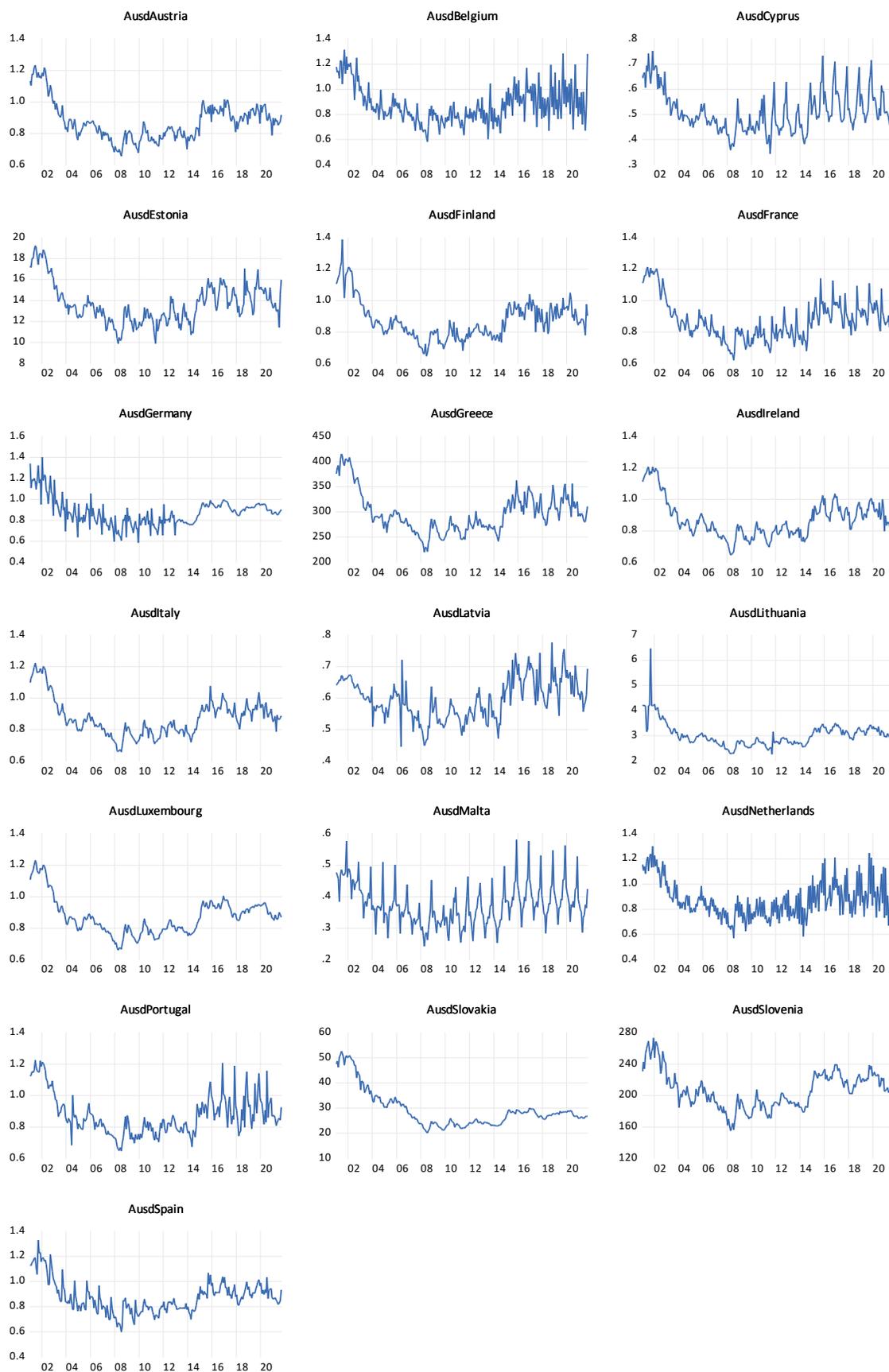


Figure 4. Real exchange rates with USD reference rate based on accommodation prices

Source: Authors' compilation IMF (2021) and U.S. Bureau of Labor Statistics (2021) data

Taking into account the accommodation prices and USD reference rates the graphs in Figure 4 show very similar movements of real exchange rates as in Figure 2, where catering prices and USD reference rates were considered. The difference is in much higher volatility around the long-run trend in the case of accommodation prices.

5. RESEARCH FINDINGS

The empirical analysis was conducted twice for both deflators. First, the whole observed period was taken into account: January 2001-September 2021, and second, the pre-Covid-19 period was considered: January 2001 to February 2020, resulting in four sets of results for each empirical test. Hence, all results presented in Tables 1-14 are reported for both periods and both reference currencies. The first set of empirical results is devoted to catering prices, while the second set of results exhibits characteristics of accommodation prices.

5.1. Results based on consumer price indices for catering

Results of Levin, Lin and Chu test show highly significant t^* statistics in Table 1. Namely, all variations of the test with various spectral specifications including individual effects or individual effects and linear trends in the case of EUR reference currency result in highly statistically significant t^* statistics, which means we can reject the null hypothesis of a unit root at 1% significance level confirming the validity of PPP. When USD is the reference currency we can reject the null again at 5% significance level for all variations of the test and both periods. Thus, Levin, Lin and Chu's test provides clear evidence in favour of PPP validity in the case of catering prices for both reference rates and both periods.

Table 1. Levin, Lin and Chu t^* statistics based on catering prices

Sample	Reference currency	Bartlett kernel		Parzen kernel		Quadratic spectral kernel	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]
2001M1- 2021M9	EUR	-8.80835 (0.0000) [13]	-15.7210 (0.0000) [13]	-9.76531 (0.0000) [13]	-17.5554 (0.0000) [13]	-9.77823 (0.0000) [13]	-17.4322 (0.0000) [13]
	USD	-4.36690 (0.0000) [1]	-4.133550 (0.0000) [1]	-4.21179 (0.0000) [1]	-3.94400 (0.0000) [1]	-4.15909 (0.0000) [1]	-3.81184 (0.0001) [1]
2001M1- 2020M2	EUR	-8.67393 (0.0000) [12]	-14.1341 (0.0000) [13]	-9.73002 (0.0000) [12]	-16.3567 (0.0000) [13]	-9.70424 (0.0000) [12]	-16.1654 (0.0000) [13]
	USD	-3.77155 (0.0001) [1]	-2.38528 (0.0085) [1]	-3.62167 (0.0001) [1]	-2.22766 (0.0130) [1]	-3.57481 (0.0002) [1]	-2.06734 (0.0194) [1]

Notes: The number of lags used in each cross-section ADF regression (p_i) was defined by the Schwarz information criterion. Computation was conducted with Newey-West bandwidth selection.

Source: Authors' calculation

Table 2. Breitung t statistics based on catering prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects and individual linear trends		Individual effects and individual linear trends		Individual effects and individual linear trends	
		t-stat (p-value) [no. of lags]	t-stat (p-value) [no. of lags]	t-stat (p-value) [no. of lags]	t-stat (p-value) [no. of lags]		
2001M1- 2021M9	EUR	-4.16163 (0.0000) [13]	-3.05083 (0.0011) [15]	-3.43491 (0.0003) [13]			
	USD	-1.49856 (0.0670) [1]	-1.45206 (0.0732) [1]	-1.49856 (0.0670) [1]			
2001M1- 2020M2	EUR	-3.53722 (0.0002) [13]	-0.64139 (0.2606) [14]	-2.96168 (0.0015) [13]			
	USD	0.79678 (0.7872) [1]	0.98867 (0.8386) [9]	0.75693 (0.7755) [1]			

Source: Authors' calculation

Results of the Breitung test (Table 2) show strong evidence in favour of the PPP theory since t statistics are highly statistically significant rejecting the null hypothesis in the case of EUR reference currency. Only in the pre-pandemic period when the Akaike information criterion is taken into account for EUR rate the result is statistically insignificant. When USD is considered as a reference currency the null hypothesis can be rejected for the whole observed period with 10% significance level. However, when the pre-pandemic period is accounted for, all three variations of the test do not provide any proof for PPP validity since the null hypothesis of a unit root cannot be rejected.

Table 3. Fisher ADF Maddala and Wu χ^2 statistics based on catering prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]
		2001M1- 2021M9	EUR	936.353 (0.0000) [13]	1034.86 (0.0000) [13]	436.825 (0.0000) [15]	574.146 (0.0000) [15]
USD	78.5303 (0.0001) [1]		35.5388 (0.5838) [1]	79.9890 (0.0001) [7]	36.5846 (0.5349) [7]	78.5303 (0.0001) [1]	35.5388 (0.5838) [1]
2001M1- 2020M2	EUR	951.711 (0.0000) [12]	1015.48 (0.0000) [13]	396.635 (0.0000) [14]	478.168 (0.0000) [14]	671.126 (0.0000) [13]	842.286 (0.0000) [13]
	USD	65.0524 (0.0000) [1]	21.5732 (0.9852) [1]	65.9348 (0.0033) [9]	22.4019 (0.9792) [9]	65.0524 (0.0041) [1]	22.2267 (0.9806) [1]

Source: Authors' calculation

Maddala and Wu χ^2 statistics presented in Table 3 display straightforward results in the case of EUR reference rate since all variations of the Fisher ADF test strongly reject the null hypothesis for both periods in question. Thus, providing clear evidence for PPP's existence. When USD is considered as a reference currency there is less clear support in favour of PPP. Namely, the null can be strongly rejected when individual effects are accounted for. Including individual effects and individual linear trends in test specification the resulting χ^2 statistics are statistically insignificant and do not support the validity of PPP.

Table 4. Fisher ADF Choi Z statistics based on catering prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]
2001M1- 2021M9	EUR	-22.6983 (0.0000) [13]	-22.9822 (0.0000) [13]	-13.4600 (0.0000) [15]	-13.8139 (0.0000) [15]	-21.6986 (0.0000) [13]	-20.7746 (0.0000) [13]
	USD	-4.94147 (0.0000) [1]	-1.11981 (0.1314) [1]	-5.04518 (0.0000) [7]	-1.25606 (0.1045) [7]	-4.94147 (0.0000) [1]	-1.11981 (0.1314) [1]
2001M1- 2020M2	EUR	-22.9573 (0.0000) [12]	-22.6759 (0.0000) [13]	-12.2040 (0.0000) [14]	-12.7036 (0.0000) [14]	-18.3365 (0.0000) [13]	-19.2981 (0.0000) [13]
	USD	-3.93385 (0.0000) [1]	0.83971 (0.7995) [1]	-3.97509 (0.0000) [9]	0.66167 (0.7459) [9]	-3.93385 (0.0000) [1]	0.73743 (0.7696) [1]

Source: Authors' calculation

Table 5. Fisher PP Maddala and Wu χ^2 statistics based on catering prices

Sample	Reference currency	Bartlett kernel		Parzen		Quadratic spectral kernel	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)
2001M1- 2021M9	EUR	1457.74 (0.0000)	1555.57 (0.0000)	1475.55 (0.0000)	1570.70 (0.0000)	1458.72 (0.0000)	1557.85 (0.0000)
	USD	64.4788 (0.0047)	25.6680 (0.9365)	65.7134 (0.0035)	26.4275 (0.9213)	66.2851 (0.0030)	27.0587 (0.9070)
2001M1- 2020M2	EUR	1362.07 (0.0000)	1441.28 (0.0000)	1381.91 (0.0000)	1455.30 (0.0000)	1363.37 (0.0000)	1442.30 (0.0000)
	USD	53.3615 (0.0502)	15.3159 (0.9996)	54.4242 (0.0410)	15.8337 (0.9994)	54.8755 (0.0375)	16.4238 (0.9991)

Source: Authors' calculation

Table 4 presents identical results provided by Choi Z statistics as compared to Maddala and Wu χ^2 statistics in Table 3. All variations of the test for both periods support the validity of PPP in the case of EUR as a reference currency. As for USD rates, the results approve the validity of

PPP when only individual effects are included; when individual linear trends are added the results change dramatically failing to provide support in favour of PPP.

Results of Fisher PP tests are presented in Table 5 for Maddala and Wu χ^2 statistics and in Table 6 for Choi Z statistics. Both statistics result in similar conclusions providing strong evidence for PPP in the case of EUR reference currency for all variations of the test and both periods.

Table 6. Fisher PP Choi Z statistics based on catering prices

Sample	Reference currency	Bartlett kernel		Parzen		Quadratic spectral kernel	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		Z (p-value)	Z (p-value)	Z (p-value)	Z (p-value)	Z (p-value)	Z (p-value)
2001M1-2021M9	EUR	-33.6867 (0.0000)	-33.6867 (0.0000)	-33.0930 (0.0000)	-33.9383 (0.0000)	-32.8533 (0.0000)	-33.7126 (0.0000)
	USD	-3.91953 (0.0000)	0.16868 (0.5670)	-4.01722 (0.0000)	0.05799 (0.5231)	-4.06237 (0.0000)	-0.02602 (0.4896)
2001M1-2020M2	EUR	-31.6731 (0.0000)	-32.1387 (0.0000)	-31.9940 (0.0000)	-32.3141 (0.0000)	-31.7181 (0.0000)	-32.0905 (0.0000)
	USD	-2.98101 (0.0014)	2.01023 (0.9778)	-3.07634 (0.0010)	1.90010 (0.9713)	-3.11812 (0.0009)	1.78738 (0.9631)

Source: Authors' calculation

When USD is the reference currency, both statistics resulting from Fisher's PP tests strongly reject the null hypothesis and confirm the PPP theory when individual effects are taken into account. When both individual effects and individual linear trends are incorporated, there is no evidence in favour of PPP since all resulting test statistics are statistically insignificant.

Table 7. Im, Pesaran and Shin W statistics based on catering prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]
2001M1-2021M9	EUR	-29.9437 (0.0000) [13]	-33.1952 (0.0000) [13]	-15.9047 (0.0000) [15]	-18.6302 (0.0000) [15]	-27.8745 (0.0000) [13]	-29.4385 (0.0000) [13]
	USD	-4.66699 (0.0000) [1]	-1.03194 (0.1510) [1]	-4.77064 (0.0000) [7]	-1.18084 (0.1188) [7]	-4.66699 (0.0000) [1]	-1.03194 (0.1510) [1]
2001M1-2020M2	EUR	-30.1746 (0.0000) [12]	-32.7619 (0.0000) [13]	-14.4654 (0.0000) [14]	-16.7941 (0.0000) [14]	-22.6720 (0.0000) [13]	-27.6106 (0.0000) [13]
	USD	-3.73181 (0.0001) [1]	0.78558 (0.7839) [1]	-3.78939 (0.0001) [9]	0.56328 (0.7134) [9]	-3.73181 (0.0001) [1]	0.69210 (0.7556) [1]

Source: Authors' calculation

Table 7 presents the outcome of Im, Pesaran and Shin test. W statistics show identical results as other tests, which assume individual unit root processes (Fisher ADF and Fisher PP). Thus, providing clear evidence for PPP for both periods in the case of EUR as a reference currency, since all W statistics are highly statistically significant and reject the null hypothesis of a unit root. Under USD rates the W statistics are highly significant only when individual linear trends are not taken into account.

5.2. Results based on consumer price indices for accommodation

Taking into account the accommodation prices for EUR values in establishing the real exchange rates the Levin, Lin and Chu test (Table 8) offers strong support for the null hypothesis since all t^* statistics are highly statistically insignificant. Thus, the results undoubtedly reject the validity of PPP for both periods for all alternatives of the test specification. When comparing observed countries with USD the results are completely opposite. All test statistics are highly statistically significant, proving proof of PPP validity in both periods observed and for all possible modifications of the test.

Table 8. Levin, Lin and Chu t^* statistics based on accommodation prices

Sample	Reference currency	Bartlett kernel		Parzen kernel		Quadratic spectral kernel	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]	t^* (p-value) [no. of lags]
2001M1-2021M9	EUR	11.3785 (1.0000) [13]	33.4513 (1.0000) [13]	2.31303 (0.9896) [13]	12.1810 (1.0000) [13]	2.89100 (0.9981) [13]	14.1331 (1.0000) [13]
	USD	-2.34854 (0.00949) [14]	-2.41953 (0.0078) [14]	-4.87551 (0.0000) [14]	-5.85979 (0.0000) [14]	-4.72479 (0.0000) [14]	-5.58024 (0.0000) [14]
2001M1-2020M2	EUR	10.7248 (1.0000) [13]	33.0473 (1.0000) [13]	-1.15977 (0.1231) [13]	4.62745 (1.0000) [13]	-2.13358 (0.0164) [13]	2.40957 (0.9920) [13]
	USD	-2.50781 (0.0061) [14]	-1.77667 (0.0378) [14]	-4.69730 (0.0000) [14]	-4.85375 (0.0000) [14]	-5.05363 (0.0000) [14]	-5.50941 (0.0000) [14]

Notes: The number of lags used in each cross-section ADF regression (p_i) was defined by the Schwarz information criterion. Computation was conducted with Newey-West bandwidth selection.

Source: Authors' calculation

Table 9 displays the results of the Breitung test when accommodation prices are utilized in the calculation of real exchange rates. The resulting t statistics provide straightforward results in favour of PPP validity. Both reference currencies in both periods exhibit very high t statistics enabling rejection of the null hypothesis within all possible alterations in the test specification.

Fisher ADF test results are presented in Table 10, where Maddala and Wu χ^2 statistics are shown, while Table 11 exhibits corresponding Choi Z statistics. In both instances, all resulting test statistics confirm the PPP hypothesis. For all variations of the test-taking into account several kernel spectral specifications and different exogenous variables (individual effects and

individual linear trends), the results are monotonous with very high test statistics strongly rejecting the null for both reference currencies and in both analysed periods.

Table 12 demonstrates Fisher PP Maddala and Wu χ^2 statistics, which provide support for the PPP theorem since all alternations of test specification in the case of both reference currencies and both periods observed result in highly statistically significant test statistics rejecting the null hypothesis of a unit root. Similarly, Table 13 offers an overview of Fisher PP Choi Z statistics, where the results are unambiguously in favour of PPP validity.

Table 9. Breitung t statistics based on accommodation prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects and individual linear trends		Individual effects and individual linear trends		Individual effects and individual linear trends	
		t-stat (p-value) [no. of lags]	t-stat (p-value) [no. of lags]	t-stat (p-value) [no. of lags]	t-stat (p-value) [no. of lags]		
2001M1- 2021M9	EUR	-0.84531 (0.1990) [13]	-0.58546 (0.2791) [15]	-0.75008 (0.2266) [13]			
	USD	-0.59704 (0.2752) [14]	0.71235 (0.7619) [15]	0.07975 (0.5318) [15]			
2001M1- 2020M2	EUR	-0.74090 (0.2294) [13]	-0.79598 (0.2130) [14]	-0.79686 (0.2128) [13]			
	USD	0.54056 (0.7056) [14]	2.51969 (0.9941) [14]	1.95097 (0.9745) [14]			

Source: Authors' calculation

Table 10. Fisher ADF Maddala and Wu χ^2 statistics based on accommodation prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]	χ^2 (p-value) [no. of lags]
2001M1- 2021M9	EUR	579.426 (0.0000) [13]	499.383 (0.0000) [13]	346.096 (0.0000) [15]	269.113 (0.0000) [15]	478.091 (0.0000) [13]	396.249 (0.0000) [13]
	USD	124.910 (0.0000) [14]	79.2518 (0.0001) [14]	130.235 (0.0000) [15]	91.3892 (0.0000) [15]	125.381 (0.0000) [15]	82.9308 (0.0000) [15]
2001M1- 2020M2	EUR	447.679 (0.0000) [13]	355.181 (0.0000) [13]	302.516 (0.0000) [14]	205.957 (0.0000) [14]	386.606 (0.0000) [13]	297.775 (0.0000) [13]
	USD	103.876 (0.0000) [14]	54.4927 (0.0404) [14]	111.432 (0.0000) [14]	61.7748 (0.0087) [14]	109.972 (0.0000) [14]	60.9777 (0.0104) [14]

Source: Authors' calculation

Table 11. Fisher ADF Choi Z statistics based on accommodation prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]	Z (p-value) [no. of lags]
2001M1-2021M9	EUR	-18.4638 (0.0000) [13]	-15.7051 (0.0000) [13]	-13.8464 (0.0000) [15]	-11.0566 (0.0000) [15]	-16.6032 (0.0000) [13]	-13.8036 (0.0000) [13]
	USD	-7.65240 (0.0000) [14]	-4.64523 (0.0000) [14]	-7.96709 (0.0000) [15]	-5.67154 (0.0000) [15]	-7.68104 (0.0000) [15]	-5.03850 (0.0000) [15]
2001M1-2020M2	EUR	-15.9017 (0.0000) [13]	-12.8128 (0.0000) [13]	-12.7004 (0.0000) [14]	-9.14103 (0.0000) [14]	-14.4585 (0.0000) [13]	-11.2656 (0.0000) [13]
	USD	-6.47124 (0.0000) [14]	-2.63602 (0.0042) [14]	-6.92362 (0.0000) [14]	-3.42957 (0.0003) [14]	-6.82025 (0.0000) [14]	-3.35184 (0.0004) [14]

Source: Authors' calculation

Table 12. Fisher PP Maddala and Wu χ^2 statistics based on accommodation prices

Sample	Reference currency	Bartlett kernel		Parzen		Quadratic spectral kernel	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)	χ^2 (p-value)
2001M1-2021M9	EUR	1223.57 (0.0000)	1269.13 (0.0000)	1338.61 (0.0000)	1421.01 (0.0000)	1443.89 (0.0000)	1533.13 (0.0000)
	USD	412.719 (0.0000)	354.354 (0.0000)	432.230 (0.0000)	374.249 (0.0000)	401.369 (0.0000)	341.664 (0.0000)
92001M1-2020M2	EUR	1138.06 (0.0000)	1170.80 (0.0000)	1187.66 (0.0000)	1248.54 (0.0000)	1270.07 (0.0000)	1327.45 (0.0000)
	USD	-348.203 (0.0000)	288.014 (0.0000)	368.740 (0.0000)	310.552 (0.0000)	339.835 (0.0000)	280.673 (0.0000)

Source: Authors' calculation

Table 13. Fisher PP Choi Z statistics based on accommodation prices

Sample	Reference currency	Bartlett kernel		Parzen		Quadratic spectral kernel	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		Z (p-value)	Z (p-value)	Z (p-value)	Z (p-value)	Z (p-value)	Z (p-value)
2001M1-2021M9	EUR	-31.0740 (0.0000)	-31.2072 (0.0000)	-32.7791 (0.0000)	-33.3933 (0.0000)	-34.1061 (0.0000)	-34.7268 (0.0000)
	USD	-14.6474 (0.0000)	-11.7222 (0.0000)	-14.9803 (0.0000)	-12.0244 (0.0000)	-14.4357 (0.0000)	-11.4197 (0.0000)

2001M1- 2020M2	EUR	-29.4425 (0.0000)	-29.5293 (0.0000)	-30.3918 (0.0000)	-30.7861 (0.0000)	-31.4168 (0.0000)	-31.7360 (0.0000)
	USD	-13.0715 (0.0000)	-9.67951 (0.0000)	-13.4203 (0.0000)	-10.0950 (0.0000)	-12.8524 (0.0000)	-9.48183 (0.0000)

Source: Authors' calculation

The last set of results is provided in Table 14, where the outcome Im, Pesaran and Shin test is given for real exchange rates based on accommodation prices. Again the decision about the validity of PPP is unambiguous. All test statistics are highly statistically significant, rejecting the null of a unit root for both periods observed, both reference currencies and alternatives of the test specification.

Table 14. Im, Pesaran and Shin W statistics based on accommodation prices

Sample	Reference currency	Schwarz information criterion		Akaike information criterion		Hannan-Quinn information criterion	
		Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends	Individual effects	Individual effects and individual linear trends
		W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]	W-stat (p-value) [no. of lags]
2001M1- 2021M9	EUR	-20.3562 (0.0000) [13]	-18.4216 (0.0000) [13]	-14.0714 (0.0000) [15]	-11.8517 (0.0000) [15]	-17.6477 (0.0000) [13]	-15.5579 (0.0000) [13]
	USD	-7.29503 (0.0000) [14]	-4.65021 (0.0000) [14]	-7.58903 (0.0000) [15]	-5.67850 (0.0000) [15]	-7.32277 (0.0000) [15]	-5.06199 (0.0000) [15]
2001M1- 2020M2	EUR	-16.6722 (0.0000) [13]	-14.2166 (0.0000) [13]	-12.7383 (0.0000) [14]	-9.64774 (0.0000) [14]	-14.9600 (0.0000) [13]	-12.3445 (0.0000) [13]
	USD	-6.18411 (0.0000) [14]	-2.71298 (0.0033) [14]	-6.61685 (0.0000) [14]	-3.55703 (0.0002) [14]	-6.52445 (0.0000) [14]	-3.46404 (0.0003) [14]

Source: Authors' calculation

6. FUTURE RESEARCH DIRECTIONS

The findings presented can be complemented with several research alternatives. It would be interesting to study the sustainability of the PPP process by using different tradable and nontradable price indices for Eurozone. Examining the validity of the mean reversion process under tourism price indices in other non-euro economies appears to be a promising research avenue. Moreover, using second-generation panel unit root tests and including nonlinear adjustment of relative prices into cointegration tests can bring new insights into the PPP debate.

7. CONCLUSION

Unlike many previous PPP studies, this research uses price indices of tourism services to test the mean reversion of real exchange rates for the group of Eurozone countries. The present empirical exercise provides several relevant findings. First, in the whole sample of calculations comprised of two price indicators for tourism services, two numeraire currencies and a battery of panel stationary tests for two-time frames (56 estimates in total), the hypothesis about the unit root process can be rejected in 86% of the cases. Second, with consumer price indices for

catering services the PPP proposition is verified for 26 out of 28 cases evaluated, when applying consumer price indices for accommodation services the PPP is supported in 22 out of 28 cases tested. Third, no significant differences could be detected when the unit root tests are performed on separate time sections. The percentage of confirmed PPP cases amounts to 93% for both periods, for 2001-2021 as well as for the pre-pandemic period, under consumer price indices for catering services. Similar inference holds for consumer price indices for accommodation services; the adjustment of real exchange rates towards PPP is under this price specification discovered in 79% of cases for each time window. Fourth, the parity conditions under tourism price indices are not dependent upon the selection of benchmark currency; for euro rates as well as for US dollar rates the null hypothesis of unit root is rejected in 24 out of 28 cases. Finally, only the Breitung test is incapable of rejecting the null hypothesis of non-stationarity of real exchange rates under any scenario with price indices for accommodation services.

The empirical outcomes of the study imply that the calculated real exchange rates of euro area economies revert to a constant mean and therefore uphold the PPP notion. The results are robust to the observed time intervals, applied unit root tests, chosen base currencies and the selected tourism price indices. The validity of the PPP established in this inquiry is consistent with the work of Ogrokhina (2019) for the Eurozone, where only short-run deviations of relative prices for traded and nontraded goods from their parity values are reported. Additionally, our empirical estimates are in harmony with the increasing tradability of services (Rabe & Waddle, 2020) and with the significance of the tourism industry in shaping relative prices and income levels among economies (Tubadji & Nijkamp, 2018). The robustness of the PPP mechanism indicates that tourism markets are dominated by intensive price competition and they are potent enough to strengthen the process of real economic integration between Eurozone members.

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REFERENCES

- Abioglu, V., & Hasanov, M. (2021). Empirical investigation of long run PPP hypothesis: the case of temporary structural break and asymmetric adjustment. *International Journal of Economic Sciences*, 10(1), 1-19. <https://dx.doi.org/10.52950/ES.2021.10.1.001>
- Bekő, J., & Boršič, D. (2018). Testing the purchasing power parity hypothesis: case of ASEAN economies. *Naše Gospodarstvo/Our Economy*, 64(4), 74-85. <https://doi.org/10.2478/ngoe-2018-0024>
- Bekő, J., & Boršič, D. (2020). Are the Mediterranean countries with tourism price indices in the purchasing power parity zone?. In: Bevanda, V., Štetić, S. (Ed.), *Modern management tools and economy of tourism sector in present era: 5th international thematic monograph*. Belgrade: Association of Economists and Managers of the Balkans; Ohrid: Faculty of Tourism and Hospitality.
- Bergin, P. R., Glick, R., & Wu, J. L. (2017). "Conditional PPP" and real exchange rate convergence in the euro area. *Journal of International Money and Finance*, 73(May), 78-92. <https://dx.doi.org/10.1016/j.jimonfin.2017.02.005>
- Breitung, J. (2000). The local power of some unit root tests for panel data. In B. Baltagi (Ed.), *Advances in Econometrics, Vol. 15: Nonstationary Panels, Panel Cointegration, and Dynamic Panels* (pp. 161-178), Amsterdam: JAI Press. [https://doi.org/10.1016/S0731-9053\(00\)15006-6](https://doi.org/10.1016/S0731-9053(00)15006-6)

- Choi, I. (2001). Unit root tests for panel data. *Journal for International Money and Finance*, 20(2), 249-272. [https://doi.org/10.1016/S0261-5606\(00\)00048-6](https://doi.org/10.1016/S0261-5606(00)00048-6)
- Christidou, M., & Panagiotidis, T. (2010). Purchasing power parity and the European single currency: some new evidence. *Economic Modelling*, 27(5), 1116-1123. <https://doi.org/10.1016/j.econmod.2010.03.008>
- Drissi, R., & Boukhatem, J. (2020). A nonlinear adjustment in real exchange rates under transaction costs hypothesis in developed and emerging countries. *Quantitative Finance and Economics*, 4(2), 220-235. <https://doi.org/10.3934/QFE.2020010>
- Emirmahmutoglu, F., & Omay, T. (2014). Reexamining of PPP hypothesis: a nonlinear asymmetric heterogeneous panel unit root test. *Economic Modelling*, 40(June), 184-190. <https://doi.org/10.1016/j.econmod.2014.03.028>
- Eurostat. (2021). *Eurostat database*. Retrieved October 20, 2021, from <https://ec.europa.eu/eurostat/data/database>
- Froot, K. A., & Rogoff, K. (1995). Perspectives on PPP and long-run real exchange rates. In G. Grossman & K. Rogoff (Ed.), *Handbook of International Economics Vol. III*, (pp. 1647-1688). Elsevier Science. [https://doi.org/10.1016/S1573-4404\(05\)80012-7](https://doi.org/10.1016/S1573-4404(05)80012-7)
- Gavurova, B., Belas, J., Valaskova, K., Rigelsky, M., & Ivankova, V. (2021). Relations between infrastructure innovations and tourism spending in developed countries: a macroeconomic perspective. *Technological and Economic Development of Economy*, 27(5), 1072-1094. <http://doi.org/10.3846/tede.2021.15361>
- Giannellis, N., & Papadopoulos, A. P. (2010). Nonlinear exchange rate adjustment in the enlarged Eurozone: evidence and implications for candidate countries. *Review of International Economics*, 18(4), 741-757. <https://doi.org/10.1111/j.1467-9396.2010.00895.x>
- Huang, C. H., & Yang, C. Y. (2015). European exchange rate regimes and purchasing power parity: an empirical study on eleven Eurozone countries. *International Review of Economics and Finance*, 35(January), 100-109. <https://doi.org/10.1016/j.iref.2014.09.008>
- Hurlin, C. (2010). What would Nelson and Plosser find had they used panel unit root tests? *Applied Economics*, 42(12), 1515-1531. <https://doi.org/10.1080/00036840701721539>
- Im, K. S., Pesaran, M. H., & Shin, Y. (2003). Testing for unit roots in heterogeneous panels. *Journal of Econometrics*, 115(1), 53-74. [https://doi.org/10.1016/S0304-4076\(03\)00092-7](https://doi.org/10.1016/S0304-4076(03)00092-7)
- International Monetary Fund. (2021). *International financial statistics*. Retrieved October 20, 2021, From <https://data.imf.org/?sk=4c514d48-b6ba-49ed-8ab9-52b0c1a0179b&sId=1390030341854>
- Kavkler, A., Boršič, D., & Bekö, J. (2016). Is the PPP valid for the AE-11 countries? New evidence from nonlinear unit root tests. *Economic Research*, 29(1), 612-622. <https://dx.doi.org/10.1080/1331677X.2016.1189842>
- Koedijk, K. G., Tims, B., & van Dijk, M. A. (2004). Purchasing power parity and the euro area. *Journal of International Money and Finance*, 23(7-8), 1081-1107. <https://doi.org/10.1016/j.jimonfin.2004.08.005>
- Levin, A., Lin, C. F., & Chu, C. (2002). Unit root testing in panel data: asymptotic and finite-sample properties. *Journal of Econometrics*, 108(1), 1-24. [https://doi.org/10.1016/S0304-4076\(01\)00098-7](https://doi.org/10.1016/S0304-4076(01)00098-7)
- Lopez, C., & Papell, D. H. (2007). Convergence to purchasing power parity at the commencement of the euro. *Review of International Economics*, 15(1), 1-16. <https://doi.org/10.1111/j.1467-9396.2007.00631.x>
- Maddala, G. S., & Wu, S. (1999). A comparative study of unit root tests with panel and a new simple test. *Oxford Bulletin of Economics and Statistics*, 61(0), 631-653. <https://doi.org/10.1111/1468-0084.0610s1631>

- Macedoni, L. (2021). Has the euro shrunk the band? Relative purchasing power parity convergence in a currency union. *Scandinavian Journal of Economics*, 123(2), 593-620.
<https://doi.org/10.1111/sjoe.12417>
- Parikh, A., & Wakerly, E. (2000). Real exchange rates and unit root tests. *Weltwirtschaftliches Archiv*, 136(3), 478-490. <https://doi.org/10.1007/BF02707290>
- Ogrokhina, O. (2019). Persistence of prices in the Eurozone capital cities: evidence from the Economist Intelligence Unit City Data. *Economic Modelling*, 76(January), 330-338.
<http://doi.org/10.1016/j.econmod.2018.09.005>
- Pascariu, G. C., & Ibănescu, B. C. (2018). Determinants and implications of the tourism multiplier effect in EU economies. Towards a core-periphery pattern? *Amfiteatru Economic*, 20(12), 982-997. <http://doi.org/10.24818/EA/2018/S12/982>
- Rabe, C., & Waddle, A. (2020). The evolution of purchasing power parity. *Journal of International Money and Finance*, 109(December), 1-21. <https://doi.org/10.1016/j.jimonfin.2020.102237>
- Statista. (2021). *Statista database*. Retrieved December 17, 2021, from <https://www.statista.com/statistics/1228395/travel-and-tourism-share-of-gdp-in-the-eu-by-country/>
- Su, J. J., Cheung, A., & Roca, E. (2014). Does purchasing power parity hold? New evidence from wild-bootstrapped nonlinear unit root tests in the presence of heteroskedasticity. *Economic Modelling*, 36(January), 161-171. <https://doi.org/10.1016/j.econmod.2013.09.029>
- Taylor, M. P. (2006). Real exchange rates and purchasing power parity: mean-reversion in economic thought. *Applied Financial Economics*, 16(1-2), 1-17.
<https://doi.org/10.1080/09603100500390067>
- Taylor, A. M., & Taylor, M. P. (2004). The purchasing power parity debate. *The Journal of Economic Perspectives*, 18(4), 135-158. <https://doi.org/10.1257/0895330042632744>
- The World Bank. (2021). *The World Bank database*. Retrieved December 17, 2021, from <https://databank.worldbank.org/source/world-development-indicators#>
- Tubadji, A., & Nijkamp, P. (2018). Revisiting the Balassa-Samuelson effect: international tourism and cultural proximity. *Tourism Economics*, 24(8), 915-944.
<https://doi.org/10.1177/1354816618781468>
- U.S. Bureau of Labor Statistics. (2021). *Consumer price index (CPI) databases*. Retrieved October 20, 2021, from <https://www.bls.gov/cpi/data.htm>
- Zhou, S., Bahmani-Oskooee, M., & Kutan, A. M. (2008). Purchasing power parity before and after the adoption of the euro. *Review of World Economics*, 144(1), 134-150.
<https://doi.org/10.1007/s10290-008-0140-5>
- Zhou, S., & Kutan, A. M. (2011). Is the evidence for PPP reliable? A sustainability examination of the stationarity of real exchange rates. *Journal of Banking & Finance*, 35(9), 2479-2490.
<https://doi.org/10.1016/j.jbankfin.2011.02.006>
- Vo, L. H., & Vo, D. H. (2020). Long-run dynamics of exchange rates: a multi-frequency investigation. *North American Journal of Economics and Finance*, 54(November), 1-17.
<https://doi.org/10.1016/j.najef.2019.101125>
- Wu, Y., & Lin, E. S. (2011). Does purchasing power parity hold following the launch of the euro? Evidence from the panel unit root test. *Applied Economics Letters*, 18(2), 167-172.
<https://doi.org/10.1080/13504850903442970>
- Xie, Z. X., Chen, S. W., & Hsieh, C. K. (2021). Facing up to the polysemy of the purchasing power parity: new international evidence. *Economic Modelling*, 98(May), 247-265.
<https://doi.org/10.1016/j.econmod.2021.02.019>



Estimating the Output Response to Tourism Spending in the Mediterranean Countries

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Abstract: *The aim of this chapter is, first, to assess the impact of changes in tourism spending on economic activity in 16 Mediterranean countries and, second, to examine whether country-specific characteristics affect the size of tourism spending multipliers. Based on aggregate SVAR model estimates, the authors confirmed a statistically significant response of output to the shock in tourism spending in 88% of the analyzed cases at least over the part of the forecast horizon. In 56% of the examined cases, the value of the respective multiplier is above two. The existence of the multiplier mechanism is documented in 13 economies for domestic and foreign tourism spending within a particular forecast horizon. Tourism spending generates stronger GDP growth in countries that record a higher standard of living, have a better state of road and railroad transport infrastructure, and, to some extent, display higher consumer price levels of hotels and restaurants.*

1. INTRODUCTION

Tourism represents one of the most vibrant sectors of economies successfully complementing the needs of growing international trade in goods and services and, at the same time, peoples' aspirations to visit remote geographical areas, discover hidden tourist destinations, and experience foreign cultures. The sector's strong interlacement with the general economy creates demand for products, services, and production factors from other industries on domestic and foreign markets on one hand. On the other hand, it creates diversification of tourism services, the development of innovative organizational practices, and a more efficient allocation of resources in the tourism industry. It also increases the supply potential of other economic sectors. There are numerous channels through which tourism development influences the general economy. The expansion of the tourism sector generates employment, increases household income, and added value, and fosters investments. It is a source of additional tax revenue and – by creating foreign exchange earnings – mitigates the economy's current account imbalances (Dritsakis, 2012; Massidda and Mattana, 2012; Bacovic et al., 2020). Speaking holistically, this service sector can immensely contribute to the economic growth and overall socio-economic progress of the country (Shahzad et al., 2017).

To explicate the process of economic growth and describe the origin of output growth, one can distinguish between two basic approaches (Pérez-Montiel et al., 2021). The supply-side explanation of economic growth rests on neoclassical models of growth and models of endogenous economic growth (Valdés, 1999). An aggregate production function is employed in neoclassical growth models under the assumption that output growth is a function of accumulated production factors whereas competition assures the most efficient allocation of disposable resources. Theories of endogenous economic growth anticipate further dynamic productivity gains from increasing returns to scale arising from technological rivalry, research and development spillovers, and accumulation of human capital. Therefore, the tourism industry is a supply-led growth

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generator when this sector is potent enough to create dynamic increasing returns of scale, disseminate productivity gains, enhance competition, provide access to new services, and acquire knowledge and organizational capital. On the other hand, the demand-based economic growth approach presupposes that GDP growth is fundamentally constrained by the bulk of effective aggregate demand (Thirlwall, 2002). Thus, every increase in autonomous expenditures brings through the Keynesian multiplier mechanism a rise in equilibrium output. Under this approach, tourism may act as an exogenous demand with expenditure potential to determine output growth.

The goal of this study is to deepen the empirical discussion about the complex nature of linkages between tourism and economic growth using the recent available annual datasets for a group of 16 Mediterranean countries. Two innovations are particularly important in our econometric exercise. First, relying on the methodological framework of Blanchard and Perotti (1999) and Perotti (2002), we calculate the size of tourism spending multipliers based on the structural vector autoregression (SVAR) approach, both on an aggregate and disaggregate expenditure levels. Second, we scrutinize the role of country-specific characteristics that dictate the size of the tourism spending multiplier based on the regression analysis and panel vector autoregression (VAR) model utilized in Ilzetzki et al. (2013) and Koh (2017). The study is organized as follows. Section 2 contains a brief evaluation of relevant empirical literature. Section 3 presents the utilized econometric methodology while in Section 4 the description of employed data and the required specification of variables are given. The discussion of empirical results is reserved for Section 5. Potential extensions of the current research are elaborated in Section 6. The final section summarizes the main findings of the study.

2. LITERATURE REVIEW

There is a relatively wide range of empirical literature that addresses the nature of the relationship between tourism development and economic growth based on specific methodological approaches and employed on different datasets. Although the underlying research question is rarely unified in the studies, the focus is on the empirical assessment of causality in most cases. Only then the focus is on the estimation of the effect of tourism spending on economic activity and other (macro)economic variables. To identify relevant causal links, authors usually rely on a variety of causality tests whereas for assessing the impact of tourism spending on economic growth, input-output analysis (Pratt, 2015), general equilibrium models (Alaminos et al., 2020), and econometric estimation techniques are applied. The inspection of relevant literature reveals that the econometric methodology is the most frequently adopted approach, especially in examining Mediterranean countries. Within this research approach, multiple regressions, autoregressive distributed lag (ARDL) models, VAR models, and vector error correction (VEC) models are at the forefront of researchers' interests. Nevertheless, there is a noticeable lack of empirical work that directly addresses the scale of the impact of tourism spending on economic activity or, in other words, the size of the tourism spending multiplier. Therefore, the upcoming text evaluates the current state of empirical findings on this research subject briefly.

Chou (2013) presents mixed results regarding the interlacement of tourism spending and economic growth in a sample of 10 transition economies from 1988 to 2011 based on the panel causality approach. The results indicate no existing causal connection for Bulgaria, Romania, and Slovenia while in Estonia and Hungary tourism spending and economic growth mutually influence each other. One-way Granger causality from tourism spending to economic

growth was detected in Cyprus, Latvia, and Slovakia while the opposite was found in the Czech Republic and Poland. Similar inconsistencies in results are traced in Tugcu (2014) where the direction of causality depends on the country group and the selected tourism indicator. The quoted research is based on data for European, Asian, and African countries that border the Mediterranean Sea and covers the period 1998-2011 with annual frequency. Tugcu (2014) reports that European countries are better able to generate growth from the tourism sector in the Mediterranean region. A more unified nexus is reached in Aslan (2014) who, based on the panel Granger causality test, discovers a unidirectional causal link between economic growth and tourism development in the group of Mediterranean countries, consequently backing up the growth-led tourism hypothesis. Furthermore, for the sample of 12 Mediterranean countries from 1995 to 2012, Bilen et al. (2017) identified bidirectional permanent causality between tourism development and economic growth. Belke et al. (2021) add to previous research and, again on the sample of 14 Mediterranean countries, apply hidden panel co-integration and asymmetric panel causality tests. Their results indicate a significant long-term relationship between the development of the tourism sector and overall economic activity. However, economic growth is more sensitive to the increase in tourism revenues than to the decrease in tourism earnings. The outcome of the causality test clearly supports the tourism-led growth hypothesis for the observed countries.

The authors of non-strictly causality papers implement diverse estimation techniques and upgrade the evidence on the tourism activity-output growth link for Mediterranean countries substantially. Tecel et al. (2020), for example, found support for tourism-led growth thesis based on bootstrap panel co-integration test and panel pooled mean group autoregressive distributed model (PMG-ARDL). More precisely, they identified the long-run equilibrium relationship among relevant variables and estimated a positive and significant link between tourism and economic growth, both in the short and the long run. For the period 1998-2018, Bacovic et al. (2020) estimate using the VAR model, VEC model, and fixedeffects panel OLS model that the export of travel services has a positive impact on GDP growth in the short-run while in the long-run, positive effect is detected only at the 10% significance level. Results for the panel of 12 European Mediterranean countries support the tourism-led growth hypothesis. Perovic et al. (2021) employ the panel VAR approach for the period 1995-2016 to investigate the long-run relationship and the direction of causality among trade openness, foreign direct investment, output growth, international tourism receipts, and the number of tourist arrivals. Among others, they found that shocks in tourism receipts per capita have a positive contemporaneous impact on GDP per capita growth in a sample of 19 Mediterranean countries.

Because in the last few decades, the tourism sector in various countries across the world gained significant economic relevance, this inspired experts to test the relevance of the Dutch disease phenomenon for this buoyant, expanding service sector. Examining the period 1995-2007, Ghallia and Fidermuc (2018) find in a sample of 133 countries, among them, 32 economies highly dependent on tourism, that tourism specialization per se has no significant effects on economic growth. At the same time, however, economies highly dependent on trade and tourism tend to report significantly lower output growth. This result might imply that tourism can have an analogous effect on economic performance as predicted by Dutch disease. On the sample of Mediterranean countries, Tuncay and Özcan (2020) do not find evidence of the Dutch disease in the overall sample based on panel data analysis. On country-based results, however, the Dutch disease is identified in some countries, notably Albania, Bosnia, Croatia, Egypt, Greece, Italy, Morocco, and Turkey.

Some studies investigate the relationship between tourism development and economic activity in a specific country. Massidda and Mattana (2012), for example, based on the structural VEC model for Italy pinpoint bidirectional causality between tourism arrivals and GDP. In addition, a long-run connection among the observed variables based on the co-integration test is also detected. With data covering the period 2000Q1-2013Q3 and with the OLS technique Kasimati (2016) estimates the value of tourism expenditures multiplier for Greece to be 1.21. Maden et al. (2019) provide results for Turkey based on the ARDL error correction model and annual dataset for 1980-2016. They document a positive and significant relationship between tourism income and GDP per capita both in the short and long run. Recently, Mariolis et al. (2021) gauged and forecast the effect of Covid-19 related measures on the tourism sector and then on the aggregate Greek economy. They find that decrease in international travel receipts in the range of 3.5 to 10.5 billion EUR would lead to a decrease in GDP of about 2% to 6% accompanied by a fall in the level of employment and deterioration of trade balance deficit.

The second part of our empirical research focuses on elucidating the variability of the size of the tourism spending multiplier whereby we can only partially build on existing empirical literature. Lejárraga and Walkenhorst (2010) addressed the issue of the changeability of the size of tourism spending multipliers based on a sample of more than 150 countries via the estimation of correlation between linkage and leakage tourism multipliers and other economic indicators, namely GDP per capita, tariffs, and days required to start a business. The quoted authors found a negative relationship between tariffs and tourism (linkages and leakages) multipliers while lower linkage and higher leakage tourism multipliers are associated with the increasing number of days to start a business. A positive correlation is detected between GDP per capita and both types of tourism multipliers. However, the results indicate statistical significance only for linkage multipliers. In addition, Pascariu and Ibănescu (2018) evaluate the effect of selected determinants on the size of tourism multipliers in the sample of EU countries based on stepwise regression analysis. Their findings predict that the size of tourism multipliers is in positive relation to the state of the business environment while in the cases of international openness, ground and port infrastructure, and Gini coefficient negative connection is detected. The study also implies core-periphery dynamics in the distribution of the size of tourism spending multipliers across EU countries. It is important to emphasize that both previously mentioned studies do not estimate the tourism spending multipliers. They merely calculate them based on data on the direct and total contribution of the tourism sector to GDP provided by WTTC (2021).

3. METHODOLOGICAL FRAMEWORK

To estimate the tourism spending multipliers, we used the methodological framework of Blanchard and Perotti (1999), which was also used in Perotti (2002) in its expanded version and was primarily developed for modeling fiscal policy actions. After minor modifications, the same model of vector autoregression was used to estimate tourism spending multipliers, first, separately on times series data and, second, on panel data sample.

Therefore, the methodological framework was adapted to our data sample, and a system with three variables was designed. To identify the system, models use a set of restrictions introduced by economic theory where several restrictions vary according to a specific observed economic phenomenon. Through shocks in structural form, results can be then interpreted through the impulse response function in the context of economic theory.

Assume that three variables are included in our basic model, namely, the logarithm of real internal tourism and travel consumption ($ittc_t$), the logarithm of the real GDP (y_t), and the logarithm of the price level (p_t). The vector of endogenous variables can be written as X_t and the vector of residuals in reduced form as U_t . Consequently, the reduced VAR format is given as:

$$X_t = A(L)X_{t-1} + U_t, \quad (1)$$

where $X_t = [ittc_t, y_t, p_t]'$ and $U_t = [u_t^{ittc}, u_t^y, u_t^p]'$, L is the lag operator, and $A(L)$ is the polynomial of the corresponding degree. The reduced form of residuals of the variable $ittc_t$, i.e. u_t^{ittc} , can be interpreted as a shock.

Based on the so-called AB model (Lütkepohl, 2005), we wrote a system of equations in the matrix form represented by the following equation:

$$AU_t = BE_t, \quad (2)$$

where U_t is the vector of the VAR residuals and $E_t = [e_t^{ittc}, e_t^y, e_t^p]'$ is a vector of structural shocks or innovations. We can define matrices A and B . The equation (2) is written in the form:

$$\begin{bmatrix} 1 & 0 & 0 \\ -\alpha_{ittc}^y & 1 & 0 \\ -\alpha_{ittc}^p & -\alpha_y^p & 1 \end{bmatrix} \begin{bmatrix} u_t^{ittc} \\ u_t^y \\ u_t^p \end{bmatrix} = \begin{bmatrix} \beta_{ittc}^{ittc} & 0 & 0 \\ 0 & \beta_y^y & 0 \\ 0 & 0 & \beta_p^p \end{bmatrix} \begin{bmatrix} e_t^{ittc} \\ e_t^y \\ e_t^p \end{bmatrix}. \quad (3)$$

For the system to be identified, $(2k^2 - 1/2 k[k + 1])$ of restrictions are necessary where k is equal to the number of endogenous variables which is 3 in our case.

The ordering of the variables defines the causal relationships between them. Real GDP and price level respond contemporaneously to the changes in tourism spending. However, at the same time, tourism spending does not react to the changes in output and price level within the same period. Furthermore, price level does not affect output within the same period.

SVAR methodology and the structural impulse response function were also used in auxiliary models with disaggregated tourism spending variables. The cause-and-effect relations were retained from the basic model and, thus, we defined the restrictions in the same way. This system is also precisely identified since it contains an appropriate number of restrictions (12 restrictions).

Based on the results from the SVAR model, the structural impulse response function of the SVAR model assessed the dynamics and values of the responses of individual components to shock in tourism spending or the case of auxiliary SVAR model with disaggregated tourism spending variables, the responses of other variables to shock in domestic or foreign tourism spending. The structural impulse response function introduced the shock at a selected variable in the size of one standard deviation of the same variable. The results are accompanied by a 90% confidence interval. The results were standardized in such a way that we converted the size of the shock from one standard deviation to 1% of the GDP. Consequently, the responses of all variables are measured in percentage. Using this adapted methodological framework, we estimated the tourism spending multipliers for each country separately.

Next, for the assessment of a tourism spending multiplier on a panel dataset, we followed the aforementioned methodological framework of Blanchard and Perotti (1999) with referencing to panel VAR model modifications in Ilzetzki et al. (2013) and Koh (2017). In this study panel, the VAR model is adapted for purpose of estimating tourism spending multipliers.

Like in the case of the time series model, the baseline panel VAR model covers three macroeconomic variables: real internal tourism and travel consumption ($ittc_{i,t}$), real GDP ($y_{i,t}$), and price level ($p_{i,t}$). The vector of endogenous variables can be written as $X_{i,t}$ and the vector of residuals as $U_{i,t}$. A reduced form of the panel vector autoregression is defined in Equation (4):

$$X_{i,t} = C(K)X_{i,t-1} + U_{i,t} \quad (4)$$

where $X_{i,t} = [ittc_{i,t}, y_{i,t}, p_{i,t}]'$ and $U_t = [u_{i,t}^{ittc}, u_{i,t}^y, u_{i,t}^p]'$, K is the operator of lag structure and $C(K)$ is the polynomial of corresponding degrees.

To identify shocks in tourism spending, we use Cholesky decomposition where the ordering of the variables is crucial. Results are based on the following system of equations:

$$AX_{i,t} = \sum_{k=1}^K C_k X_{i,t-k} + BE_{i,t} \quad (5)$$

where $X_{i,t}$ is a vector of endogenous variables for a given country i and a year t . C_k is the matrix of the own and cross effects of the k th lag of the variables. Matrix B is diagonal. Therefore, $E_{i,t}$ represents orthogonal shocks to tourism spending (Ilzetzki et al., 2013). Thus, our model consists of variables in the following order: real tourism spending, real GDP, and price level. For estimation purposes, the panel vector autoregression package for Stata provided by Abrigo and Love (2016) was utilized. The generalized method of moments is used as an estimation technique.

Ordering of the variables in the panel VAR model defines the causal relationships between them and it is the same as in the previously described times series VAR model. The GDP responds contemporaneously to the changes in tourism spending but on the other hand, tourism spending does not react to the changes in output within the same period. Price level responds contemporaneously to the changes in tourism spending and output. Within the same period, however, it affects neither of them.

To examine relations between the size of the impact tourism spending multipliers and specific country characteristics, we used panel VAR approach and regression analysis based on ordinary least squares estimation technique which is defined as follows:

$$TM_i = \beta_0 + \beta_1 X_i + e_i \quad (6)$$

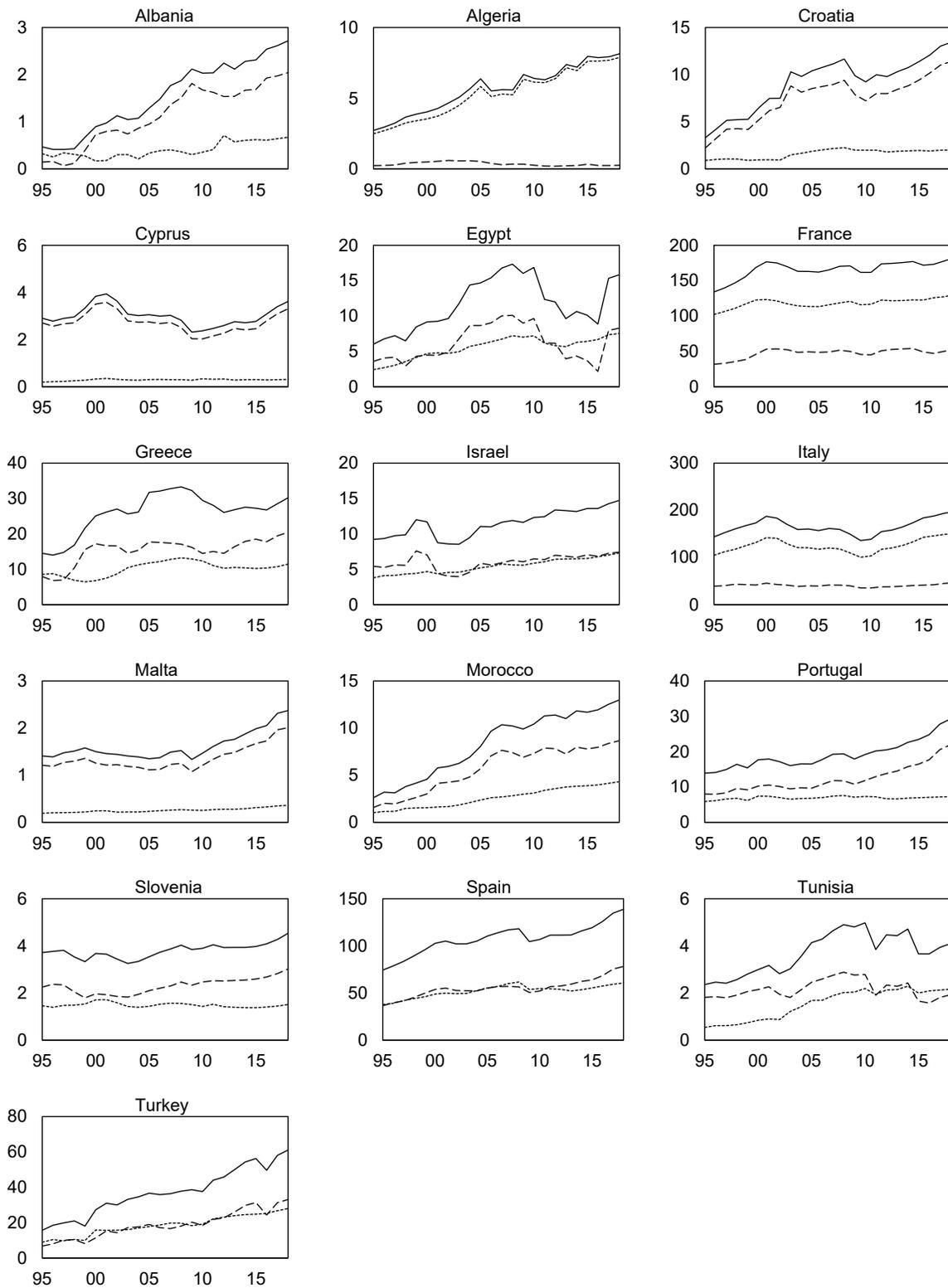
where TM_i is the impact tourism spending multiplier of a country i , β_0 is a constant term, β_1 is slope regression coefficient, and X_i is a country-specific characteristic of a country i . We considered four country-specific factors of estimated tourism spending multipliers: road infrastructure quality index, railroad infrastructure quality index, GDP per capita, and hotel and restaurant price index. Therefore, a separate regression analysis was run for all four country-specific characteristics.

4. PRESENTATION OF APPLIED DATA

The baseline vector autoregression model in our study comprises real tourism spending, real GDP, and price level. All variables have annual frequency and cover the period between 1995 and 2018 for 16 Mediterranean countries (Albania, Algeria, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Malta, Morocco, Portugal, Slovenia, Spain, Tunisia, and Turkey). Data for real GDP and price levels are collected from the World Bank (2021a), specifically from the World Development Indicators database, the former in the form of constant US dollars and the latter in the form of the consumer price index. After transformation, both variables have the base year in 2017. Data for tourism spending, more specifically internal tourism and travel consumption are collected from a separate World Bank (2021b) data stream which plays a role of a secondary data source whereas primary data are provided by the World Travel and Tourism Council (2021). In addition to the baseline model, we compiled two auxiliary models in which we assess the difference between domestic and foreign tourism spending on the dynamics of economic activity and price levels. Consequently, data are collected for two more disaggregated series, namely domestic tourism spending and foreign tourism spending where all three variables are expressed in constant 2017 US dollars. All five variables are stated in logarithmic form. After calculating tourism spending multipliers separately for individual countries, data were organized in a strongly balanced panel data sample. Data for different tourism spending variables are available only from the year 1995 onward in annual frequency whereby for the year 2019 data are still reported as projections and consequently excluded from our research.

Additional variables are collected to examine the role of countries' characteristics. Thus, we employed the road quality index and railroad quality index from TheGlobalEconomy.com database (2021a, 2021b) to establish the level of basic public transport infrastructure of Mediterranean countries. Then, with hotel and restaurant price index data from the same database (TheGlobalEconomy.com, 2021c), the selected countries were classified according to their absolute price level differences where the hotel and restaurant price index was used as a proxy for tourism prices. Next, data on the GDP per capita in constant 2010 USD are employed by the World Bank (2021a) to classify countries into two groups according to their level of development. Basically, all collected classifiers rank countries in different ways according to their level of development in a broader sense. Except for the hotel and restaurant price index which refers to data from the year 2017, we used data from the year 2018 for the other three variables.

The road and railroad infrastructure quality indicators are two of the components of the Global Competitiveness Index published annually by the World Economic Forum. Assessment of aforementioned quality indices in a given country is based on data from the World Economic Forum Executive Opinion Survey, a long-running and extensive survey tapping the opinions of over 14,000 business leaders in 144 countries. The score for both indices, road, and rail infrastructure quality is dispersed between 1 which marks underdeveloped infrastructure, and 7 which marks extensive and efficient infrastructure by international standards. The hotel and restaurant price index shows the relative prices of those services across 167 countries. Greater values of the index indicate higher prices where the value of 100 represents the world average. The primary data source for the hotel and restaurant price index is World Bank International Comparison Program (TheGlobalEconomy.com, 2021a, 2021b, 2021c).



Solid line represents internal tourism and travel consumption, dot line represents domestic tourism spending, dash line represents foreign spending; all variables are in real 2017 billion USD; period: 1995-2018.

Graph 1. The dynamics of tourism spending in Mediterranean countries

Source: World Bank, 2021

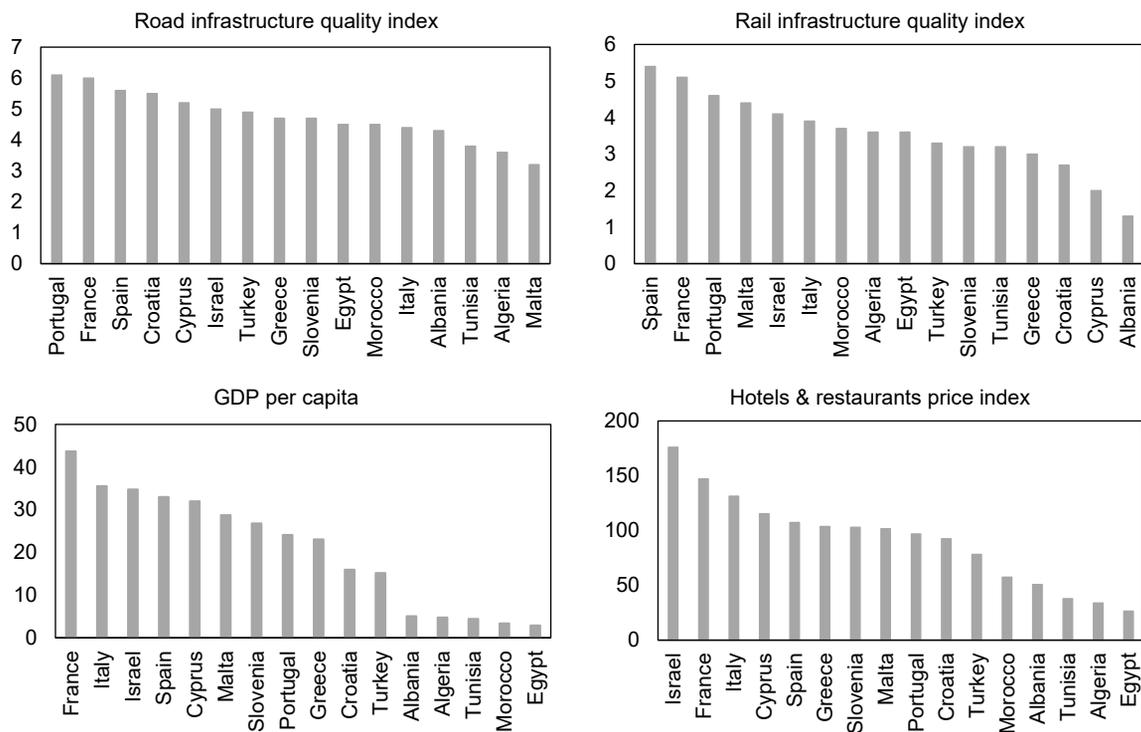
In determining the relative thresholds for individual characteristics, this study determines relative thresholds according to the nature of our sample, which is rather small. To obtain an appropriate number of estimates in both groups, we rank countries based on the median value of a specific threshold variable. If the road quality index exceeds the value of 4.71, that country is classified as one with better road infrastructure. According to the rail infrastructure quality index, countries with values less than 3.61 are considered less equipped with rail infrastructure. To rank countries concerning the level of economic development, we include countries into a group of less and more developed economies. Namely, the median real GDP per capita in the year 2018 is used as the threshold. Similarly, the median value of the hotel and restaurant index, 99.22, is used to classify countries into two groups.

Values of tourism spending multipliers represent the output effect of tourism spending measured in absolute currency terms. The impulse and response variables are expressed in logarithmic form and, consequently, the results can be interpreted as elasticities. To obtain tourism spending multipliers, values of elasticities are divided by an average share of tourism spending to GDP in the sample. The calculations of the short-term multipliers are reported.

According to the data in Graph 1, the tourism sector has gradually become a vital part of the national economies, which is also resembled in its gaining role as an important employer of a domestic workforce. At the same time, however, there are differences in the structure of tourism sectors across countries. Specifically, the share of foreign tourism spending in total tourism spending is different across our sample and it is especially high in Albania, Croatia, Cyprus, Greece, Malta, Morocco, and Portugal. In these countries, the economy is even more dependent upon the tourism sector and, thus, much more vulnerable to any external shocks that act as a global inhibitor to travel and tourism. The outbreak of a new coronavirus is an extreme case of this type of shock.

Since the 1990s, a rapid acceleration of globalization occurred and the tourism sector has gradually begun to gain its proportional size in comparison with more traditional economic sectors. Simultaneously, it helped to compensate for classic industry job losses in the process of deindustrialization in developed countries. On the other hand, even in less developed economies, the tourism sector helps to contribute to a slightly higher standard of living through a non-negligible inflow of foreign exchange into the country. In the last decades, however, the rapid growth of the tourism sector on a global scale made this industry very lucrative and, therefore, prone to intensive capital spending by private and public funds. Companies from the tourism sector recognized that investment spending is crucial to attracting new customers in a fierce and extremely competitive race on a global stage.

Graph 2 indicates that our sample countries differ in their transport infrastructure quality and the level of development measured with GDP per capita and absolute price level. Spain, Portugal, and France are positioned as countries with relatively high-quality public transport infrastructure while countries on the other end of the scale differ between our two measures of quality of transport infrastructure. We argue that public infrastructure might be an important driver of the size of the tourism spending multiplier. Regarding the level of development and absolute price level measured via hotel and restaurant prices, the highest scores are observed for France, Italy, and Israel. Both measures indicate overall country economic performance which very likely at least indirectly includes some information about the state of public and private infrastructure in the specific country.



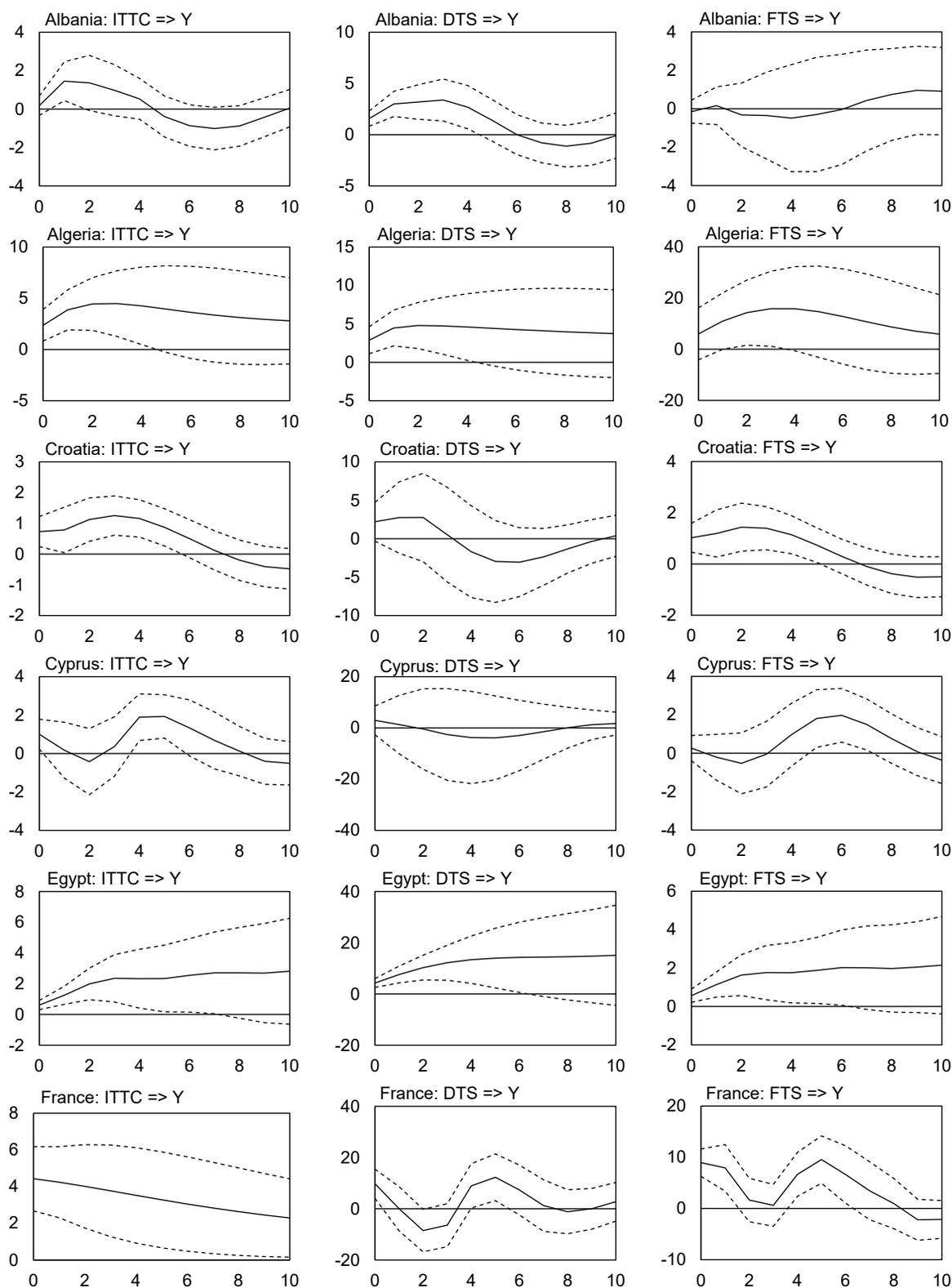
Graph 2. Mediterranean countries ranked by selected indicators

Source: World Bank, 2021

5. OVERVIEW OF EMPIRICAL RESULTS

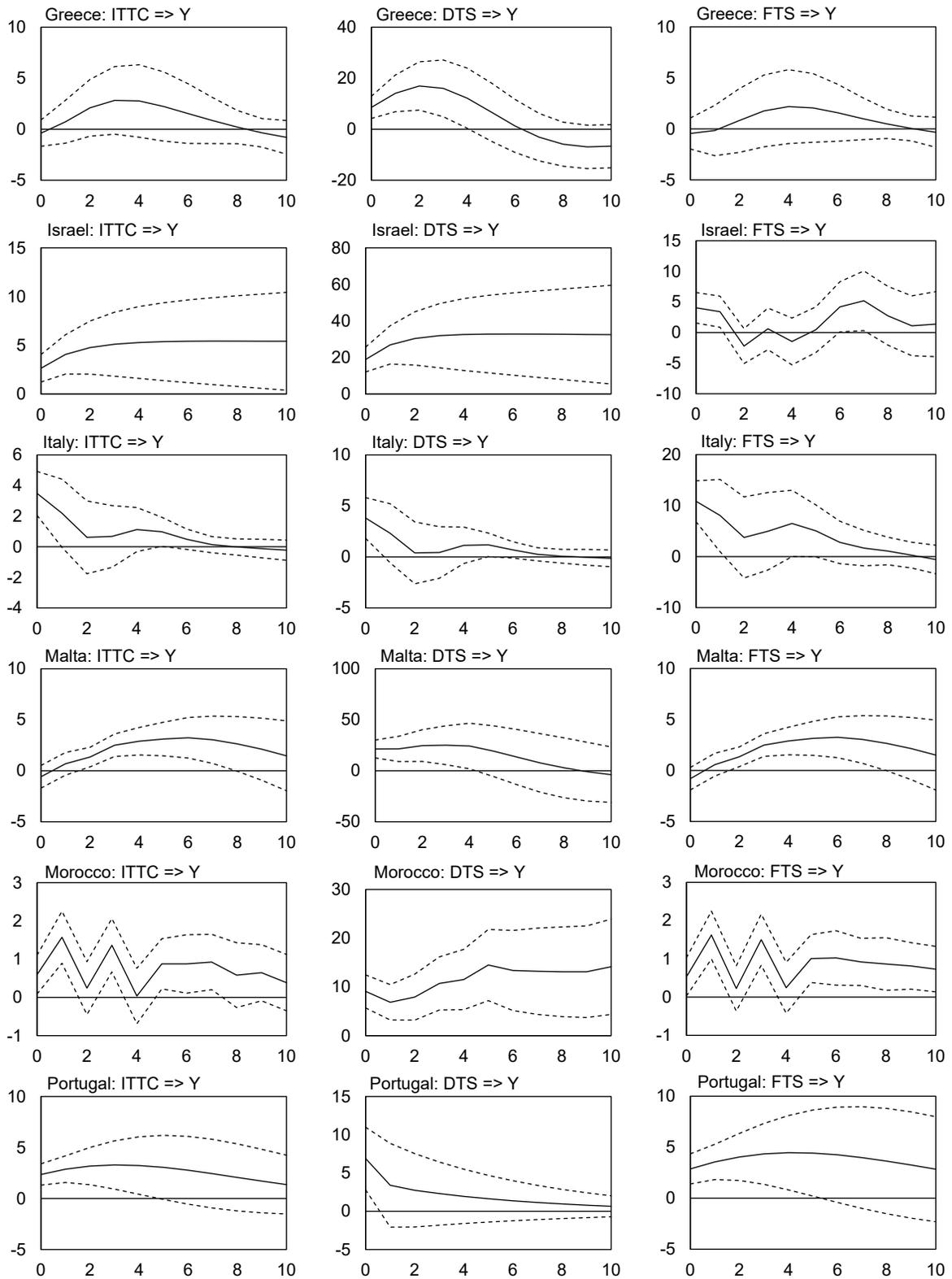
The results of this study are presented in two parts. In the first part, we estimate tourism spending multipliers individually for each country where the shock is introduced either in the tourism spending variable (ITTC) or in both disaggregated tourism spending variables, namely domestic tourism spending (DTS) and foreign tourism spending (FTS) (Graph 3). In addition to this, price level response to a tourism spending shock is also estimated individually for each country (Graph 4). The solid line represents the output response to a positive shock in a specific tourism spending variable in the magnitude of 1% of GDP. Dash lines represent a 90% confidence bound. The results are presented over 10 years forecast horizon. In the second part of the research, we analyze the variation of the size of the tourism spending multiplier with respect to four country-specific characteristics, first, by regression analysis (Table 1) and second, by panel VAR approach where we estimate the average tourism spending multipliers according to specific subsamples (Graph 6). In Graph 6, the solid line represents a statistically significant output response and the dashed line represents the statistically insignificant response of GDP. The magnitude of the shock in the tourism spending variable is still 1% of GDP.

The results in Graph 3 show a statistically significant response of output to the shock in tourism spending, at least over the part of the forecast horizon, for all countries except for Greece and Slovenia. Although the magnitude of the output response, or in other words, the size of the tourism spending multiplier, varies between countries, they all have in common that the multiplier is positive almost over the entire forecast horizon. At least within a certain forecast horizon, the tourism spending multiplier is greater than one in 14 out of 16 countries. In 9 economies the value of the corresponding multiplier even exceeds two. The presented estimations indicate that the tourism sector is not only a vital part of Mediterranean economies but also acts as a generator of economic growth because tourism spending has a statistically significant multiplicative effect on output.



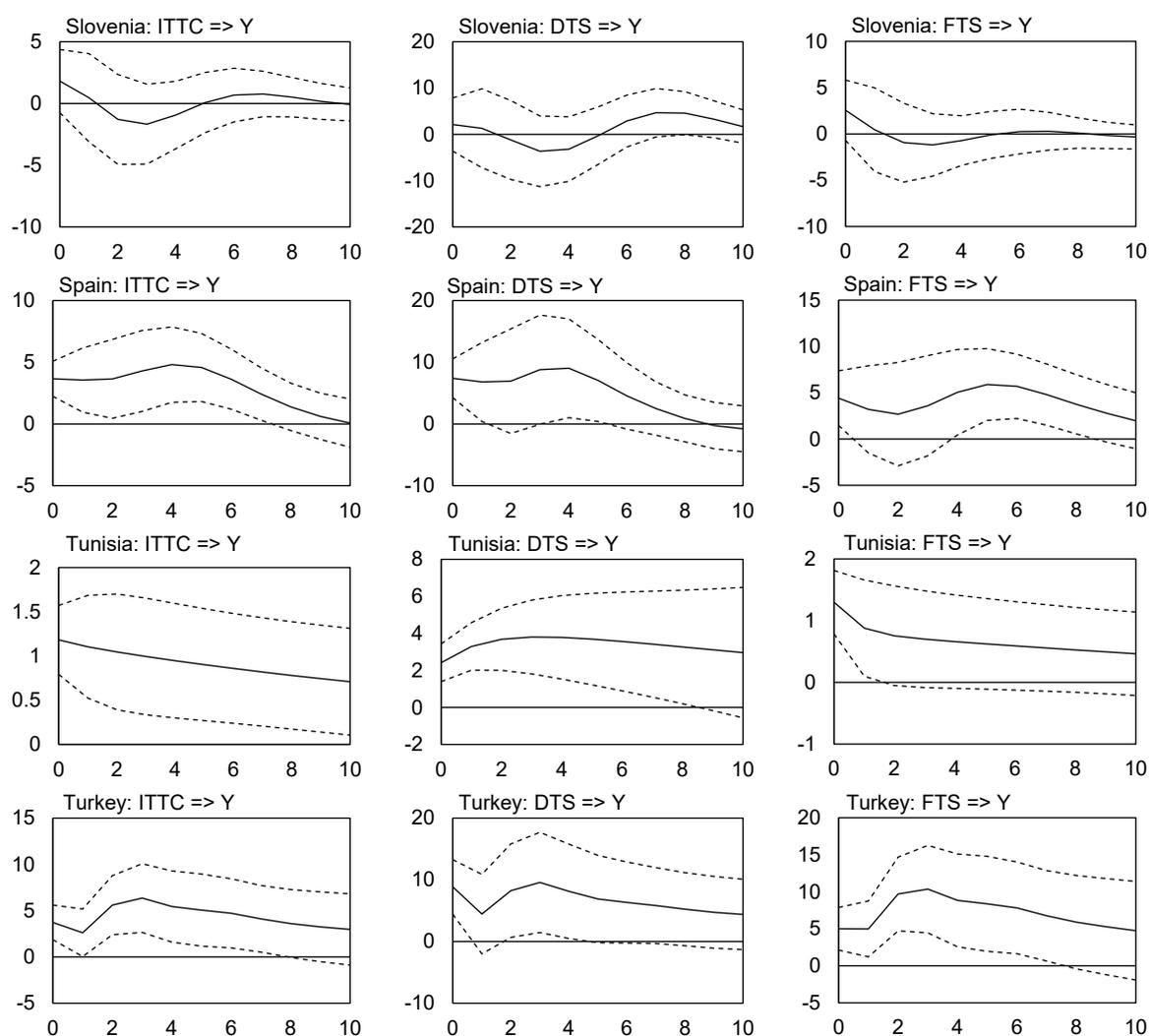
Graph 3. Estimates of tourism spending multipliers (part 1)

Source: Authors calculation



Continuation of **Graph 3** (part 2)

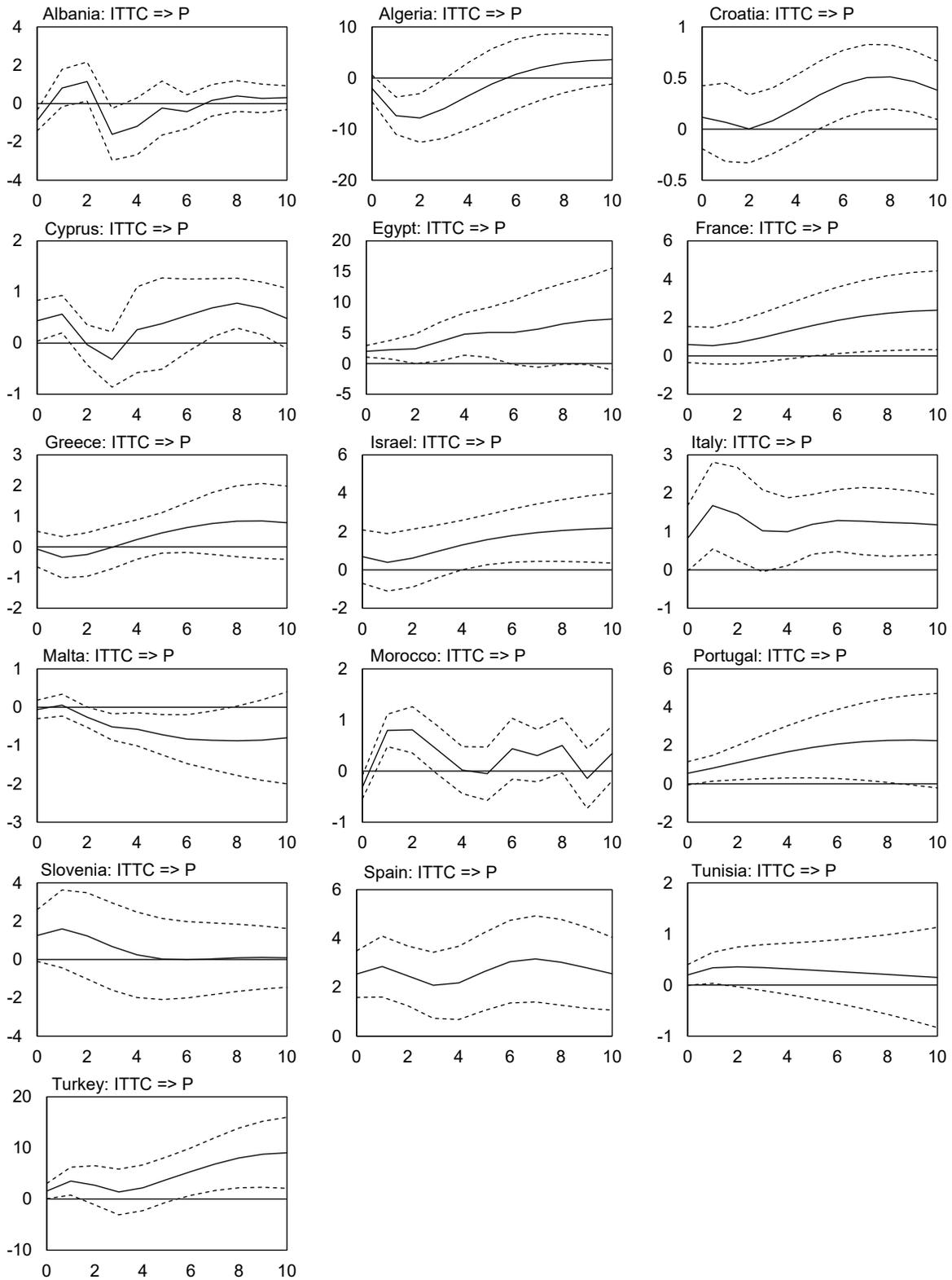
Source: Authors calculation

Continuation of **Graph 3** (part 3)

Source: Authors calculation

Furthermore, Graph 3 shows country-specific output responses to a positive shock in disaggregated tourism spending variables, namely domestic tourism spending and foreign tourism spending. Aware of the fact that, in general, disaggregated variables are in absolute terms smaller than total tourism spending, we must assume that the results are consequently less robust because even small changes in the dynamics of individual disaggregated variables of tourism spending can be due to standardization process which distorts the magnitude of the output response. Based on disaggregated tourism spending variables, our SVAR model estimations show that for the remaining Mediterranean countries, with the exclusion of Croatia, Cyprus, and Slovenia, there is a significant positive reaction of real GDP to the shock in domestic tourism spending at least over a section of the forecast horizon. Furthermore, we were able to discover significant output effects derived from the mechanism of the foreign tourism multiplier in 13 countries from the sample of 16 countries.

Price level response to a positive shock in tourism spending is statistically different from zero in 75% of the observed cases, at least in some parts of the forecast horizon (Graph 4). The results suggest that higher tourism spending may stimulate the growth of the price level. However, this adjustment of an overall price level is relatively heterogeneous across countries. The magnitude of price level impact on tourism spending is particularly pronounced in Spain, Turkey, Egypt, and Portugal. We can conclude that additional tourism spending triggers to a certain extent inflationary pressures while on the other hand, a positive shock in tourism spending boosts economic activity at least over the short term.



Graph 4. Price level response to a positive shock in tourism spending

Source: Authors calculation

Next, we scrutinize four country-specific characteristics which may affect the size of the tourism spending multiplier. Based on the results of regression analysis (Table 1), considering impact multipliers as a dependent variable and the specific determinants as independent variables, we find that both selected proxy variables for the state of public infrastructure are

statistically significant and affect the size of the impact tourism spending multiplier positively. The same can be seen in Graph 5 where the scatter plots clearly show a positive correlation between the size of impact tourism spending multipliers and the road and railroad infrastructure quality indices. When we apply the panel VAR approach to the sample of the same Mediterranean countries and define two subsamples according to the median values of road and railroad infrastructure quality indices, the results (Graph 6) guide us to the same conclusion. The average tourism spending multiplier is statistically different from zero in both cases. However, it is higher in countries with better road and rail transport infrastructure.

Table 1. Determinants of the size of tourism spending multiplier - regression analysis

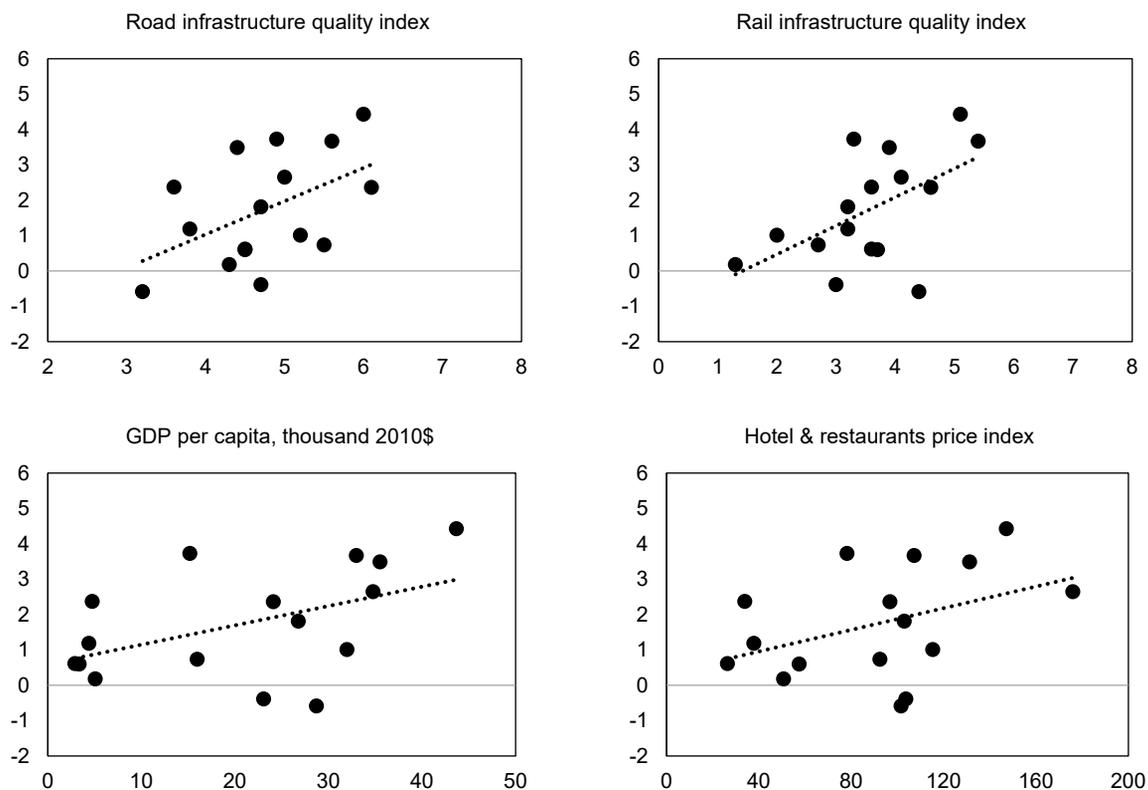
$TM_i = \beta_{0,i} + \beta_{1,i}X_i + e_i$					
X_i	β_0	β_1	t-stat (p-value)	R^2	
Road infrastructure quality index	-2.729	0.941	2.127 (0.052)	0.244	
Rail infrastructure quality index	-1.148	0.809	3.018 (0.027)	0.304	
GDP per capita, constant 2010 U	0.600	0.056×10^{-3}	2.033 (0.061)	0.228	
Hotels & restaurants price index	0.342	0.015	3.018 (0.111)	0.171	

Notes: TM_i represents impact tourism spending multiplier of a country i , X_i represents determinant of the size of tourism spending multiplier in country i .

Source: Authors calculation

According to scatter plots in Graph 5, there is also detected slim positive correlation in the cases of GDP per capita and price levels of hotels and restaurants, which is supported by the positive sign of both slope coefficients in Table 1. In the case of GDP per capita, the slope coefficient is statistically significant but its magnitude implies only a weak positive connection. On the other hand, the estimated slope coefficient by hotel and restaurant prices barely missed the 90% confidence interval. Nevertheless, the results from the panel VAR model in Graph 6 support the notion that differences in both, the level of economic development and absolute price levels in the tourism sector, dictate the differences in the size of the tourism spending multiplier to some extent.

To sum up, the performed calculations indicate positive and statistically significant tourism spending multipliers whose size is positively correlated with the state of public transport infrastructure, level of economic development measured via the GDP per capita, and the price levels of hotels and restaurants. We can infer not only that rise of tourism visitors' spending has multiplicative potential but also that capital spending on public and private infrastructure is crucial to achieving such growth potential. According to findings in Gherghina et al. (2018) and Lenz et al. (2018), investments in various types of transport infrastructure propel economic growth in EU countries significantly and produce a longstanding positive output effect although evidence about the positive growth impact of railway infrastructure lacks in Central and Eastern EU members probably due to insufficient public investments in these transport capacities and, consequently, outdated rail infrastructure (Lenz et al., 2018). Besides transport infrastructure and the quality of logistics services, Gavurova et al. (2021) found the development of ICT (information and communication technologies) infrastructure as an additional driver of tourism spending in the sample of 36 countries of the Organization for Economic Co-operation and Development (OECD). Improvement of general transport infrastructure combined with private and public investments in ICT infrastructure assure the necessary expansion of the economy's production capacities, increase the scale of supply, and, in turn, allow greater flexibility and more space for innovation and marketing activities of tourism enterprises.



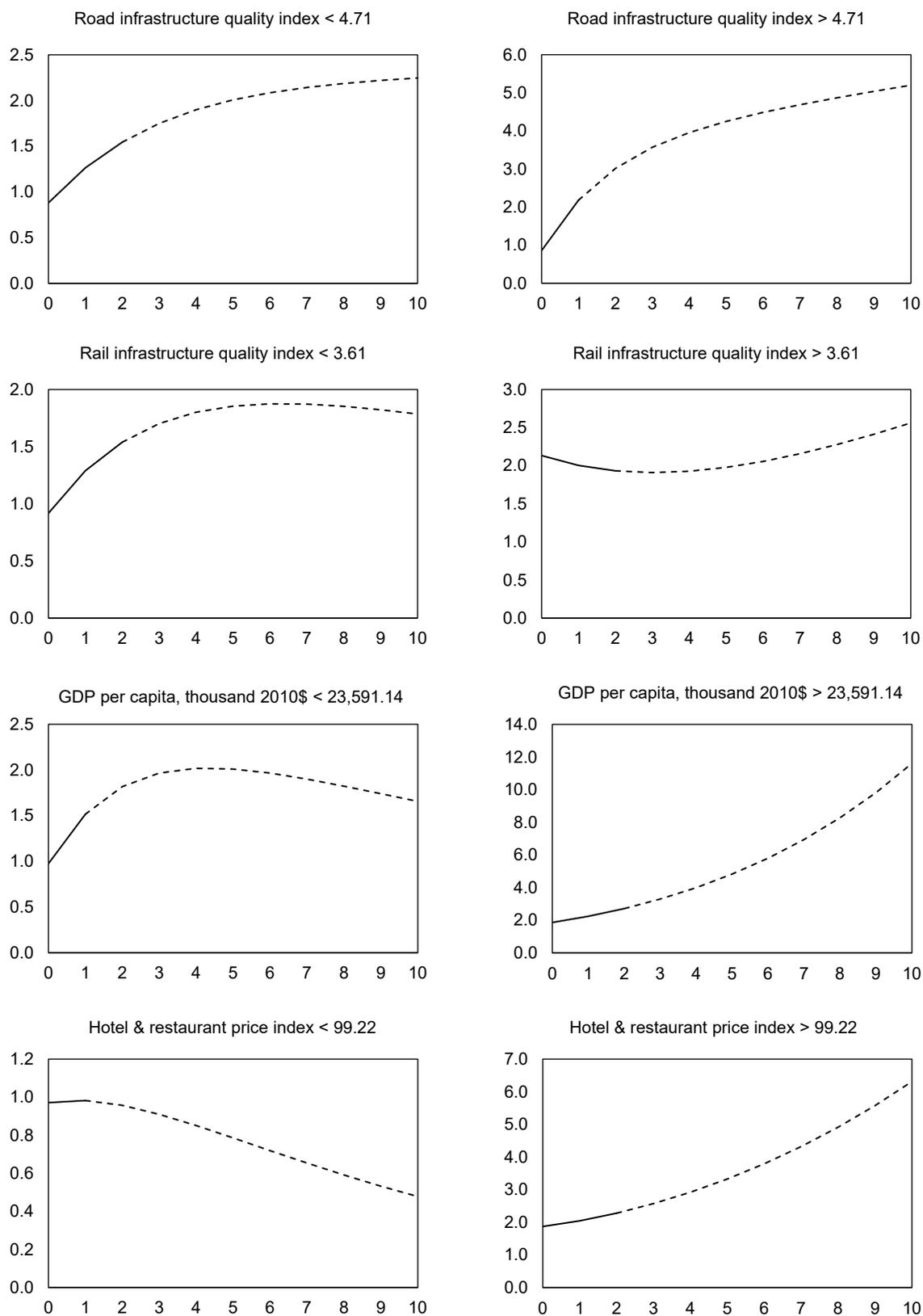
Notes: y-axis measures values of tourism spending multiplier, x-axis measures values of specific determinants.

Graph 5. Determinants of the size of tourism spending multiplier - scatter plot

Source: Authors calculation

Following the empirical outcomes in this section, more developed Mediterranean countries reveal higher values of tourism expenditure multiplier. The significance of GDP per capita to magnify the effect of tourism expenditure increases output points to the circular income mechanism. Accordingly, more developed economies tend to spend larger amounts on services (among others on tourism services). However, they are also able to attract larger demand from other countries because they have capacities to provide a broader range of services and the products consumed intensively in the travel and hospitality industry. At the sectoral level, therefore, tourists with growing real income will spend more and look for new destinations to experience services with higher quality, which will extend the chain of increasing expenditures and generate additional income.

The dynamics of the price level of hotels and restaurants is an additional factor that influences the size of the tourism multiplier effect in our study. The underlying determinants of price level increases of tourism services are faster productivity growth in this sector, rising relative sectoral wages, and mark-ups, as well as an overall improvement in the quality of provided services in the travel and hospitality industry. Bekó and Boršič (2020) offer conclusive evidence in favor of purchasing power parity when the real exchange rates are based on consumer price indices for hotels and restaurants in 15 Mediterranean countries. Because the reported validity of purchasing power parity is indirect evidence of effective price competition among tourism sectors, the strengthening tradability of tourism services through further convergence of respective price levels can provoke multiplier effects on aggregate output in the observed countries.



Graph 6. Determinants of the size of tourism spending multiplier - panel VAR model

Source: Authors calculation

6. FUTURE RESEARCH DIRECTIONS

Future research should focus on a broader range of countries with possible quarterly data frequency availability and deeper disaggregation of tourism spending variables. Further empirical evidence could be obtained by estimating long-run relationships between tourism spending and economic activity in these economies. Moreover, additional determinants of the size of the tourism spending multiplier should be included in the testing procedure to clarify which of these possible new structural or sectoral indicators can help to further explain the variation in the magnitude of corresponding expenditure multipliers. Gradually more complete and unified view of the multiplicative role of tourism spending might arise.

7. CONCLUSION

This research provides a detailed range of estimations about the significance of output impact coming from tourism spending in Mediterranean countries. The study contributes to existing empirical literature in the following ways. First, it gauges the size of tourism spending multipliers based on the SVAR approach, both on the aggregate and the disaggregate expenditure levels. Second, it assesses the role of country-specific characteristics that determine the magnitude of the tourism spending multiplier based on the regression analysis and the panel VAR model. And third, the most recently available annual dataset of the selected Mediterranean countries is tested in our econometric investigation.

Four crucial empirical findings can be emphasized in the current study. First, following the aggregate estimates from the SVAR model, a statistically significant response of output to the shock in tourism spending was confirmed in 88% of the analyzed cases at least over the part of the forecast horizon. On the detected forecast horizon, the tourism spending multiplier is greater than one in 14 countries. In 56% of the analyzed cases, the value of the respective multiplier is above two. Second, from disaggregated tourism visitors' spending, we were able to prove the existence of the multiplier mechanism in 13 economies from the sample of 16 Mediterranean countries for domestic and foreign tourism spending within a particular forecast horizon. Third, the price level response to a positive shock in aggregate tourism spending is statistically different from zero at least in some parts of the forecast horizon in three-quarters of the cases examined. Fourth, our results imply that tourism spending generates stronger GDP growth in countries that record a higher standard of living, have a better state of road and railroad transport infrastructure, and, to some extent, display higher consumer price levels of hotels and restaurants.

The empirical outcomes described in this analysis are in line with the view sustained by advocates of the tourism-led growth development concept. However, the tourism-driven growth narrative for the scrutinized Mediterranean countries requires an amendment. Our identification of key determinants influencing the size of tourism spending multipliers namely suggests that the expenditure effect of the tourism industry upon output growth can be considerably higher when accompanied by increases in the remaining components of aggregate demand, notably governmental investment expenditures, which further contribute to real GDP directly or indirectly (via fueling consumption in tourism sector). Recently, Deleidi et al. (2020), Petrović et al. (2021), and Konstantinou and Partheniou (2021) demonstrated conclusively that public investments stimulate private consumption, boost labor demand and private investments, and ultimately invigorate aggregate economic activity in EU members, OECD, and non-OECD countries. Furthermore, enlarging public investments in transport infrastructure is vital for the working of the economy and the competitiveness of the tourism industry in particular

(Gherghina et al. 2018; Lenz et al., 2018). To spur the growth impact of the domestic tourism sector in Mediterranean countries, policymakers should expand public investment expenditures especially when the economies are functioning well below their full capacity (Konstantinou and Partheniou, 2021) paying appropriate attention to the efficiency of public investment management.

REFERENCES

- Abrigo, M. R. M., & Love, I. (2016). *Estimation of panel vector autoregression in Stata: a package of programs*. University of Hawaii Working Paper No. 16/2, University of Hawaii, Hawaii.
- Alaminos, D., León-Gómez, A., & Sánchez-Serrano, J. R. (2020). A DSGE-VAR analysis for tourism development and sustainable economic growth. *Sustainability*, 12(9), 3635. <https://doi.org/10.3390/su12093635>
- Aslan, A. (2014). Tourism development and economic growth in the Mediterranean countries: evidence from panel Granger causality tests. *Current Issues in Tourism*, 17(4), 363-372. <http://doi.org/10.1080/13683500.2013.768607>
- Bacovic, M., Jacimovic, D., & Cerovic Smolovic, J. (2020). Impact of export of travel services on current account balance and growth in Mediterranean countries. *Prague Economic Papers*, 29(6), 710-728. <https://doi.org/10.18267/j.pep.748>
- Bekő, J., & Boršič, D. (2020). Are the Mediterranean countries with tourism price indices in the purchasing power parity zone? In V. Bevanda & S. Štetić (Ed.), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era*, (pp. 107-130). Association of Economists and Managers of the Balkans. <https://doi.org/10.31410/tmt.2020.107>
- Belke, M., Bolat, S., & Hatemi, A. (2021). The impact of tourism on the economic growth in the Mediterranean countries: evidences from hidden panel cointegration test. *Journal of Economics and Administrative Sciences Faculty*, 8(1), 399-419. <https://doi.org/10.30798/makuiibf.822194>
- Bilen, M., Yilanci, V., & Eryüzlü, H. (2017). Tourism development and economic growth: a panel Granger causality analysis in the frequency domain. *Current Issues in Tourism*, 20(1), 27-32. <http://doi.org/10.1080/13683500.2015.1073231>
- Blanchard, O., & Perotti, R. (1999). *An empirical characterization of the dynamic effects of changes in government spending and taxes on output*. NBER Working Paper No. 7269, National Bureau of Economic Research, Cambridge.
- Chou, M. C. (2013). Does tourism development promote economic growth in transition countries? A panel data analysis. *Economic Modelling*, 33, 226-232. <http://dx.doi.org/10.1016/j.econmod.2013.04.024>
- Deleidi, M., Iafrate, F., & Levrero, E. S. (2020). Public investment fiscal multipliers: An empirical assessment for European countries. *Structural Change and Economic Dynamics*, 52, 354-365. <http://doi.org/10.1016/j.strueco.2019.12.004>
- Dritsakis, N. (2012). Tourism development and economic growth in seven Mediterranean countries: A panel data approach. *Tourism Economics*, 18(4), 801-816. <http://doi.org/10.5367/te.2012.0140>
- Gavurova, B., Belas, J., Valaskova, K., Rigelsky, M., & Ivankova, V. (2021). Relations between infrastructure innovations and tourism spending in developed countries: a macroeconomic perspective. *Technological and Economic Development of Economy*, 27(5), 1072-1094. <http://doi.org/10.3846/tede.2021.15361>
- Ghalia, T., & Fidrmuc, J. (2018). The curse of tourism? *Journal of Hospitality & Tourism Research*, 42(6), 979-996. <http://doi.org/10.1177/1096348015619414>

- Gherghina, S. C., Onofrei, M., Vintila, G., & Armeanu, D. S. (2018). Empirical evidence from the EU-28 countries on resilient transport infrastructure systems and sustainable economic growth. *Sustainability*, 10(8), 1-34. <http://doi.org/10.3390/su10082900>
- Ilzetzki, E., Mendoza, E. G., & Végh, C. A. (2013). How big (small?) are fiscal multipliers? *Journal of Monetary Economics*, 60(2), 239-254. <http://doi.org/10.1016/j.jmoneco.2012.10.011>
- Kasimati, E. (2016). Does tourism contribute significantly to the Greek economy? A multiplier analysis. *European Journal of Tourism, Hospitality and Recreation*, 7(1), 55-62. <http://doi.org/10.1515/ejthr-2016-0006>
- Koh, W. C. (2017). Fiscal multipliers: New evidence from a large panel of countries. *Oxford Economic Papers*, 69(3), 569-590. <http://doi.org/10.1093/oenp/gpw066>
- Konstantinou, P. T., & Partheniou, A. (2021). The effects of government spending over the business cycle: A disaggregated analysis for OECD and non-OECD countries. *The Quarterly Review of Economics and Finance*, 80, 809-822. <http://doi.org/10.1016/j.qref.2019.09.017>
- Lejárraga, I., & Walkenhorst, P. (2010). On linkages and leakages: measuring the secondary effects of tourism. *Applied Economics Letters*, 17(5), 417-421. <http://doi.org/10.1080/13504850701765127>
- Lenz, N. V., Skender, H. P., & Mirković, P. A. (2018). The macroeconomic effects of transport infrastructure on economic growth: the case of Central and Eastern EU member states. *Economic Research - Ekonomska Istraživanja*, 13(1), 1953-1964. <http://doi.org/10.1080/1331677X.2018.1523740>
- Lütkepohl, H. (2005). *New Introduction to Multiple Time Series Analysis*. New York, USA: Springer.
- Maden, S., Bulgan, G., & Yildirim, S. (2019). The effect of tourism sector on economic growth: an empirical study on Turkey. *Journal of Yasar University*, 14(55), 215-225.
- Mariolis, T., Rodousakis, N., & Soklis, G. (2021). The COVID-19 multiplier effects of tourism on the Greek economy. *Tourism Economics*. <http://doi.org/10.1177/1354816620946547>
- Massidda, C., & Mattana, P. (2012). A SVECM analysis of the relationship between international tourism arrivals, GDP and trade in Italy. *Journal of Travel Research*, 52(1), 93-105. <http://doi.org/10.1177/0047287512457262>
- Pascariu, G. C., & Ibănescu, B. C. (2018). Determinants and implications of the tourism multiplier effect in EU economies. Towards a core-periphery pattern? *Amfiteatru Economic*, 20(12), 982-997. <http://doi.org/10.24818/EA/2018/S12/982>
- Pérez-Montiel, J., Dejuán Asenjo, O., & Manera Erbina, C. (2021). A Harrodian model that fits the tourism-led growth hypothesis for tourism-based economies. *European Journal of Tourism Research*, 27(2706), 1-17.
- Perotti, R. (2002). *Estimating the effects of fiscal policy in OECD countries*. ECB Working Paper No. 168, European Central Bank, Frankfurt.
- Perovic, J., Raicevic, M., & Delibasic, M. (2021). Foreign direct investment, tourism, economic growth and trade: panel vector auto regression (VAR) model. *Transformations in Business & Economics*, 20(1), 140-153.
- Petrović, P., Arsić, M., & Nojković, A. (2021). Increasing public investment can be an effective policy in bad times: Evidence from emerging EU economies. *Economic Modelling*, 94, 580-597. <http://doi.org/10.1016/j.econmod.2020.02.004>
- Pratt, S. (2015). The economic impact of tourism in SIDS. *Annals of Tourism Research*, 52, 148-160. <http://doi.org/10.1016/j.annals.2015.03.005>
- Shahzad, S. J. H., Shahbaz, M., Ferrer, R., & Kumar, R. R. (2017). Tourism-led growth hypothesis in the top ten tourist destinations: New evidence using the quantile-on-quantile approach. *Tourism Management*, 62, 223-232. <http://doi.org/10.1016/j.tourman.2016.12.006>

- Tecel, A., Katircioğlu, S., Taheri, E., & Bekun, F. V. (2020). Causal interactions among tourism, foreign direct investment, domestic credits, and economic growth: evidence from selected Mediterranean countries. *Portuguese Economic Journal*, 19, 195-212. <https://doi.org/10.1007/s10258-020-00181-5>
- TheGlobalEconomy.com (2021a). *Roads quality - country rankings*. Retrieved from https://www.theglobaleconomy.com/rankings/roads_quality/
- TheGlobalEconomy.com (2021b). *Railroad infrastructure quality - country rankings*. Retrieved from https://www.theglobaleconomy.com/rankings/railroad_quality/
- TheGlobalEconomy.com (2021c). *Hotel and restaurant prices - country rankings*. Retrieved from https://www.theglobaleconomy.com/rankings/hotel_and_restaurant_prices_wb/
- Thirlwall, A. P. (2002). *The Nature of Economic Growth*. Cheltenham: Edward Elgar Publishing.
- Tugcu, C. T. (2014). Tourism and economic growth nexus revisited: a panel causality analysis for the case of the Mediterranean region. *Tourism Management*, 42, 207-212. <http://dx.doi.org/10.1016/j.tourman.2013.12.007>
- Tuncay, N., & Özcan, C. C. (2020). The effect of Dutch disease in the tourism sector: the case of Mediterranean countries. *Tourism and Hospitality Management*, 26(1), 97-114. <https://doi.org/10.20867/thm.26.1.6>
- Valdés, B. D. (1999). *Economic Growth, Theory, Empirics and Policy*. Cheltenham: Edward Elgar Publishing.
- World Bank (2021a). *World Development Indicators*. Retrieved from <https://databank.worldbank.org/source/world-development-indicators>
- World Bank (2021b). *TCdata360*. Retrieved from <https://tcdata360.worldbank.org/>
- WTTC. (2021). *World travel and tourism council*. Retrieved from <https://wttc.org/>



Comparative Market Price Analysis of Dental Services in the Framework of Health Tourism by Applying the Due Diligence Model

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Abstract: *During current attempts of human survival for which, highly symptomatic propulsive professional, scientific and technological activity, relating to the rate of humans worn out in the light of their physical vs spiritual vs intellectual qualities, becomes even more significant, i.e. increases the multiplication coefficient as well as acceleration one. It is reasonable to conclude that in given circumstances of accelerated economic progress worldwide, simultaneously implying a geometric leap in the wear and tear of humanity, there is a convincing demand for establishing continuity of the revitalization process of psycho - physical - intellectual forces per capita. A crucial reason, which speaks in favor of the given claim is exclusive of a philanthropic nature, that is, it is a result of emotional activity as the need to exercise social responsibility. Human activities, among other things, are infrastructural assumptions created in parallel for the use of medical and health tourism services. Abstracting property form of ownership (state and/or private) regarding built accommodation facilities under medical and health tourism, we respect primarily as the need, and also the right of the human part of the capital, precisely, for the optimal renewal of spent components. After all, every form of human activity is immanent to the function of civilization achievement, that is, the natural need to live as humanely as possible. In the given sense, the built accommodation capacities of both medical and overall health tourism, indisputably, open their doors to people, that is to say, to their growing needs for optimal renewal of their spent physical, spiritual and intellectual strengths.*

1. INTRODUCTION

Following the suggestions and strategic orientation of the Strategy of Tourism Development in RS and the Program of Tourism Development in APV, a Study of Health and Medical Tourism Development in APV has been prepared, within the project “HEALTH-TOUR - Health Tourism – Good Tourism: Joint Development of Medical and Health Tourism in the HU-SRB Cross-Border Region“. The project is being realized within the cross-border program of cooperation between Hungary and the Republic of Serbia and it is being financed by the European Union (IPA INTERREG).

The starting point and the subject of the study is determining the current condition and possible development directions of health tourism in the province from the tourism, legal, medical, financial and marketing standpoint. Determining possible types of cooperation with Bács-Kiskun county in Hungary and creating a joint performance in the international tourist market is also a part of the study goals.

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Human resources as an inherent part of optimal functioning (use), i.e. progress continuously among all other business resources, such as in general, the capital of corporations, are mostly spent in all given aspects. By rationalizing the awareness of the need to return to the optimal framework, due to a disproportionately higher degree of wear and tear of human resources, in relation to multi-generated scientific, technological and economic progress, we conclude the biblical role as well as the responsibility of our civilization to preserve each individual.

Nevertheless, the optimization of the revitalization of the spent forces of individuals, in all mentioned aspects as a civilizational heritage, should be dealt with by those organizational structures, which have a sense of social responsibility, personal moral values and realistic evaluation of the invested work. The implementation of all three aspects of qualification and quantification of the need to optimize the revitalization of human resources, in the long term (strategic) sense is the only imperative, especially in the circumstances of existence, growth and development of economically profiled human civilization.

However, in the circumstances of significant participation of human resources in first of all renewal, but also, geometric growth of overall material wealth (the process of hoarding), no less relevant is the civilizational feedback that is manifested in the optimal renewal of spent forces when are being generated. The least how the generated material wealth, thanks to human resources can reciprocate on a global scale is actually- empathy, that is, civilizational motivated, realistic, human need to enable all other people to renew spent (physiological, mental, intellectual) components. Given the civilization-like need for the renewal of spent human forces is feasible since the very same human resources have also created the preconditions for it.

Yet, the explicit situation of the given necessities, should not be analyzed ad hoc, but through the strategic prism of considering the possibility of the revitalization of human resources. Optimizing the possibility of using the accommodation capacities of medical and health tourism in order to provide symptomatic forms of services and in the function of relaxing revitalization of all aspects of spent human forces, de facto should be the primary task of civilized humanity.

2. ECONOMIC AND FINANCIAL JUSTIFICATION OF GEOMETRIC PROGRESSIONS IN MEDICAL AND HEALTH TOURISM

The critical mass of generated, infrastructural performances, in the field of medical and health treatment/tourism, in principle satisfies, that is, could meet the needs of the human resources.

However, in the circumstances of the market existence, i.e., the law of supply and demand, the usage of services in the field of medical and health treatment/tourism is turning, for an increasing number of potential users, into a problem of a not so minor nature. In the given context of the analysis, it is inherently important to emphasize that accommodation capacities (existing and/or anticipated) are increasingly lagging behind demand.

Due to the intensive demands for the engagement of the workforce, which at the increasingly frequent time intervals experience the implosion of exhaustion of their physical, spiritual and intellectual strengths, with implicitly growing and also more frequent needs for using medical and health treatments/tourism services. As a consequence, the enormously growing number of individuals, in search of a particular, immanent form of medical and health treatment, in an ephemeral time interval, generates huge pressure on the existing infrastructure of medical and health tourism.

In the explicitly significant, complex situation, the increasingly witnessed inability of using the services of medical and health treatment/tourism, contributes to a conjunction of the market oscillations on a world scale. Namely, since the outbreak of the mortgage crisis (Miloradić et al., 2021, p. 49), made official on August 19, 2007. On the territory of the USA, with the further expansion to the financial and then on to the overall economic crisis, there was a significant degree of recomposition on the side of aggregate demand of medical and health treatment/tourism services. Basically, by spreading the all three forms of crisis, by the pattern of concentric circles, from the US market to other parts of the planet Earth, and consequently by more frequent resorting to tax evasion, i.e., avoiding first of all to make a payment of a corporate income tax, capital owners moreover, resort to restructuring the degree of (il)legitimacy of the employees' position with an employer and their work performance in the official premises of a company.

Additionally, from the point of view of Pierre Conso, a French author (Vidaković, 2001, p. 16), a financial position is defined as the ability of a corporation to service a degree of liquidity, acceptable from the aspect of the permanence of the balance of monetary fluctuations. The causes of the given flagrant consequences are identified in an international document, inaugurated by the Bretton Woods Agreement, in 1944 (<https://kamenjar.com/bretton-woods-novi-svjetski-poredak/>, October 15, 2021). Furthermore, the forced use of the American dollar in the form of the world reserve currency after 76 years, puts a spoke in the wheel (Parnicki, 2021, p. 3) of the planetary, that is, national economies, observed through the aspect of financial evaluations.

The official creators of the business atmosphere must extend, namely, human resources, with the implementation of accounting analyzes, i.e., simultaneously, respect the due diligence doctrine. In the given context, it is imposed as a necessity to rehabilitate the resulting economic and financial chaos. (Parnicki et al., 2020, p. 606). In an atmosphere of "superficial awareness" of the plausibility of due diligence doctrine, that is, non-sense insistence on selfish hedonism, exclusively the "interests" of quasi-elected individuals, multiplying the damage in parallel to others and their property, further worsens the economic and the financial situation of corporations (Vidaković et al., 2017, p. 117), thus, will contribute to more intensive spending of human resources. The neuralgic points, i.e., "economic-financial obstacles" to the realization of qualitative due diligence, arise precisely from the core of plausibility of financial - balance sheet understanding, by the corporate management (Buble et al., 2006, p. 250 - 270).

Logically identified, significantly devastated economic-financial position of corporations, i.e., consequently more intensive spending of human resources, anticipated activities solely on the part of macroeconomic management, include economic optimization measures, both in the field of fiscalization and monetization.

The described situation, which is still highly current, points to an essential intersection point summarized in the conclusion of the explanation of the reasons, which, above all, affect the mobility of human resources, in search of a particular and to the necessary form of service from a wide range of medical and health treatment/tourism. Namely, in the mentioned circumstances, human resources, that is, their status in corporations, undergoes a transformation from a legitimate to an illegitimate performance of work tasks. In principle, regardless of the escalation of the volume and intensity of the general, global, economic crisis, there is a disproportionately small number of human resources, which in the succession of time really stay without a job.

This explicit statement is in fact the result of the logic, and not of the capital performance. Capital is a fixed part of the company's assets and its non-use (passivation) due to the intensification of the economic crisis, bills actually will not stop arriving, based on their existence.

In the constellation of explicit relations, the owners of capital do not decide on the termination of work, yet, recompose the employment status of the already engaged, i.e., the existing human resources. In most cases, human resources will not be paid insurance contributions: pension, health, social, or, in the case of unemployment. The fact is that, regardless of the given, negative phenomena, human resources continue to wear out. Due to the adverse changes in the employment status, it has been proven that the workers will be spent to an even greater extent and intensity through the prism of all three aspects of exhausting their own strength. Thus, the described crucial moment points to the conclusion that human resources will exert even greater pressure to seek a particular service from a wide range of medical and health treatment/tourism.

Evidently, given the economic crisis times, human resources place more and more emphasis on health, that is, opting to find a certain service, from the sphere of medical and health treatment/tourism. However, respecting significantly reduced financial means through the received earnings, only one element of the marketing mix gained importance, and that is the price level of services in the field of medical and health treatment/tourism.

In the countries, which at the given moment have reached a relatively enviable level of economic well-being for the needs of their population, i.e., human resources, where the owners of the capital in the field of providing medical and health services, due to the mentioned reason- achieved high fixed cost levels - simply cannot bring down the price levels of the services they provide. Therefore, due to the inflexibility of the price level of provided medical and health treatment services in the conditions of the global economic crisis in the countries that have reached a more enviable level of economic well-being, their potential users are dispersed.

At the same time, regardless of the burden of travel costs, as well as other dependent direct costs, significantly lower price levels of medical and health treatment services in the countries with more modest economic results will make them more competitive compared to the first category of countries. The significantly lower price levels of medical and health treatment services in the states with more modest economic performance have become their comparative advantage. We also emphasize that although the price levels of medical and health treatment services are at a significantly lower level in the countries of more modest economic performance, the quality of the services does not lag from the economically more affluent countries.

Based on the above-mentioned economic expertise, we conclude that to a greater extent, a special form of tourism is developing, that is, tourism of medical and health provenance.

In the following, we will make a comparative analysis of prices for a provision of dental services, in the field of medical and health treatment/tourism, through the prism of several countries, which come from different economic milieus. More specifically, customized comparative analysis of the prices of dental services was performed on the example of three countries - Serbia, Slovakia and Croatia.

3. COMPARATIVE ANALYSIS OF PRICES OF DENTAL SERVICES

Due to the constant increase in the number of participants, the markets become oversaturated; the supply is much higher than the market absorption rate, so it seems that it is almost impossible to operate successfully in such conditions (Grgar et al., 2013, pp. 268). By referring to the tabular representation of statistical data and by applying the method of comparative analysis of prices of dental services from three countries: the Republic of Serbia, the Republic of Slovakia, and the Republic of Croatia, inherent conclusions were reached.

Table 1. Price levels of dental services in Serbia, in euros

Ordinal number	Type of dental service	Price
1.	First aid in dentistry	8,47
2.	Routine tooth extraction	8,47
3.	Complex dental extraction	16,95
4.	Milk tooth extraction	4,24
5.	Removal of soft and hard deposits	16,95
6.	Composite filling (front tooth)	12,71
7.	Composite filling (side tooth)	16,95
8.	Amalgam filling	12,71
9.	Glass ionomer filling	16,95
10.	Glass ionomer filling (milk tooth)	12,71
11.	Fissure sealing	8,47
12.	Dental treatment in stages	12,71
13.	Logan kočić-Dental implant	16,95
14.	Cast restoration	29,66
15.	Fiber-reinforced composite (FRC) resin	21,19
16.	Partial acrylic prosthesis	101,69
17.	Total acrylic prosthesis	127,12
18.	Skeletal prosthesis	322,03
19.	Metal-ceramic crown	50,85
20.	Metal-free zirconium crown	152,54

Source: <https://www.stomatolog-bozovic.rs/?grupaA=14>, October 15, 2021

Table 2. Price levels of dental services in Slovakia, in euros

Ordinal number	Type of dental service	Price
1.	Dental examination	free of charge
2.	Treatment plan	free of charge
3.	OPG X-ray	free of charge
4.	Implant screw	470,00
5.	Mini dental implants for the upper jaw	2.000,00
6.	Mini dental implants for the lower jaw	1.500,00
7.	Implant placement	250,00
8.	Implant Crown	from 320,00
9.	Temporary crowns, where applicable	free of charge
10.	Sinus lift as needed (depends on size)	from 400,00
11.	Complete dental implant (includes implant screw, abutment and crown)	1.090,00
12.	Special crown	390,00
13.	Porcelain crown	390,00

14.	Total prosthesis	450,00
15.	Partial prosthesis	640,00
16.	Dentures for mini dental implants (per jaw)	450,00
17.	ALL-ON-4/ALL-ON-6	from 5.570,00
18.	Palliative root canal treatment	40,00
19.	Teeth whitening	320,00
20.	Complete dental hygiene	54,00
21.	Tooth removal	44,00
22.	Surgical extraction	95,00

Source: <https://www.dentaltourismslovakia.co.uk/complete-price-list/#1539328270445-1481dfe0-a41c>, October 15, 2021

Table 3. Price levels of dental services in Croatia, in euros

Ordinal number	Type of dental service	Price
1.	Straumann Implant Premium Roxolid BLT	600,00
2.	Straumann Abutment Titan	120,00
3.	Sinus floor lifting operation + Geistlich BioOss + Bio Gide	600,00
4.	Osteotomy/extraction of complicated wisdom teeth	140,00
5.	Apicotomy	120,00
6.	Complex tooth extraction	60,00
7.	Bone / sinus augmentation BioOss + Bio Gide	150,00 - 350,00
8.	Metal ceramic crown IvoclarVivadent	160,00
9.	Ceramic veneer, Veneers e.max IvoclarVivadent	230,00
10.	Ceramic crown complete, e.max Ivoclarvivadent	230,00
11.	Zircon ceramic crown CAD / CAM + IvoclarVivadent	230,00
12.	Titanium ceramic crown	190,00
13.	Aesthetic upgrade FRC Postec + Multicore Flow	100,00
14.	Individual Straumann Zircon Abutment	160,00
15.	Temporary acrylic crown	20,00
16.	Wironit combined dentures	450,00 - 550,00
17.	Prosthesis on Straumann implant /Locator/Novaloc	500,00 - 600,00
18.	Fixed orthodontic therapy-one jaw	800,00
19.	Fixed orthodontic therapy-both jaws	1.500,00
20.	Treatment and filling of dental canals /AH+/Protaper	70,00 - 150,00
21.	Teeth whitening Powerboost 40%	250,00
22.	Removal of hard dental deposits / tartar	50,00

Source: <http://www.dental-centar-omega.hr/hr/cjenik/>, October 20, 2021

Comparative analysis of the prices of dental services from three countries, i.e., Serbia, Slovakia and Croatia, leads to the conclusion that the most acceptable prices are in the Republic of Serbia. Even in the Slovak Republic, which joined the EU long before Croatia, which is in the third ring of countries admitted to the EU, the prices of dental services are at a lower, more favorable level.

Also, we conclude that regardless of the lower prices of dental services in the Republic of Serbia compared to the two EU member states, the quality of dental services does not lag if looking at the given example. So, regardless of the additional costs such are travel expenses, accommodation (while receiving dental services), food, and other either dependent or direct expenditures which would eventually add up to the basic prices of dental services in the Republic of Serbia, it still pays off for a foreign patient, i.e., a tourist, to visit it.

Namely, the lowest price levels regardless of the type of dental services among the analyzed countries, are represented in the Republic of Serbia. The remaining two countries analyzed, belong to EU membership - we conclude. The Republic of Slovakia joined the EU much earlier than the Republic of Croatia. Despite that fact, the price levels of dental services in the Slovak Republic are significantly lower (read, and more favorable) compared to the price levels of the same services in the Republic of Croatia. Understanding and then implementing the logic of the principle of transitivity in mathematics, we derive the conclusion that through the prism of realized price and comparative advantages, it is economically most profitable for potential users of dental services to come to the Republic of Serbia.

Simultaneously, without the absence of a critical level of quality of provided dental services, in the Republic of Serbia, with the satisfied principle of plausible price levels, it is really feasible to attract an increasing number of tourists, in a strategically profiled succession of time. Given that the principle of inversely proportional correlation between lower price levels and optimal quality levels of provided dental services in the Republic of Serbia is a generator of comparative advantage in the context of attracting new clients (read, and tourists) and thus the potential to increase economic and financial performance based on the explicit type of medical and health treatment services.

Undoubtedly, keeping a satisfying level of quality and at the same time maintaining reasonable price levels in the future, we will ensure economic progress based on the provision of dental services in the Republic of Serbia. The economic (read, and financial) development of dentistry in the Republic of Serbia through a given constellation of inversely proportional relations of price and quality, will gain in propulsiveness exclusively through the prism of “mass”, i.e., satisfying the principle of “economies of scale”. The assumptions relating to the latter explicit benefits of the future and the question of their survival, de facto, is the question of nurturing the principle of consistency. Contrary to the literary direction called “larpurlartism”, propulsive, multiplicative and accelerated economic development in the field of dental services, aims to achieve the highest possible financial results. Larpurlartism (from the French “l’art pour l’art”; art for art’s sake) is an aesthetic direction based on the thesis that style and works of art end in themselves, and do not need explanations or rules. The term and name were first used by Theophile Gautier in 1835, in France, to give significance to art, getting free from religious and ethical pressures as a reaction to civic utilitarianism (<https://hr.wikipedia.org/wiki/Larpurlartism>).

Given the economically rational explications, the fact that dental services, de facto, belong, symptomatically, to the most sophisticated group of economic - business activities, in the analyzed market environment, also unquestionably supports it. Following optimal investments in this type of medical and health treatment, by at the same time maintaining (read, and nurturing) the desired level of quality of services provided, a mathematical multiplication operation with a steadily increasing number of foreign users, in the strategic expression of the situation, will surface a phrase: “the economy of mass”. In the economic sense, the latter explicit situation will inevitably enable over a period, even better economic and financial results, both at the micro as well as at the macroeconomic level.

Regardless of significantly lower levels of prices of dental services in the Republic of Serbia, their level of quality does not lag behind that presented in the sample that consists of two EU member states of the EU family, i.e., the Republic of Croatia and the Slovak Republic. Abstracting even additional transport costs as well as overnight stays, including food expenses, implies

that the Republic of Serbia can remain competitive in the sphere of providing dental services, thus further benefitting from a steady increase in finances.

Basically, the circumstance of inhibiting the defined (inversely proportional) relationship, in the relation: lower price rank of dental services - optimally critical rank of quality of provided services, will imply a new, positive market symbiosis, i.e., realistic realization of the market term "mass economy". Above all, if the existing relations stay steady in the long-term (strategic) view, it will be a guarantee of the development of this type of medical and health treatment/tourism together with the complementary growth of micro-macro finances.

However, despite the given title of this chapter some additional scientific facts, which are complementary to the above shown will be derived. Namely, the derived price comparison of dental services in the given example of the three countries analyses observed through the prism of the degree of relevance in general that has taken into account potential development of medical and health tourism is in the mathematical language just the first excerpt. According to mathematical logic, the explanation of the first excerpt of some, any or every scientific assumption or hypothesis through the aspect of relativity can present only required but not sufficient conditions for its either confirmation or rejection. Simultaneously, we note that for the purpose of the scientific research from the aspect of determining the degree of affirmation of the progress of medical and health tourism throughout one of its forms - dental services, the most crucial part played the analysis of price parities.

In a relative sense, the inspected scientific phenomenon by applying the logic of developing scientific research activities solely by performed analyzes of price comparisons and for the purpose of practical implementation at the same time indicates a lack of facts as well as of either confirmation or denial of investments in the mentioned type of business. Although the dental service prices, statistically speaking, are taken in the explicit form on which the orthodox scientific derivatives were based and further developed, presented in the form of realized analysis of price parities, we still emphasize and insist on the lack of scientific data in respect to purposes of verifiability of a grounded hypothesis. The fact that complements the already mentioned explicit doubts regarding the degree of completeness of relevant information pro et contra launching or further development of existing forms of providing medical and health tourism services i.e., through the prism of dental services comes down to a need for implementation of one more inherent, the scientific research method. Specifically, in addition to methods of analysis of the observed phenomenon in the general sense i.e., explicitly, derived price comparability of heterogeneous forms of dental services, another method that also contributed to scientific sophistication refers to the synthesis procedure of scientific conclusions. De facto, on the path of realization, that is, optimization of scientific research experiment along with the use of the analytical methodology in a significantly causal - consequential correlation relationship, there is a need to synthesize already analyzed facts. The analysis of the price parities of the differentiated dental services represents a relevant foundation in the realization of the current scientific research. On the other hand, analytics as a scientific research method per se indicates conditional plausibility either in confirming or rejecting a scientific assumption. Thus, in order to get to conclusions observed through the aspect of relativity, it is essential to synthesize the price parities in the form of analytical method in a systematic way.

However, the logic of the functioning of the chain, explicitly depending on the consequential connections between analytics and synthesis as a scientific research tool, it is necessary to point

out another relevance in the context of missing scientific facts, yet, in the function of completing them. In order to come to the scientific truth, that is, to the relevant answer to the question of economic and financial profitability of doing or even continuing to expand the dental business, through the aspect of providing dental services, we dealt with one more type of analytics. Namely, for the purpose of finalizing current scientific research activities by understanding the degree of affirmation of medical and health tourism, precisely by analyzing price parities of available dental services, we dealt with the analysis of ratios between price levels by method of random statistical sampling of the same types in relation to the average net salaries of employees from the observed three countries. We emphasize, in order to optimize the completion and supplementing of the scientific data through the base of the finalization, i.e., synthesis of scientific conclusions and that in the form of the marginal, in addition to existing types of analytics, with the intention of achieving the highest possible rank of scientific truth of the observed phenomenon, motivated by scientific drive, we therefore relativized the same, by performing yet another analytics. With the intention of considering the degree of propulsiveness of the observed kind of medical and health tourism in a more complex way in spite of additional demands of scientific research, yet guided by the logic of extending the ambience of scientific truth, we have decided to furthermore relativize the observed phenomenon by incorporating data on average net earnings of employees in three European countries i.e., by pairing them with price levels by a method of random statistical sampling. The identified moment of need for additional scientific research and putting into practice emphasized analysis was motivated by consideration of business aspects, such as an opportunity and a hazard of luring foreign citizens through an aspect of dental services within medical and health treatments. Conditionally speaking, scientific research of a similar type we limited to three states of one continent - Europe; following the logic that intercontinental travelers would find it more cumbersome to cover the distance for various reasons. For instance, regardless of the propulsive level of scientific and technological development, especially regarding transportation means - relevant for our scientific research, more distant destinations still inhibit foreign nationals regardless of their living standard or lower price of dental services, seldom set off due to fairly high travel expenses. Nonetheless, it is important to point out a fact that the European market is significantly big. The selection of the dental surgeries in three respective countries was determined by the high standard of dental services and their renowned position in respective surroundings. It should also be emphasized that each of them cares for several thousands of patients annually thus presenting a glaring example of a topic of this scientific paper. A degree of inhibition of foreign nationals' mobility in search of this type of exercise of medical and health tourism is still contributed by the high cost of travel and health insurance. Apart from significantly high expenses of both, travel and health insurance, this aspect also carries additional difficulties regarding rigorous conditioning during the implementation of the given activities, in case of an eventuality, that is, when paying the premium. Anyway, neither travel expenses nor the cost of medical - health insurance cannot be avoided so we have to incorporate them into our projections. By the constellation of other analytics, we point to statistics relating to the average net earnings of employees in three European countries. Namely, the average net salary of employed citizens in Slovakia is 867 euros (<https://www.vesti.rs/Ekonomija/Slovacka-Prosecna-plata-867-evra.html>, October 20, 2021). The average net salary of employed citizens in Croatia is 950 euros (<https://www.b92.net/biz/vesti/region/koliko-zaraduje-prosecni-hrvat-1861075>, October 20, 2021). The average net salary of employed citizens in Serbia is 632 euros (<https://publikacije.stat.gov.rs/G2022/HtmlL/G20221047.html>, October 20, 2021). By comparing the price levels of certain types of dental services with the average net earnings of employees from the given three European countries we will get, although relative - ratio indicators, de facto, indicators of the living standards of the citizens, respectively. We note for the sake

of understanding that the lower the percentage, the more it implies that the living standard of the citizens of the given country is actually at a higher level. In other words, it also means that there is less expenditure on using some kinds of dental services. In parallel, it also implies that if analyzed through a prism of a higher level of the average net earnings of the citizens of those countries, there are increased odds of using dental services packages. To illustrate more precisely, by pairing the price of a service called “complex dental extraction” of 16,95 euros in Serbia, with the average net earnings of its employed citizens, in Serbia, of 632 euros; we come to a relative indicator in the amount of 2,68%. An established relative indicator in effect represents the share of price levels of the given dental service in the average net earnings of the citizens of 2,68%. On the other hand, if the price of a service called “complex dental extraction” is 60 euros in Croatia with the average net earnings of its employed citizens, in Croatia, of 950 euros then by their pairing we come to a relative indicator of 6,32%. To remark, the full names of in essence identical dental services differ solely in one word but de facto is one and the same dental service, which logically implies plausible comparability of derived relative indicators. Thirdly, taking into consideration identical circumstances in the state of Slovakia where the price of a dental service called “surgical extraction” is 95 euros, with the average net earnings of its employed citizens, in Slovakia, is 867 euros, then by their pairing, we come to a relative indicator of 10,96%. Like the previous comparison example in determining the degree of identity of the name of the analyzed dental service, apart from one word, indicates its uniformity in Slovakia as well as in Serbia and Croatia. Respecting these conclusions, we point to absolutely plausible comparability of analytically explicit types of dental services from the given three European countries.

Taking into account the derived ratio indicators, we will synthesize and draw adequate conclusions. For the citizens of Serbia, through the aspect of these two endogenous indicators, i.e., price levels of the given types of dental services along with the average net salary of employed Serbian citizens in Serbia, as well as derivatives i.e., exogenous indicators, the lowest funds will be allocated. With the constellation of the given explication, at a lower rank, although still evident price advantage, in the second place, comes Croatia. Evidently, out of three identically analyzed European states, Slovakia has the least favorable price-earnings ratio. Considering that the price of this particular service is in fact the lowest in the Serbian state indicates its comparative advantage in attracting foreign citizens; in any case, guided by the logic of the progression of medical-health tourism, we will compare it with the average net earnings of the citizens in Slovakia as well as those in Croatia. Basically, if the price of the sample type is 16.95 euros in Serbia, paired with the average net earnings of the citizens in Slovakia of 867 euros, we come to a relative indicator in the amount of 1,95%. Also, if the price of the sample type dental service is 16.95 euros in Serbia, paired with the average net earnings of the citizens in Croatia of 950 euros, we come to a relative indicator in the amount of 1,78%. We conclude that for both, citizens of Slovakia and Croatia, pays off to mobilize, in the sense of tourism, that is to promote to greater extent mobility towards the state of Serbia if we have taken into account exemplified types of dental services. Health-medical mobility, analyzed through the aspect of the observed type of dental service of the citizens of Slovakia and the citizens of Croatia respectively, in financial terms exclusively, is not justified.

4. TRAVEL HEALTH INSURANCE

Travel health insurance (PZO - until recently also called visa insurance) is an element of safety optimization, especially when it comes to preparations for travel, that is, in the circumstances of planning travel costs. Primarily, it provides security during the trip whether it is a business

trip or a family vacation, or for the needs of medical and health tourism. Until the decision on the abolition of visas for Serbian citizens for travel to EU Schengen countries came into force, a travel insurance policy was mandatory when applying for visas.

Nowadays, when the visa liberalization decision came into effect, travel insurance was no longer classified as compulsory insurance. However, despite this fact, possessing a travel insurance policy is, *de facto*, a necessity for several aspects of safety. Yet, there is no insurance product, which for a relatively small amount of money, or to say for a minor insurance premium, provides huge opportunities if the insured event occurs.

Tourism, as one of the relevant global industries, with no signs of inhibition in the 21st century, is fueled by globalization, high incomes, as well as knowledge- and information-based economies. According to OPIC (Overseas Private Investment Corporation) data from 2009, it is estimated that 16% of all jobs on a global scale are in some way directly or indirectly related to tourism; and globally, that insurance percentage is 3%. We emphasize that exclusive tourism, business vs tourism of symptomatic interest, which was activated after the abolition of the visa regime, and which generate the highest income per visitor, together with mass tourism can have far-reaching qualitative-quantitative results in the field of travel insurance -viewed as a whole.

Of course, to base any projections and plans for future realization of these types of insurance on empirical grounds are unfounded. Namely, the compared type of financial service is directly correlated with the growth of the gross domestic product; so considering that in the domicile environment, since it is slightly increasing, it is necessary to enable the same progression in insurance. Indicators do not speak in favor of the explicit, but represent a well-known model of traditionalism, that is, the unfortunate power of habit where no alternative is possible, either in the legal framework or in the minds of tourists.

Actually, everything must be interpreted exclusively in the form of an obligation while in the relatively near future, in the state of Serbia, clients of travel agencies will relate to travel insurance in accordance with the slogan: “if it is not imperative - it can be and it does not have to be” (Miloradić, 2010, p. 265). It is also necessary to make a development plan to sophisticate the product and finally to develop such a model with all its attributes, which would be completely complementary, both with travel agencies and also with other forms of insurance. In this context, the concept of a grouped, economic and financial model known as the CBM (Cluster Based Model) is plausible.

Without a definite strategy of developing needs versus consciousness, it is impossible to realize long-term, effective progress of economic and financial results. What determines, that is, classifies travel insurance at the time of the abolition of visas, is the decline in the realization of policies on a global level; dealing with the accompanying problems is not easy but not impossible. In a given post-period one should, naturally, be inventive by avoiding other people’s programs and principles that used to be implemented in the earlier period. Creating a new concept of realization is, *de facto*, creating the right product for the right market, i.e., creating a thematic framework of travel insurance with an emphasis on the inherent symptomatic interest that are supporting business, educational and hobby tourism, in an environment of complementary, mass tourism trends. The market is not large, nevertheless, it is profitable, especially if it is properly fragmented.

Taking into account the targeted audience, i.e., the clientele, the elaboration of marketing activities remains, together with the system of promotion, as well as the preparation of professionally

educated staff. Marketing activities should be developed especially in cooperation with travel agencies. In the aspect of trust, security and protection, the company (should) offers various ways of verification, and insurance during the stay, including a refund if the reservation is cancelled in a given time defined by the regulations (Radnović et al., 2019, p 572).

The period spent on the road, as well as the stay abroad, is covered by the travel health insurance policy and in case of illness or accident, the care of the insured is taken over by professionals who conduct and supervise treatment besides organizing a return to the country of residence, i.e., repatriation. All costs of treatment, as well as repatriation, are borne by the insurance company and it should be noted, that the costs of medical assistance abroad, de facto, are at a significantly high level.

The amount of the premium is determined by certain factors: the country to which the person travels, concerning the geographical position of the final destination, as well as its economic development, where the determining factor for the amount insured is the level and cost of medical services and medicines; risk of expediency of travel (a tourist stay does not have the same weight in comparison with persons who are engaged in skiing, athletes in training, etc.); the length of the stay itself, that is, the period of insurance coverage. You should not save money on insurance, because you never know when it will be needed and it is obvious that it cannot be obtained in the form of a subsequent one, that is, it is not realistic to conclude an insurance contract after the potential insured event occurred.

Before a potential traveler decides to take out insurance at an insurance company, they should get acquainted with the possibilities provided by health insurance. First of all, it is necessary to obtain a certificate from the Republic Health Insurance Institute, since, as stated in the notice, all citizens who are paying for the health insurance in any way, have the right to use emergency medical care, during a temporary stay abroad. With that confirmation, upon returning from the trip, the insured person can request the reimbursement of the treatment costs inflicted solely in the case of an emergency. In order to obtain the certificate, the elected doctor must issue a certificate of health, which should be certified by the medical commission of the parent branch of the Institute.

Chronic and acute patients cannot get confirmation, because, as they explain in the Institute, their health condition requires the more frequent provision of health services, which are necessary for them, but they belong to long-term treatment services, and not immediate endangerment of life. In the further iteration of activities, it is necessary to know that health services, with a similar certificate, should not be paid in those countries with which Serbia has signed an international agreement on health insurance (Macedonia, Montenegro, Croatia, Bulgaria, Great Britain, Slovakia, Poland, Romania, Hungary, Czech Republic, Italy, France, Luxembourg, Belgium, the Netherlands, Germany, Austria).

In any case, these are theoretical possibilities, because the compensation of the mentioned costs is very slow or, which is frequent, it is never paid to the insured for the reason that the medical report always contained exclusions, partly based on chronic and acute diseases and often, the requirements of the HIF (RZZO) for supplemental medical reports and the findings of a specialist doctor. However, in the countries with which there is no signed agreement, the service is paid for, and the costs should be subsequently reimbursed by the HIF if the medical commission determines that it was an emergency medical condition. In these cases, the question of the

necessity or “justification” of treatment is always raised, and also considering the length of the period required for making a decision makes the whole thing unfeasible.

Thus, before traveling abroad, having in mind the promptness of payment as explained above, every potential traveler should think in the terms of ensuring the safety of themselves and their families by purchasing a health insurance policy from one of the insurance companies. The amount of money for which the traveler can be insured ranges from 5,000 to 40,000 euros with insurance companies. It is best to insure oneself for the largest possible amount of insurance because it also covers the costs of potential surgical interventions.

Insurance can be arranged either for one person (individual policy) or a family (family policy) or a group (group policy). For stakeholders of organized travel, group insurances are concluded by tourist organizations, which are at the same time travel organizers. Also, in addition to the fact that travel health insurance is no longer compulsory for travelling abroad, potential travelers are still showing great interest, while most insurers have improved the insurance assumptions, that is, introduced new products as well as the possibility of choosing the amount of insurance against premiums.

When the trip is organized under the jurisdiction of a travel agency, the services of travel health insurance are provided by the agency itself through an insurance company with which it has concluded a business arrangement. The price of insurance is stated in the travel program, and represents its immanent segment. In the constellation of general insurance conditions, insurance can be concluded by all persons, or groups of persons, older than six months up to the age limit of 80 years. Persons younger than six months and older than 80 can be insured by paying a reduced or increased insurance premium. The amount of compensation and the value of medical services may not exceed the maximum amount of money, which is agreed upon on the policy, during the agreed period.

Each travel health insurance policy must incorporate basic elements, more specifically, detailed information about the insured (or insured persons, if it is a family or group policy) - name and surname, address from the travel document, contact phone, ID number, passport number, etc. Travel health insurance policy also has to contain the registered individual number, the final destination, i.e., the destination, the signed sum insured for that destination, the types of the insurance coverage, the duration of the insurance, and the period of the insurance coverage.

If the insurance company, through the prism of travel health insurance, allows the payment of travel insurance packages for additional insurance coverage such as luggage insurance, travel cancellation insurance, etc., then, in the form of imperatives, it is necessary to indicate because by opting for some of them the insurance premiums are inherently changing. The entry of data is also relevant, concerning when the policy is issued, the code of the agent who issued it as well as the signature of the insured and the insurer, including the stamp of the insurance company. Usually, above the upper margin of the policy, there is a contact phone of the assistance house, which serves as a call center, and it is obligatory for the insured (or anyone nearby) to call the specified number and tell the duty operator the data they will be asked for. The text in the insurance policy, both on the face and also on the back, is always printed bilingually in order to be explicit and transparent to the medical staff abroad.

5. CONCLUSION

Within the symptomatic, scientific topic, i.e., partially observed sector of medical and health treatment services resulting in determining the elements of tourism development, we observed and analyzed almost exclusively a group of internal factors that may affect the financial situation of dental practices, which, in fact, are engaged in similar business activities.

Internal factors, which will generate a certain more acceptable financial situation, as well as the economic perspective, the medical institution itself with appropriate organizational activities can de facto have influence.

However, in the given sense, we can state that a group of external factors also exists. The group of external determinants, which determine the financial position of medical institutions such as dental practices, cannot be influenced but, by the logic of business flexibility, it can be adjusted. External factors that influence the economic-financial position of medical - health and dental surgeries as business organizations, come to the fore through professional representatives of the state, i.e., through the creation of the macroeconomic environment, especially through competent ethical activities of the macroeconomic establishment.

For instance, economic measures of easing the levies on employers in a view of paying contributions for pension, healthcare, and social insurance, as well as in the case of unemployment of dental workers or to say - employees in a similar industry, would result in significant reliefs as a segment of providing medical and health treatment/tourism services. A similar, optimized “domestic” relationship on the part of macroeconomic management towards employees and through an indirect factor- employers, would enable the propulsiveness of the “spiral” of positive feedback. In other words, significantly relieved tax contributions related to salaries would be affected by the continuity of lower price levels of provided forms of medical and health treatment services, i.e., dental activities and consequently the increase in economic and financial effects.

By pursuing a less restrictive monetary policy, i.e., a policy of “cheaper money”, the representatives of the state within a set of economic measures of the macroeconomic system, will enable medical and health institutions as well as dental offices, de facto, to attract an increasing number of clients from other countries. By devaluing the national currency by implementing the policy of “cheaper money”, medical and health treatment services, i.e., primarily dental services and then other (non-medical), economic branches (services, but also products), secondarily, become (by price range) more acceptable to a wider audience of stakeholders. Representatives of the state, in the light of the mentioned macroeconomic activity, must take care not to go into an extreme situation, i.e., not to push the national economy into a galloping phase or even worse, into a phase of hyperinflation, i.e., inflation spiral, by excessive “devaluation of money”.

Mathematically, statistically and operationally calculated, optimally managed macroeconomic activities in the form of external factors by the state management can positively influence the economic and financial condition of medical and health institutions, i.e., more specifically, dental practices, in the future. However, in addition to providing a “financial moment”, much more important is ensuring the continuity of a “healthy nation”, which subsequently leads to the utmost achievement of civilization - to live as humanely as possible.

Contemplation such as: “only healthy is at the same time satisfied humanity, and also motivated to achieve even greater economic and financial results”, we could quite at liberty identify with the “phrase of survival of the future”. Given the current negative context of the economic resources of corporations and consequently the macroeconomic environment in the Republic of Serbia, fiscal activities should be aimed at relaxing taxes as well as other parafiscal levies brought upon corporations. It is absolutely not the time, either for increasing the estimates of the existing fiscal duties or for issuing new forms.

On the contrary, the “just in time” model of fiscal relief is more than plausible regardless of whether it is a corporate income tax or a tax on contributions for pension, healthcare, social insurance, or in the case of unemployment. A more empathetic attitude towards the “chronically ill” financial condition of corporations by the macroeconomic management of the establishment would enable the propulsiveness of the spiral of positive feedback, in the succession of time. A more relaxed tax system by the very act of inauguration will contribute to a significant extent, to the prompt motivation of both employers and employees, which will have its effects on triggering the chain reaction of positive impact.

By constellation of the need to “pull” corporations from the problematic financial situation, we also suggest pursuing a significantly less restrictive monetary policy at this moment, that is, a policy of “cheaper money”. A sudden sharp devaluation of the national currency, regardless of the necessity for an urgent reaction at the moment of the decision, would not be a rational thing to do. Although now, a long time from the moment of inhibition, that is, the artificial maintenance of the value of the national currency at a very high level, it would still be out of place to react recklessly in a hurry.

Sudden, “large” devaluation of the domicile currency could be reflected in the inflation rate, which from its currently “galloping” or “double-digit” rates (estimated at between 25% and 30%), would easily slip into “hyperinflation”, that is, in its “three-digit” variant. The necessity is to dosage devaluation of the national currency properly, chiefly in order to stimulate economic and business activities primarily of domestic corporations including dental institutions and surgeries. It should be noted that, over the last 15 years, foreign corporations have been more than generously stimulated by our macroeconomic “experts”. In percentage terms, subsidies to foreign corporations reached approximately significantly high 80%, while the remaining rather modest circa 20%, belong to domicile corporations.

Corporations cannot influence the measures of economic policy or economic system but solely adapt to them. The employers of corporations also cannot influence the consciously recommended management policies, both the “more relaxed fiscus” and the “cheaper money”, which also come to us from the macroeconomic milieu. Following a similar claim to the representatives of the macro-management establishment, we point out the necessity of respecting the explicit scientific research conclusions. Their respect would be an expression of the concern of a rational person in an attempt to achieve business targets, without harming other people or their property. Finally, in addition to stabilizing the “financial position”, the question of the continuity of a “healthy nation” is even more inherent, precisely through the prism of the civilization premise, as humane as possible.

REFERENCES

- Buble, M., Kulović, Dž., Kuzman, S., (2006), *Due Diligence and Enterprise Valuation*, according to Howson, P., Masmedia: business diary.
- Grgar, D., Tot, V., Savić Tot, T., (2013), *The application of modern marketing strategies: The study of entrepreneurial business market of South Bačka district, Vojvodina, Serbia*, *Metallurgia international*, Vol. 18, No Special Issue no. 4, pp. 268-274, ISSN 1582-2214
- Miloradić, J., (2010), *Insurance technology*, Eurooffice, Belgrade.
- Miloradić, J., Parnicki, P., Marić, D., Osuch P., (2021), *Economic system in the function of revitalization financial position of the corporation*, International Scientific Conference: Sustainable Economic Transformation in the Postpandemic Period, Novi Sad, Sremska Kamenica, Serbia.
- Muhi, B., Jevtić, M., Golubović, D., Đurđević, D., Parnicki, P., (2020), *Study of Health and Medical Tourism Development in the Autonomous Province of Vojvodina, HEALTH-TOUR, Joint Development of Health and Medical Tourism in the Cross-Border Region of Hungary and Serbia*, Project ID: HUSRB/1602/31/0084
- Parnicki, P. (2021), *Balancing through the prism of success targets*, Educons University, Faculty of Business Economics.
- Parnicki, P., Marić, D. (2020), *Forensic audit - an instrument of consolidation of business nonsense in the function of protecting the interests of customers*, *Kultura polisa*, Novi Sad, No 41.
- Radnović, B., Grbović, D., Đurđević, D., Grbović, Ž. (2019), *Marketing influence of touristic Airbnb application on vacation rental market in London, Paris, Berlin, Rome and Amsterdam*, 4th International Thematic Monograph *Modern Management Tools and Economy of Tourism Sector in Present Era*, Association of Economists and Managers of the Balkans in cooperation with the Faculty of Tourism and Hospitality, Ohrid, North Macedonia, Belgrade, pp. 571-586, ISBN 978-86-80194-29-5, ISSN 2683-5673, DOI: <https://doi.org/10.31410/tmt.2019.571>
- Vidaković, S. (2001), *Business analysis of companies in a market economy*, Mala knjiga, Novi Sad.
- Vidaković, S., Parnicki, P. (2017), *Accounting - the primary source of information for efficient business management*, *Business Economics*, Sremska Kamenica, God. XI – br. 1.
<http://www.dental-centar-omega.hr/hr/cjenik/>, October 20, 2021
<https://kamenjar.com/bretton-woods-novi-svjetski-poredak/>, October 20, 2021
<https://publikacije.stat.gov.rs/G2022/HtmlL/G20221047.html>, October 20, 2021
<https://www.b92.net/biz/vesti/region/koliko-zaraduje-prosecni-hrvat-1861075>, October 20, 2021
<https://www.dentaltourismslovakia.co.uk/complete-price-list/#1539328270445-1481dfe0-a41c>, October 20, 2021
<https://www.stomatolog-bozovic.rs/?grupaA=14>, October 20, 2021
<https://www.vesti.rs/Ekonomija/Slovačka-Prosecna-plata-867-evra.html>, October 20, 2021



The Sustainability Management in the Cruise Tourism – An Application

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Eco-friendly behavior



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Abstract: *This chapter aims to present the sustainability management in the cruise industry, a constantly growing sector, except in 2020 and 2021, which were affected by the Covid-19 pandemic. After a literature review that highlighted a limited research interest in these topics, the authors presented the results of a structured analysis conducted in several steps. Firstly, this study focused on the evolution of the cruise sector in terms of the growth of passengers in the last twenty years. Secondly, the authors analyzed the environmental policies adopted by cruise shipping companies and finally, they presented the results of the evaluation of the eco-friendly behavior of cruise passengers.*

1. INTRODUCTION

The cruise industry, which has experienced exponential growth since the 1970s (Di Vaio et al., 2021), moved millions of passengers and, in particular, has shown its growth in the last twenty years, net of a particular decrease in 2020 due to the stop caused by Covid-19 pandemic.

Unfortunately, the emergency of COVID-19 imposed a global pause in cruise operations in mid-March 2020. Following this stop, the companies implemented extensive public health protocols that allowed for the resumption of navigation in Europe, parts of Asia and the South Pacific, a few months later (CLIA, 2022). The success of the protocols adopted by the cruise lines has reported a COVID-19 incidence rate aboard cruise ships to lower values than in any other leisure activity.

Statistically, the typical world passenger is between the ages of 50 and 69. This is 36% of cruise passengers who choose an 8-14 days cruise and come mainly from North America and Western Europe (Tab.1).

Among the most preferred destinations, the authors highlighted: the Caribbean, the first and the most historic destination from the origins of cruises, Asia, China, Panama Canal, South America, Australia and New Zealand, Africa and the Mediterranean.

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Table 1. Cruise passengers volume for 2018-2020 by source passengers region (in millions)

Region	2018	2019	2020
North America	14,24	15,408	3,008
Western Europe	6,371	7,226	1,223
Asia	4,24	3,738	497
South America	883	935	458
Australia	1,46	1,351	340
Eastern Europe	213	263	72
Africa	154	169	68
Scandinavia/Iceland	225	218	52
Central America	47	49	14
Middle East/Arabia	111	108	8
Caribbean	56	57	7

Source: Authors' elaboration on data CLIA (2022).

Conversely, despite the large volume of business, equal to 155 billion \$ of global output in 2019 (CLIA, 2022), cruise industry generates significant environmental impact across the process chain (Han and Hyun, 2019; Bhuiyan et al., 2021).

This kind of tourist-maritime activity is distinguished from other forms of tourism by sea for the use of large cruise ships, to offer passengers the opportunity to relax and visit different countries in a short time (Smirnov et al., 2022). In particular, this industry offers simultaneously almost all its forms of tourism: recreational, sporting, healthy, educational, congress, adventurous and archaeological, as well as combining different options for service, recreation, accommodation and catering (Logunova et al. 2020).

For this reason and all the activities associated with them, the cruise sector produces waste, consumes natural resources, changes ecosystem balance, and generates pollution and negative spillovers for host communities. In particular, the cruise sector produces a large quantity of solid waste (Werma et al., 2016; Mwanza et al. 2018; Paiano et al., 2020), especially packaging for food and beverage (Klein, 2011). It is estimated that the cruise industry generates 25% of the waste produced by all merchant ships.

Despite everything, recently a small number of cruise shipping companies have adopted measures of management and reduction of the general impacts (Crovella et al., 2021), such as solid waste, and greenhouse gas emissions (Murena et al., 2018; Pulido-Fernández et al., 2019) and grey water from sanitary facilities (Zheng et. al., 2019). Some more innovative companies, instead, have implemented new sustainable technologies such as the installation of solar panels, wastewater treatment systems, high-efficiency domestic appliances, and electronic devices that reduce harmful factors onboard and solid waste compactors. However, environmental impacts do not just affect onboard population and the sea, but also cruise terminals, ports and local host communities.

Therefore, the constant growth in maritime cruises stimulates shipping companies to build ships by the highest standards: recent ones powered by Liquefied Natural Gas (LNG) and with onboard waste compactors (Smirnov et al. 2022).

It has to be noted that in scientific production there are few studies on the environmental impact caused by the cruise sector, with a growth trend only in recent years, although an interdisciplinary approach to the tourism phenomenon has been quite broad (Okumus et al., 2018).

Consequently, this chapter aims to enhance the scientific production of these topics, and to drive attention to environmental issues by public government, international agencies, scientific groups and cruise shipping companies.

2. LITERATURE REVIEW

Tourism is an interdisciplinary area that has reached great interest in recent decades concerning multiple perspectives of analysis and also regarding numerous papers. Within this macro-area of study, the cruise sector is one of the tourist phenomena that has not received enough attention (Vega-Munoz et al., 2019).

Although the scientific literature produced on the cruise industry is well developed at a general level (Papathanassis and Beckmann, 2011), scholars have paid a lot of attention to marketing, security, communication, and corporate reputation activities (Ryschka et al., 2016; Remondino et al., 2019), much less on the environmental issue.

The cruise sector presents three categories of impacts according to MacNeill and Wozniac, (2018): solid waste, wastewater and impacts on the ecosystem (Herz, 2002; Butt, 2007) which can become a threat to ecosystems and resident communities (Zeppel, 2012; Svaetichin and Inkinen, 2017). These problems cause environmental damage to the ecosystem hosting ports or ship stopovers (Zuin et al., 2009) and also influence climate change (Carić and Mackelworth, 2014).

Moreover, according to Aran and Leon (2017) tourism above all does not offer incentives to behave responsibly towards environmental protection. Therefore, environmental policy has to be implemented to change the passengers' behavior towards socially and environmentally responsible decisions. Therefore, despite the growth of the cruise sector and its increasing environmental impact, the scientific literature on the behavior of cruise tourists is still quite limited.

However, a positive attitude of cruise passengers has been revealed, but they are not encouraged daily (Vermeir & Verbeke, 2006). Despite everything, there are a lot of green consumers that travel on cruise ships (Gadenne et al., 2011). From the few studies conducted, it emerged a positive attitude toward environmental protection in the tourism industry, especially in Arctic destinations (Chen, 2015). For this purpose, Schafer et al. (2011) analyzed the awareness of cruise tourists on environmental issues through a survey in a city in Southern Brazil (Schafer et al., 2011).

Recently, the choices of green products that generate changes in the production chain have also been analyzed through a survey (Kowalski & Veit, 2018). In any case, environmental awareness is positively correlated with green and conscious purchases (Dhandra, 2019). This also confirms the leading role of consumers in the production and supply chain of service, including tourism (Lamb, 2019). Additionally, in terms of sustainable behavior, surveys are a useful tool for assessing the willingness of tourists to pay additional amounts for the purchase of more sustainable tourism products and services (Jurado-Rivas & Sanchez-Rivero, 2019).

Unfortunately, it has emerged that the relationship between eco-labels and preferences for greener tourism services has still been poorly studied (Penz, Hofmann & Hartl, 2017). Similarly, some cruise lines in the Caribbean were more concerned with limiting the number of tourists than with reducing their environmental impact (Lowe et al., 2002).

Finally, there is a positive aspect: tourists are willing to contribute by paying higher taxes if the concept of sustainability is clearly explained (Derrin & Tisdell, 1999). In particular, high and middle-income passengers have a greater willingness to pay for environmental protection (Franzen & Meyer, 2009; Sun et al., 2016; Shuai et al., 2018). This statement is also in line with the results of our survey conducted.

The conceptual model and hypotheses were developed based on the literature review:

Hypothesis One (H1): There is a relationship between background elements that characterize the cruise passengers and their behaviors, as suggested by Han et al. (2018).

Hypothesis Two (H2): There is a statistical significance between awareness of the environmental issue and the attention of cruise passengers to read sustainability reports, as highlighted by Dhandra, (2019).

Hypothesis Three (H3): There is a statistical significance in the intention to purchase a travel package at a higher price in order to facilitate the reduction of CO₂ emissions and awareness of environmental issues, as suggested by Jurado-Rivas & Sanchez-Rivero (2019).

Hypothesis Four (H4): There is a statistical significance between the involvement of the cruise passengers by the cruise companies through the publication on the website of their sustainability reports and passengers' willingness to pay a higher price to counteract environmental damage, as highlighted by Jurado-Rivas & Sanchez-Rivero (2019).

3. METHODOLOGY

In order to achieve a replicable analysis method and representative, reliable and applicable results, the authors followed a mixed-method research design as suggested by Hair et al. (2007).

Phase One: the authors used an exploratory methodology, as shown in Fig.1, in order to highlight the distinctive features of the cruise sector according to some points of view.

Phase Two: a brief literature review relating to the sustainability of cruises and the behavior of the cruise tourist was made.

Phase Three: the authors analyzed the evolution of the cruise industry in terms of features of the sector, worldwide cruise shipping companies, global movement of passengers and effects due to the pandemic.

Phase Four: the scholars presented the different policies that cruise shipping companies adopt to mitigate the environmental impacts.

Phase Five: this study provided a snapshot of the environmental awareness of the cruise tour through the results derived from a survey conducted in 2018.

Particularly:

1. In the literature review section, the authors conducted a literature investigation using the Web of Science and they found a shortage of papers in the last 20 years.

2. To focus on the evolution of cruise shipping, this chapter presented a picture of the world-wide passengers that travelled in the last twenty years.
3. For evaluating sustainability in the cruise industry, sustainability management according to several policies adopted by cruise shipping companies was analyzed.
4. Lastly, using survey methodology, in 2018 the authors administered a questionnaire at a cruise terminal port, in order to investigate the level of awareness and behavior concerning the environmental issues of cruise passengers. The results of this survey were manipulated on StataMP software. Particularly, the “*probit*” commands were used for the descriptive/exploratory analysis of the variables. However, the authors evaluated the possible relationships between the variables through StataMP.

In this last part, the authors used Spearman’s Coefficient analysis: this is a non-parametric statistical technique used to evaluate two ordinal quantitative variables. Hence, Spearman’s test measures the strength and direction of the relationship between the ranks of two quantitative or qualitative ordinal variables. Particularly, it is suitable for measuring relationships between variables on Likert scales: in this case, each variable had different levels to which certain values were assigned.

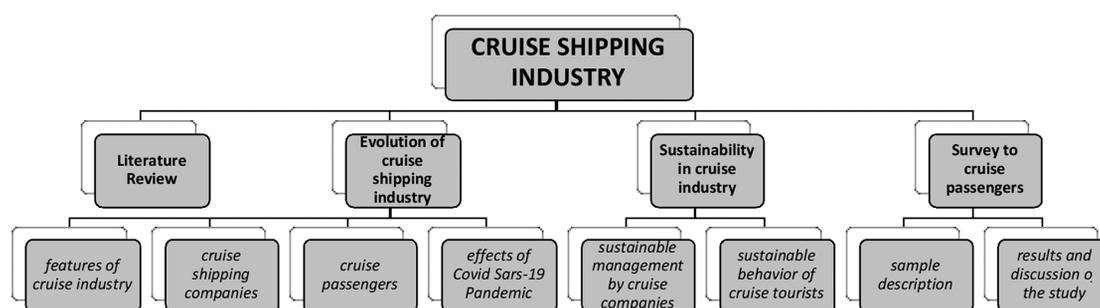


Figure 1. Methodology framework

Source: Authors’ elaboration

Moreover, the authors manipulated control variables (gender, age, education, and occupation) and other variables to identify sample characteristics. Then, dummy variables (response value 1 or 0) and categorical variables (with response 1, 2, 3, 4, or 5, then with a Likert scale) were analyzed.

After collecting the responses and transforming them into a numerical data matrix, as suggested by Wang et al. (2018), the data were translated and encoded.

4. EVOLUTION OF THE CRUISE INDUSTRY

Historically, cruise tourism has been the most desired mode of travel for social elites after World War First in the 1920s. Later, during the Second Post-War period, however, the contraction of the cruise market caused a decline in trade due to passenger planes (Johnson, 2002) which stimulated the transition from cruising to the airplane.

Nowadays, cruise companies are passenger ships that sell and deliver leisure travel on an all-inclusive basis. Hence, according to one of the first definitions by Wild & Dearing (2000, p. 319-320): “A cruise is any paid leisure trip aboard a ship with the main purpose of providing accommodation for guests, not transportation usually, and to visit a variety of destinations according to a definite journey”.

4.1. Features of the cruise industry

In the last twenty years, the cruise sector has grown in terms of the movements of passengers and the number of cruise vessels. In 2016 the global economic impact of this sector was equal to €126 billion (CLIA, 2017, 2018; MedCruise, 2018), European to about € 50 billion and the USA over € 27 billion. Among the Mediterranean destinations, Italy was the first, followed by Spain, Greece and France (CLIA, 2018) totaling over € 13 billion.

As a result, the cruise industry caused further pressures on the ecosystems (Popiolek, 2014; MacNeill & Wozniak, 2018), also contributing to climate change (Brida & Zapata, 2010b). Nevertheless, according to the UNEP (United Nations Environment Programme), cruise ships are among the most polluters of the sea ecosystem (Allsopp et al., 2005).

Furthermore, the large size of the ships and the high number of passengers has increased the pressure on ports and host communities, which play a very complex role. First of all, companies offer different itineraries to attract more cruise traffic, and increase the economic benefits for the port and local communities, but, at the same time, cause the environmental impacts (Karlis & Polemis, 2018).

For this reason, important international organizations, such as UNWTO (United Nations World Tourism Organization), UNEP and OECD (Organization for Economic Cooperation and Development), are studying the impact of tourism on climate change and, above all, the approach to tackle the negative environmental effects (Rico et al., 2019).

4.2. Cruise Shipping Companies

The global cruise market is dominated by American cruise shipping companies such as Carnival Corporation, Royal Caribbean Cruises, and Norwegian Cruise Line. Globally, the other most important cruise shipping companies are Celebrity Cruises, MSC Cruises, Oceania, Azamara, Viking Ocean Cruise, Un-Cruise Adventures, Lindblad Expeditions, Europe River Cruise, Regent, Crystal, Seabourn, Silversea, SeaDream, Windstar, World Cruise, Celebrity Cruises, MSC Cruises.

Table 2. LNG-powered Cruise Ships

Cruise companies	Ships' name	Launch year
AIDA LNG Ships	AIDAnova	2018
	AIDAcosma	2021
	AIDA unnamed	2023
Carnival LNG Ships	Mardi Gras	2020
	Carnival unnamed	2022
Costa Cruises LNG Ships	Costa Smeralda	2019
	Costa Toscana	2021
Disney Cruises Line LNG Ships	Disney Wish	2021
	Disney Unnamed	2022
	Disney Unnamed	2023
MSC Cruises LNG Ships	MSC Europa	2022
	MSC Meraviglia Class	2023
	MSC World Class unnamed	2024
	MSC World Class unnamed	2025
	MSC World Class unnamed	2027

P&O Cruises LNG Ships	Iona	2020
Princess Cruises LNG Ships	Princess unnamed	2023
	Princess unnamed	2025
Royal Caribbean International LNG Ships	Royal Caribbean Icon Class unnamed	2022
	Royal Caribbean Icon Class unnamed	2024
	Royal Caribbean Icon Class unnamed	2025
TUI Cruises LNG Ships	TUI unnamed	2024
	TUI unnamed	2026

Source: Authors' elaboration on data Cruise Critic (2020)

Nowadays, in terms of innovation, cruise shipping companies are investing millions of dollars in research and development activity in order to implement new technologies for their cruise ship vessels (CLIA, 2016) and to achieve the fundamental sustainability goals. Especially, cruise companies have planned to launch several ships powered by Liquefied Natural Gas (LNG) in the next years (Tab.2).

4.3. Cruise Passengers

According to estimates by Dowling (2006), the cruise industry has grown by 2,600 percent since 1970, serving as many as 7.2 million passengers in 2000 to around 19.1 million passengers in 2011 (Rodrigue and Notteboom, 2012).

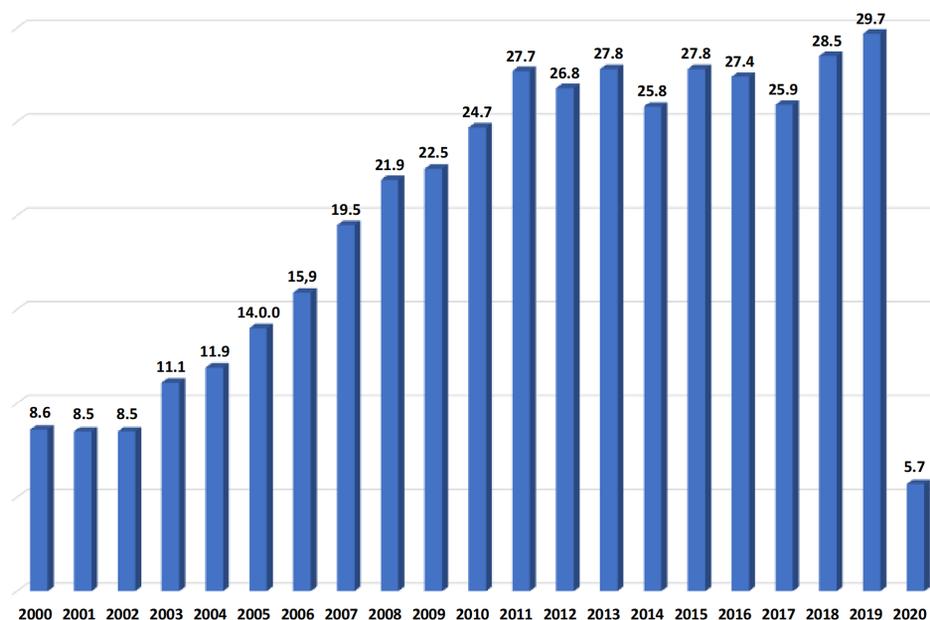


Figure 2. Global cruise passengers during 2000-2020

Source: Authors' elaboration on data Clia (2021)

Global cruise passengers mainly choose Oceanic, American, Mediterranean, and European destinations. In the ports of the last areas, the number of passengers grew by over 230% from 2000 to 2018, recording a peak in the 2011-2013 period (Fig. 2). About 70% of the total number of passengers handled has travelled in the last 10 years and almost 40% in the last 5 years. Of these, nearly 160 million have taken a cruise of at least 2 days. In the last four years, however, the trend has been more stable, except for 2020 which recorded a break of 80.6% due to the Covid-19 pandemic (CLIA, 2021).

4.4. Effects of Covid-19 Pandemic

COVID-19 had a great slump that has caused a serious economic downturn with huge implications for tourism (Bhuiyan et al., 2021): 6 million fewer passengers, came from North America and about half from Western Europe (Statista, 2021). Consequently, this period has overwhelmed all stakeholders' interests involved in the cruise sector. From the economic point of view, employers, crew and passengers reached, in this period, very low levels below the 2000s (Mizumoto & Chowell and Rocklöv et al., 2020).

On the contrary, this industry has implemented extensive public health protocols that have made it possible to test the safety of these trips.

Finally, despite the dangers, cruise ships recorded the lowest number of Covid-19 infections (Clia, 2021).

5. SUSTAINABILITY IN THE CRUISE INDUSTRY

Generally, the tourism and hospitality industry has been working for a few years to make their operations more ecologically sound. These shipping companies have implemented environmentally friendly onboard technologies, encouraged environmentally friendly practices, and developed environmental policies and guidelines to change operational processes (Han et al., 2019). It is important to pay more and more attention to environmental issues so that positions are raised by citizens, governments, and national and international agencies.

5.1. Sustainable management by cruise shipping companies

According to MacNeill and Wozniac (2018), the average carbon emissions per cruise passenger and day is equal to 169 kg of CO₂. For this reason, cruise companies need to implement sustainable technologies (such as alternative fuel ships) and environmentally friendly practices for the products and services offered onboard (Klein, 2011). This direction represents a possibility of sustainable development and the ability to attract the most ecologically conscious consumers who currently do not prefer cruises for the high impact on the environment.

To achieve sustainability, the cruise industry has implemented for a few years the reduction of waste and emissions (Pulido-Fernández et al., 2019), fuel (Murena et al., 2018), solid waste and wastewater discharge (Zheng et. Al., 2019). However, some companies have recently applied new sustainable technologies, such as solar panels, wastewater treatment systems, high-efficiency appliances and onboard waste compactors.

Therefore, the authors encourage to act proactively to reduce emissions and adopt a green approach to the port, maritime and shipping sectors (Zhen et al., 2018), involving all the players in this sector. In particular, the final user of the cruise service has a leading role (Tiba and Omri, 2017) and can improve the quality of cruises towards a more sustainable approach.

5.2. Sustainable behavior of cruise tourists

Through a survey, the authors investigated the cruise tourists' awareness of the environmental issues, by distributing 500 questionnaires at the arrivals terminal, during the 2018 summer,

in a port in Southern Italy. Among them, 352 questionnaires (over 70% of the total) formed the assessable sample and it was a validated value for statistical significance (Crovella et al., 2021).

As shown in Table 1, passengers who earn an average income and have a high level of education have shown a strong willingness to pay to improve environmental protection. So H1 is supported by this result. In the purchase of the cruise travel package, 91.5% of the sample paid attention to the environmental protection actions carried out by the cruise shipping companies. Each passenger also provided more answers on some environmental issues: 45.5% had read about the reduction of CO₂ emissions and fuel consumption, about 36.0% had read about the reduction of noise pollution, only 24% paid attention to reducing energy and water, whilst only 12.0% had read about waste reduction. Therefore, 53% knew of the publication of the sustainability reports on the websites and among these, 47.44% will read it and 45.45% had already read them (H2 was supported). The 83.0% of the last percentage was aware of the important results of reducing environmental impact by cruise shipping companies (H2 was supported). Furthermore, almost 40% are strongly influenced by the protection and improvement of the environmental conditions implemented by the company and only 6.53% are indifferent. 41.5% of the sample is willing to pay additional charges and about 7.4% are not. 63.4% were aware of the presence of LNG-propelled ships. The majority had diplomas and were in employment. To reduce the specific impact of the CO₂, most respondents are willing to pay a higher price, in particular, 52% of them a 5-10% higher price and 13.0% up to 20% more on the final price of a cruise package. This result supports the H3 hypotheses.

In terms of waste, 89.0% of the respondents paid attention to separate food and beverage packaging waste onboard.

The results underlined that level of education, employment and age are discriminant on the awareness and knowledge of environmental issues. In particular, passengers with a degree are more sensitive than the other passengers. It also has to be noted that half of the sample passengers read the sustainability reports published by the cruise shipping companies on their websites. Generally, age, level of education, and employment affect the adoption of sustainable behaviors (e.g. separate disposal of waste onboard). Therefore, the H1 hypothesis was supported.

Furthermore, more than half of the sample who have read the sustainability reports published by the cruise company are willing to pay a higher price to allow cruise shipping companies to use fuels less impacting. In this case, the H4 hypothesis was supported.

Thus, according to the Spearman' Coefficient analysis, there is a positive, moderate and statistically significant relation between the reading of the sustainability reports shared by the cruise shipping companies on their website and the willingness to pay a higher price ($n > 30$, $\rho = 0.2558$, 0.900) by cruise passengers. Particularly, the authors highlighted a positive and directly proportional relationship between the two ranks represented by the group of cruisers that reading of the sustainability reports shared by the cruise shipping companies on their website and the group willing to pay a higher price to reduce the environmental impact.

The same positive, moderate and statistically significant relationship is observed also between the future willingness to read the sustainability reports by cruise passengers and their willingness to pay a higher price in order to allow the cruise companies to counteract the negative environmental effects ($n > 30$, $\rho = 0,3331$, 0.900).

6. DISCUSSION

The main findings of the research outline the attitude of cruise passengers toward environmental issues. After manipulation of data derived from the questionnaires, the authors observed a sample of passengers aware of the environmental issue with the willingness to invest a part of their earnings to pay for a more expensive package, enjoying a more sustainable service. On the contrary, the scholars noticed a negative approach in terms of future reading sustainability reports (52.56% declared that will not be willing to read).

Table 3. Results of dates derived from questionnaires

Item	Question Number	Variables	Results (%)
BACKGROUND	1	<i>Gender</i> Male Female	54.83 45.17
	2	<i>Age</i> 18-25 26-40 41-60 61 and over	14.49 31.53 37.22 16.76
	3	<i>Education</i> Elementary License / Media License Diploma in upper secondary education Degree Master's /Postgraduate Diploma Ph.D.	6.25 46.02 28.41 17.90 1.42
	4	<i>Employment</i> Student Employed (Temporary / Permanent / Occasional or Project) Self Employed (Entrepreneur/ Craftsman/ Other / Freelancer) Unemployed Retired Housewife	11.36 53.69 6.25 7.67 16.19 4.83
KNOWLEDGE	5	Reading any actions for environmental protection	Yes No 91.48 8.52
	5a	Reading about reduction of:	Yes No 45.45 54.55
	I	<i>greenhouse gas emissions</i>	44.89
	II	<i>fuel consumption</i>	55.11
	III	<i>noise pollution</i>	35.80 64.20
	IV	<i>water and energy consumption</i>	23.86 76.14
	V	<i>waste</i>	11.93 88.07
	6	Knowledge of online publications of sustainability representatives	52.84 47.16
	6a	Reading reports?	45.45 54.55
	7	Knowledge of the achievement of important levels of reduction of environmental impacts	83.24 16.76
	10	Presence of LNG ships	63.35 36.65

ACTION	6b	Future reading of sustainability reports	<i>Yes</i>	47.44
			<i>No</i>	52.56
	12	Separate disposal onboard of food & beverage packaging	"	89.20
			"	10.80
INFLUENCE	8	Influence of environmental practices on the choice of the company	<i>None</i>	6.53
			<i>Little</i>	29.26
			<i>Enough</i>	36.93
			<i>Much</i>	19.03
			<i>Very much</i>	8.24
WILLINGNESS TO PAY	9	<i>Willing to pay more to counter the negative effects on the environment caused by cruise ships</i>	<i>None</i>	7.39
			<i>Little</i>	32.10
			<i>Enough</i>	41.48
			<i>Much</i>	14.49
				<i>Very much</i>
	11	Willingness to pay a higher travel cost to reduce fuel impacts	<i>Yes</i>	87.78
			<i>No</i>	12.22
	11a	Percentage of increased willingness to pay	<i>5-10%</i>	51.99
			<i>10-20%</i>	35.23
			<i>Beyond the 20%</i>	12.78

Source: Author's elaboration

Particularly, it emerges that age negatively affects knowledge of the cruise company's environmental policy. The variable of the level of education has a higher positive relation to the purchase phase of a cruise package than the kind of employment. Education and employment have equal levels of positive effect on the response.

Through this survey, the willingness of passengers to read the sustainability reports published by the companies on their websites has been investigated too. There was a strong positive nexus between education level and response, and not between employment and response. In addition, middle-aged passengers paid more attention onboard to separately dispose of food and beverage packaging waste.

It also highlighted the higher positive nexus of the level of education of passengers than employment with the willingness to pay more for a travel package. Additionally, the authors underlined that there is a positive connection between willingness to pay more and age and knowledge of environmental issues.

Results also reveal a gap between environmental concern and eco-friendly attitude of passengers: 89.20% of them declares to pay attention to the correct disposal of waste onboard, but only 12.78% of the sample towards the willingness to pay more than 20% of the cost of the final package.

Although some previous studies have involved other points of view to explain pro-environment decision-making, this analysis provides an overview of knowledge of environmental issues and measures to be implemented onboard. Lastly, the importance of this analysis lies in the description of the environmental perspective of tourists (Tan et al., 2016), in particular cruise passengers.

This chapter highlighted that the development of certain attitudes for this group of consumers originates in hedonic consumption (Howard & Gengler, 2001) and the intention to repurchase the trip could be influenced by their past and positive travel experience. Pavesi et al. (2016) showed that travelers shape their emotional judgment, and therefore also the answers to the questionnaire administered, based on the evaluation they made of their experience.

However, in this post-pandemic context, travelers' perception of a cruise company during a crisis can certainly negatively affect their post-crisis purchase intent (Laufer & Coombs, 2006). For this reason, the companies must transform the package of this service into a tourism trend closer to the needs of safety, health, and respect for the person and the environment.

Generally, it was highlighted that the decision-making process of new environmentally conscious consumers (in this case cruise passengers) is similar to a problem-solving process: first of all, cruise passengers gather sufficient information to understand the market for the product they are buying; subsequently, they carefully evaluate the alternatives even among the most sustainable ones and, finally, make a well-considered decision (Pan et al. 2021).

7. FUTURE RESEARCH DIRECTIONS

Some limitations of the survey conducted reside in the kind of target identified, numbers, countries of passengers involved and cruise routes. Mainly, the authors have focused on mass cruises, in the Mediterranean area, leaving out the luxury cruises preferred mainly by consumers with high spending capacity but not very widespread. Particularly, most of the respondents came from Italy, had a medium level of education and were in employment. These were passengers with a medium level of awareness interested in enhancing environmental issues in cruise tourism.

Future research directions will focus on a larger sample (for target passengers and cruises) to more reliably analyze relations through different econometric tools.

8. CONCLUSION

These analyses provide important feedback for cruise shipping companies, scientific research, and public administration for designing new policies in order to reduce pollution and environmental impact (Carić, 2015). Furthermore, this chapter disseminated environmental awareness among passengers, stimulating greater awareness of these issues.

Particularly, this study is useful to all stakeholders involved in assessing the behavior of cruise passengers, exploring the characteristics of the cruise industry and formulating environmental awareness strategies.

Following this analysis, the authors stated that it is necessary to act proactively through the reduction of emissions and the adoption of a green approach by all stakeholders (Zhen et al., 2018). In particular, cruise passengers as the final consumers play a leading role (Tiba & Omri, 2017), in the adoption of a more sustainable approach.

The sample of tourists investigated is generally careful with the environmental information provided during the purchase but does not know the measures taken by the companies. Therefore, onboard separate collection activities, composting of organic waste, and recycling of materials, for passengers and crew, are therefore necessary prerogatives in cruise tourism.

As conclusive remarks, this chapter offers a snapshot of the passenger who travels on commercial cruise shipping companies, who is attentive during the purchasing phase and willing to separate waste disposal on board, in particular food and beverages packaging. However, cruise

shipping companies should involve passengers through onboard information, inviting them to use in rational way water resources, energy, separate waste correctly and reduce food waste.

Among the different solutions, paying a premium price would allow cruise lines to plan more sustainable actions and increase their reputation. For this reason, a close collaboration is needed between all the stakeholders of the cruise chain to manage, monitor and raise public awareness of the major environmental problems of this type of tourism.

In order to implement effective strategies and reduce the environmental impact, it is important to engage and sensitize crew and passengers to behave more sustainably.

Finally, the results of the survey showed that most cruise passengers pay attention to the general sustainability criteria adopted by the shipping companies when purchasing their holiday and are willing to pay additional charges to cope with the environmental load caused by the cruise. In any case, the cruise sector requires greater international coordination to make the adoption of sustainable models, currently voluntary, mandatory. Hence, all stakeholders (cruise lines, public authorities and tourists) can change the environmental approach of this sector and achieve complete environmental, economic and social sustainability.

REFERENCES

- Allsopp, M., Walters, A., Santillo, D. & Johnston, P. (2005). *Plastic Debris in the World's Oceans*. Greenpeace International, Amsterdam. Retrieved January 10, 2018, from www.greenpeace.org/austria/Global/austria/dokumente/Studien/meere_Plastic_Debris_Study_2006.pdf
- Arana, J. & Leon, C.J. (2017). Comportamiento del consumidor y turismo sostenible. *Cuadernos Economicos de I.C.E.*, 93, 45-68.
- Bhuiyan, M.A., Crovella, T., Paiano, A. & Alves, H. (2021). A Review of Research on Tourism Industry, Economic Crisis and Mitigation Process of the Loss: Analysis on Pre, During and Post Pandemic Situation. *Sustainability* 2021, 13, 10314. <https://doi.org/10.3390/su131810314>.
- Brida, J. G., & Zapata, S. (2009). Cruise tourism: Economic, socio-cultural and environmental impacts. *International Journal of Leisure and Tourism Marketing*, 1, 205-226. <https://doi.org/10.1504/IJLTM.2010.029585>.
- Butt, N. (2007). The impact of cruise ship generated waste on home ports and ports of call: a study of Southampton. *Marine Policy*, 31, 591-598. doi: 10.1016/j.marpol.2007.03.002.
- Carić, H. & Mackelworth, P. (2014). Cruise tourism environmental impacts e The perspective from the Adriatic Sea. *Ocean & Coastal Management*, 102, 350-363. <https://doi.org/10.1016/j.ocecoaman.2014.09.008>.
- Chen, J.S. (2015). Tourism stakeholders attitudes toward sustainable development: A case in the Artic. *Journal of Retailing and Consumer Services*, 22, 225-230. DOI: 10.1016/j.jretconser.2014.08.003.
- CLIA (2016). *Environment Sustainability Report 2016*. Retrieved March 20, 2018, from <https://cruising.org/-/media/research-updates/research/featured/2016-annual-report.ashx>
- CLIA (2017). *The contribution of the international cruise industry to the global economy in 2016*. Retrieved March 20, 2018, from <https://www.cruising.org/docs/default-source/research/cli-2017-state-of-the-industry.pdf?sfvrsn=0>
- CLIA (2018). *Contributions of Cruise Tourism of the Economies of Europe 2017*. Retrieved September 5, 2018, from <https://es.cruiseexperts.org/media/2971/2017-europe-economic-impact-report.pdf>

- CLIA (2021). *Global Market Report*. Retrieved May 20, 2022, from <https://cruising.org/-/media/research-updates/research/clia-one-resource-passenger-reports/clia-global-passenger-report--2020.ashx>
- CLIA (2022). State of the cruise industry outlook 2021 – Report. Retrieved June 4, 2022, from <https://cruising.org/en-gb/news-and-research/research/2020/december/state-of-the-cruise-industry-outlook-2021>
- Crovella T., Paiano, A. & Lagioia, G. (2021). Study on the ecological attitudes of Italian cruise passengers, *International Journal of Digital Culture and Electronic Tourism*, 3, (3-4), 356-381. <https://doi.org/10.1504/IJDCET.2021.116471>.
- Cruise Critic (2020). What Is LNG Gas, and What Are LNG-Powered Cruise Ships?, Retrieved June 4, 2022, from <https://www.cruise critic.com/articles.cfm?ID=5138>
- Derrin, D. & Tisdell, C.A. (1999). Tourist levies and willingness to pay for a whale shark experience. *Tourism Economics*, 2, 161-174. <https://doi.org/10.1177%2F135481669900500203>.
- Dhandra, T.K. (2019). Achieving triple dividend through mindfulness: more sustainable consumption, less unsustainable consumption and more life satisfaction. *Ecological Economics*, 161, 83-90. <https://doi.org/10.1016/j.ecolecon.2019.03.021>.
- Di Vaio, A., Lopez-Ojeda, A., Manrique-de-Lara-Penate, C. & Lourdes, T. (2021). The measurement of sustainable behavior and satisfaction with services in cruise tourism experiences. *An empirical analysis, Research in Transportation Business & Management*. DOI: <https://doi.org/10.1016/j.rtbm.2021.100619>.
- Dowling, R. K. (2006). *Cruise ship tourism*. CABI.
- Franzen, A. & Meyer, R. (2009). Environmental attitudes in cross-national perspectives: a multilevel analysis of the ISSP 1993 and 2000. *European Sociological Review*, 26 (2), 219-234. <https://doi.org/10.1093/esr/jcp018>.
- Gadenne, D., Sharma, B., Kerr, D. & Smith, T. (2011). The influence of consumer' environmental beliefs and attitudes on energy saving behaviors. *Energy Policy*, 39 (12), 7684-7694. DOI: 10.1016/j.enpol.2011.09.002.
- Hair, J. F., Money, A. H., P, M. & Samouel, P. (2007). *Research methods for business*. John Wiley & Sons.
- Han, H. & Hyun, S.S. (2019). Cruise tourism motivations and repeat cruising behavior: impact of relationship investment. *Current Issues in Tourism*, 7 (22), 786-805. <https://doi.org/10.1080/13683500.2017.1313204>.
- Han, H., Olya, H.G.T., Kim, J. & Kim, W. (2018). Model of sustainable behavior: Assessing cognitive, emotional and normative influence in the cruise context. *Business Strategy and The Environment*, 27, 789–800. DOI: 10.1002/bse.2031.
- Herz, M., 2002. Cruise control. *A report on how cruise ships affect the marine environment on behalf of The Ocean Conservancy*, Washington DC, USA. Retrieved November 10, 2018, from <http://www.footprintnetwork.org>
- Howard, D. J., & Gengler, C. (2001). Emotional contagion effects on product attitudes. *Journal of Consumer Research*, 28, 189-201.
- Johnson, D. (2002). Environmentally sustainable cruise tourism: A reality check. *Marine Policy*, 26(4), 261-270. [https://doi.org/10.1016/S0308-597X\(02\)00008-8](https://doi.org/10.1016/S0308-597X(02)00008-8).
- Jurado-Rivas, C. & Sanchez-Rivero, M. (2019). Willingness to pay for more sustainable tourism destinations in world heritage cities: the case of Caceres, Spain. *Sustainability*, 11 (21): 5880. DOI: 10.3390/su11215880.
- Karlis, T. & Polemis, D. (2018). Cruise homeport competition in the Mediterranean. *Tourism Management*, 68, 168-176. doi.org/10.1016/j.tourman.2018.03.005.

- Klein, R.A. (2011). Responsible Cruise Tourism: Issues of Cruise Tourism and Sustainability. *Journal of Hospitality and Tourism Management*, 18, 107-116. <https://doi.org/10.1375/jhtm.18.1.107>.
- Kowalski, S. & Veit, W. (2018). *Aligning sustainability and competitiveness in international supply chains: a consumer driven approach*. L'Industria, Nuova Serie. Il Mulino, 39 (4), 583-614.
- Lamb, L., 2019. Changing preferences for environmental protection: evidence from volunteer behavior. *International Review of Applied Economics*. 33 (3), 384-401. <http://dx.doi.org/10.1080/02692171.2018.1510906>.
- Laufer, D. & Coombs, W. T. (2006). How should a company respond to a product harm crisis? The role of corporate reputation and consumer-based cues. *Business Horizons*, 49(5), 379-385. <https://doi.org/10.1016/j.bushor.2006.01.002>.
- Logunova N., Kalinkina S., Lazitskaya N. & Tregulova I. (2020). *Specifics of cruise tourism and features of creating a cruise tourism product*. E3S Web Conf. 217 DOI: <https://doi.org/10.1051/e3sconf/202021705005>.
- Lowe, A.M. & Sealey, K.S. (2002). *Ecological and economic sustainability of tropical reef systems: Establishing sustainable tourism in the Exuma Cays, Bahamas*. Conference: International Symposium on Coastal and Marine Tourism, VANCOUVER, CANADA, April 26-29, 1999. 183-193.
- MacNeill, T. & Wozniak, D. (2018). The economic, social, and environmental impacts of cruise tourism, *Tourism Management*, 66, 87-404. doi.org/10.1016/j.tourman.2017.11.002.
- MedCruise (2018). A MedCruise report - cruise activities in MedCruise Ports, 2017 Statistics, Piraeus. Retrieved July 20, 2018, from http://www.medcruise.com/sites/default/files/2018-03/cruise_activities_in_medcruise_ports-statistics_2017_final_0.pdf.
- Mizumoto, K. & Chowell, G. (2020). Transmission potential of the novel coronavirus (COVID-19) onboard the Diamond Princess Cruises Ship, 2020. *Infectious Disease Modelling* 5, 264–270. <https://doi.org/10.1016/j.idm.2020.02.003>.
- Murena, F., Mocerino, L., Quaranta, F. & Toscano, D. (2018). Impact on air quality of cruise ship emissions in Naples, Italy. *Atmospheric Environment*, 187, 70-83. <https://doi.org/10.1016/j.atmosenv.2018.05.056>.
- Mwanza, B.G., Mbohwa, C. & Telukdarie, A. (2018). Strategies for the Recovery and Recycling of Plastic Solid Waste (PSW): A Focus on Plastic Manufacturing Companies. *Procedia Manufacturing*, 21, 686–693. doi: 10.1016/j.promfg.2018.02.172
- Okumus, F., van Niekerk, M., Ali Koseoglu, M. & Bilgihan, A. (2018). Interdisciplinary research in tourism. *Tourism Management*, 69, 540-549. <https://doi.org/10.1016/j.tourman.2018.05.016>.
- Paiano, A., Crovella, T. & Lagioia, G. (2020). Managing sustainable practices in cruise tourism: the assessment of carbon footprint and waste of water and beverage packaging. *Tourism Management*, 77, 104016. <https://doi.org/10.1016/j.tourman.2019.104016>.
- Pan, T., Shu, F., Kitterlin-Lynch, M. & Beckam, E. (2021). Perceptions of cruise travel during the COVID-19 pandemic: Market recovery strategies for cruise businesses in North America. *Tourism Management*, 85, 104275, <https://doi.org/10.1016/j.tourman.2020.104275>.
- Papathanassis, A. & Beckmann, I. (2011). Assessing the 'poverty of cruise theory' hypothesis. *Annals of Tourism Research*, 38(1), 153-174. <https://doi.org/10.1016/j.annals.2010.07.015>.
- Pavesi, A., Gartner, W., & Denizci-Guillet, B. (2016). The effects of a negative travel experience on tourists' decisional behavior. *International Journal of Tourism Research*, 18, 423-433. <https://doi.org/10.1002/jtr.2060>.
- Penz, E., Hofmann, E. & Hartl, B. (2017). Forecasting sustainable travel behavior: role of sustainability labels and goal-directed behavior regarding touristic services. *Sustainability*, 9 (6): 1065. DOI: 10.3390/su9061056.

- Popiolek, I.U. (2014). Cruise industry in the City of Gdynia, the implications for sustainable logistic services and spatial development. *Procedia – Social and Behavioral Sciences*, 151, 342–350. doi: 10.1016/j.sbspro.2014.10.032.
- Pulido-Fernández, J.I., Cárdenas-García, P.J. & Espinosa-Pulido, J.A. (2019). Does environmental sustainability contribute to tourism growth? An analysis at the country level. *Journal of Cleaner Production*, 213, 309-319. <https://doi.org/10.1016/j.jclepro.2018.12.151>
- Remondino, M., Penco, L. & Profumo, G. (2019). Negative events in the cruise tourism industry: The role of corporate responsibility and reputation in information diffusion. *Tourism in Marine Environments*, 14(1/2), 61-87. DOI: 10.3727/154427319X15471560218888.
- Rico, A., Martínez-Blanco, J., Montlleó, M., Rodríguez, G., Tavares, N., Arias, A., & Oliver-Solà, J. (2019). Carbon footprint of tourism in Barcelona, *Tourism Management*, 70, 491-504. doi.org/10.1016/j.tourman.2018.09.012.
- Rocklöv, J., Sjödin, H. & Wilder-Smith, A. (2020). COVID-19 outbreak on the Diamond Princess cruise ship: Estimating the epidemic potential and effectiveness of public health countermeasures. *Journal of Travel Medicine*, 27(3). DOI: 10.1093/jtm/taaa030.
- Rodrigue, J. P., & Notteboom, T. (2012). *The geography of cruise shipping: Itineraries, capacity deployment and ports of call*. International Association of Maritime Economists (IAME) conference.
- Ryschka, A. M., Domke-Damonte, D. J., Keels, J. K., & Nagel, R. (2016). The effect of social media on reputation during a crisis event in the cruise line industry. *International Journal of Hospitality & Tourism Administration*, 17(2), 198-221. <https://doi.org/10.1080/15256480.2015.1130671>.
- Schafer, M., Jaeger-Erben, M. & dos Santos, A. (2011). Leapfrogging to sustainable consumption? An explorative survey of consumption habits and orientations in southern Brazil. *Journal of Consumer Policy*, 34 (1), 175-96. DOI: 10.1007/s10603-010-9150-5.
- Shuai, S., Zhihua, T. & Meiting, F. (2018). Do the rich have stronger Willingness to Pay for environmental protection? New evidence from a survey in China. *World Development*, 105, 83-94. <https://doi.org/10.1016/j.worlddev.2017.12.033>.
- Smirnov, A., Smolokurov, E., Timofeeva, E. & Krovsh, S. (2022). Features of development of sea cruise tourism, XII International Conference on Transport Infrastructure: Territory Development and Sustainability, *Transportation Research Procedia*, 61, 147-154, doi: 10.1016/j.trpro.2022.01.024.
- Statista (2021). Cruise industry worldwide - statistics & facts. Statista Research Department. Retrieved September 20, 2021, from <https://www.statista.com/topics/1004/cruise-industry/>
- Sun, C., Yuan, X. & Yao, X. (2016). Social acceptance towards the air pollution in China. Evidence from public's willingness to pay for smog mitigation. *Energy Policy*, 92, 313-324. <http://dx.doi.org/10.1016/j.enpol.2016.02.025>.
- Svaetichin, I. & Inkinen, T. (2017). Port Waste Management in the Baltic Sea Area: A Four Port Study on the Legal Requirements, *Processes and Collaboration. Sustainability*, 9 (699). doi: 10.3390/su9050699
- Tan, S-K., Tan, S-H., Luh, D-B., Kung, L & Kung, S-F. (2016). Understanding tourist perspectives in creative tourism. *Current Issues in Tourism*, 10 (19), 981-987. <https://doi.org/10.1080/13683500.2015.1008427>.
- Tiba, S. & Omri, A. (2017). Literature survey on the relationship between energy, environment and economic growth. *Renewable and Sustainable Energy Reviews*, 69, 1129-1146. <http://dx.doi.org/10.1016/j.rser.2016.09.113>.

- Vega-Munoz, A., Arjona-Funtes, J.M., Ariza-Montes, A., Han, H. & Law, R. (2019). In search of a “research front” in cruise tourism studies. *International Journal of Hospitality Management*. <https://doi.org/10.1016/j.ijhm.2019.102353>.
- Vermeir, I. & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer “attitude - behavioral intention” gap. *Journal of Agricultural & Environmental Ethics*, 10 (2), 169-194. DOI: 10.1007/s10806-005-5485-3.
- Wang, S., Zhen, L. & Zhuge, D., 2018. Dynamic programming algorithms for selection of waste disposal ports in cruise shipping. *Transportation Research Part B*. 235-248. <https://doi.org/10.1016/j.trb.2017.12.016>.
- Werma, R., Vinoda, K.S., Papireddy, M. & Gowda, A.N.S. (2016). Toxic Pollutants from Plastic Waste – A Review. *Procedia Environmental Sciences*, 35, 701–708. doi: 10.1016/j.proenv.2016.07.069.
- Wild, P., & Dearing, J. (2000). Development of and prospects of cruising in Europe. *Maritime Policy & Management*, 27(4), 315-333, 2000. <https://doi.org/10.1080/030888300416522>.
- Zeppel, H., 2012. Collaborative governance for low-carbon tourism: climate change initiatives by Australian tourism agencies. *Current Issue in Tourism*, 7 (15), 603-626. <https://doi.org/10.1080/13683500.2011.615913>.
- Zhen, L., Li, M., Hu, Z., Lv, W. & Zhao, X. (2018). The effects of emission control area regulations on cruise shipping. *Transportation Research Part D*, 62. 47-63. <https://doi.org/10.1016/j.trd.2018.02.005>.
- Zheng, J., Zhang, H., Yin, L., Liang, Y., Wang, B., Li, Z., Song, X. & Zhang, Y. (2019). A voyage with minimal fuel consumption for cruise ships. *Journal of Cleaner Production*, 215, 144-153. <https://doi.org/10.1016/j.jclepro.2019.01.032>.
- Zuin, S., Belac, E. & Marzi, B. (2009), Life cycle assessment of ship-generated waste management of Luka Koper. *Waste management*, 3026-3046.

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Tourism in Slovakia in the Times of COVID-19 Pandemic – Communication of the Municipalities with Tourists

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Abstract: *In this chapter, we deal with the importance of marketing communication in tourism, especially when it comes to the COVID-19 pandemic and the recovery of Slovak municipalities after it. According to revised OECD estimates, the decline in international tourism will be in the range of 60% to 80%. This chapter aims to deal with the effects of the COVID-19 pandemic on tourism, while we also present the results of our research, which deals with marketing communication in Slovakian regions. We use the comparison on the occasion of comparing the number of visitors in Slovakia and the number of overnight stays in January, February and March in the 2017 – 2021 years. We also present results from the correlation, which evaluate the relationship between chosen variables.*

1. INTRODUCTION

The outbreak of the pandemic, which is related to a worldwide spread of a COVID-19 and its direct shock to the area of tourism has caused that in the present this industry is reaching a significant loss. Based on the revised OECD estimates (2020), the decrease in international tourism will range from 60% to 80%, depending on the length of the recovery. The World Tourism Council (WTTC, 2020) stated that in the recent period, the direct and significant decrease in tourism was due to the financial and economic crisis of 2009, with the current situation caused by the COVID-19 virus estimated to have a much more serious impact on the industry. The current situation in the industry, on the other side, is perceived as an opportunity for the modernization of tourism in the European Union, which would be in accordance with environmental and social responsibility (Sigela, 2020, Vigliarolo, 2020). On the other side, a significant drop in sales in the sector is perceived. From the point of view of the accommodation sector in the territory of the SR, for example, there was the most significant drop in revenues in April 2020 (by 84.7% year-on-year). In May of the same year, revenues from own services and goods in the accommodation sector fell by 81.6%, and due to the gradual release, a decrease in revenues by 61.2% was registered in June. In July, sales fell by only 29% (OECD, 2020). Based on the data, even the timely introduction of anti-pandemic measures did not help to revive the restrictions imposed until then at the time of the release. A restart of the tourism industry calls for taking immediate short-term and long-term support measures (Kumudumali, 2020). From this point of view, attention is currently on eliminating the economic effects on the entire tourism industry. In some countries, measures to revive tourism had already been undertaken.

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A significant role in the development of tourism infrastructure is played by regions (Hrout & Mouhamed, 2014). The development of tourism infrastructure by the local government mainly includes the construction of cycle paths (which is a financial and time-consuming task, and therefore concrete results are manifested over time), marking of tourist routes and the development of other supporting infrastructure (examples are lookout towers). Regions also support OOCR, implement marketing or create their own agencies to support the local economy and products.

In recent years, more and more emphasis has been placed on the quality of services provided and their marketing communication in tourism. Tourists in domestic tourism often compare the destinations of tourism and their primary and secondary offer. It is therefore important to how the aim spots are presented, what marketing communication tools they use, but also how the aim spots are perceived by visitors (Bramwell & Lane, 2011). This perception can be influenced by marketing communication tools. Marketing communication tools are constantly evolving. This emphasizes the two-way communication between the creators of marketing communication and visitors.

2. LITERATURE REVIEW

2.1. Marketing of tourism and its specifics

Tourism is an important factor in any national economy. In the countries of the European Union, it plays an important role, especially in terms of economic and social indicators of the EU economy. In terms of the primary definition of tourism, the Ministry of Transport and Construction of the Slovak Republic (2020) defines tourism as “a set of activities aimed to meet the needs related to travel and residence of persons outside their place of residence and usually in leisure time. Their aim is rest, cognition, health, entertainment, cultural and sports activities, business trips, it means gaining a comprehensive experience” (Ministry of Transport and Construction of the Slovak Republic, 2020). An important concept connected to the tourism sector is also the tourism product, which is a type of service offered by the destination, tourism operators, including tourism institutions (in this case, the so-called secondary offer). The main essence of the tourism product specification is to know the needs of customers (Albalate & Bel, 2010), as well as how to use communication tools.

The specifics of marketing in tourism can be stated as follows (Butoracová Šindleryová & Hoghová, 2020):

1. Dependence on the political and legislative terms of a country - the situation in the markets is often directly related to the legal system of a given country.
2. Intangibility of tourism products - the final tourism products are intangible, these are services. We cannot produce or store services for the future.
3. Local connection and direct connection of the destination with the surrounding area, place and environment - the final destination is a mirrored picture of the surrounding nature, environment and thus directly affects the offered services or the feelings of visitors.
4. Seasonal nature of tourism - the market and its conditions are significantly influenced by weather and other natural factors, which are often unpredictable.
5. Tourism uses mainly human capital – when it comes to offering quality services, there is a supportive and non-conflicting approach of staff, through which guests come into direct contact.
6. Close interconnection of demand and an offer - even small fluctuations in the needs of customers or offers of individual regions will be immediately demonstrated on the market.

7. Demand - depends to a large extent on the pensions of the population, the amount of leisure time, the prestige of the products and the overall standard of living of the country. These ultimately create overall consumer preferences, desires and individual needs that create demand.
8. Technological impact on the industry - the development of modern technologies is a relatively important factor in the composition of the tourism market. This factor has the greatest impact on the transport component of travel but is also reflected in the provision of specific services. These can be administered better, effectively, easily and largely adjust the overall nature of the specific experiences that are expected by consumers from the offer.

Tourism as an industry has its specifics as well as marketing in it (Jánošová, 2017). These are associated with the specific characteristics of the market for goods and services. However, it has several characteristics that can only be found within it. The result can be found from the nature of the needs satisfied by tourism as well as the nature of the individual goods offered to tourism. The specificities of this sector are mainly reflected in the signs of supply and demand. When it comes to the creation of new markets or market segments it is always a long-term process (Gössling et al., 2020). Large investments are needed to build the infrastructure as well as high costs for advertising and promotion. Aim groups must know about the destination, and have enough information about it as well as good recommendations from well-known persons or service providers.

2.2. Marketing communication in tourism

Marketing communication of the regions as destinations for tourism has become the main topic of several authors in recent years. On the one side, this is due to the development of tourism, which affects regional development, on the other side, due to the personal approach to the marketing of destinations. The creation of marketing communication in tourism regions in Slovakia should be based on the fact that these regions are characterized by regional disparities that affect their competitiveness (Gregorová, et al., 2015, Šoltés & Repková Štofková, 2016). Besides that, it is necessary to emphasize in the marketing communication the uniqueness of these regions and the tourism services that are provided in them. Marketing communication is allowing visitors in tourism regions to make the services provided available, which reduces their uncertainty and allows them to make better use of these services. In the marketing communication of services, as well as in the marketing communication of regions, higher demands are placed on choosing the right tool. It is necessary to take into account that the regions are constantly changing organisms and respond to changes in society, but also in the economy and politics.

We can state that the success of marketing regions in domestic tourism is depending mainly on the effectiveness of marketing activities (Bichler, 2019). Therefore, emphasis is placed on their motivation, choice and characteristics. Success also determines how regions can communicate these activities with visitors in domestic tourism.

When it comes to a geographical point of view, we distinguish between domestic and foreign tourism. Domestic tourism is according to Gretzel and Scarpino-Johns (2018) “travel and stay of the domestic population in their own country in order to use their free time for rest, exploration, entertainment, cultural and sports use, etc., if it does not exceed 6 months.” Domestic tourism is a form of tourism in which the visitor in travel does not exceed the territory of the state. We understand domestic tourism as tourism involving the local inhabitants of the country, who travel only within the country.

The development of domestic tourism is conditioned by effective marketing communication and properly chosen tools for the creation and promotion of products of tourism regions according to the aim of visitor groups. As a product of tourism regions, we understand the comprehensive range of services, which the region offers. Therefore, it serves to meet collective and individual needs, and thus for the needs of local people, visitors, potential investors and entrepreneurs. The main aim of marketing communication is to influence the decisions of visitors to tourism regions in order to support the sale of tourism services. Gretzel (2020) agrees with this principle of marketing communication. Szymanska (2018) specifies that marketing communication includes all types and forms of communication that can influence the attitudes, knowledge and behavior of visitors when choosing and buying tourism services. According to Deuz (2020), marketing communication in the field of tourism is “the creation of an effective system, informing consumers and other market participants about products, their price and properties, the place and time in which they can be gained and other important facts.”

2.3. Tourism and its benefits for the region

Tourism involves the movement of people to countries or places outside the usual environment for various purposes, which is mainly linked to the spot (destination) in which the primary and secondary supply of tourism is concentrated. Even though the term of the destination is not precisely defined, it can be approached from several perspectives (Andrades & Dimanche, 2019). From the geographical point of view, it is an area that has the potential to attract customers and can be created traditionally or artificially (for example, amusement parks). Given that the offer of a given location is important for the destination, the destination can also be defined as a “naturally defined whole, which has unique features different from other destinations in terms of tourism development conditions; these unique features include attractions that offer services and infrastructure” (Gregorová, 2015).

The OECD in 2020 found two trends in tourism, which are described quite extensively and include the previous more specified trends in tourism:

1. Preparing tourism businesses for the digital future. The standard for tourism businesses is to have website design and social media communication. In this way, companies are adapting not only to the current but especially to the upcoming Z generation and the Millennium, which will form a decisive component of tourism participants by 2040. The task of companies in the field of tourism, which want to succeed in the market in the coming years, is to use digital technologies as much as possible so that they adapt to the emerging clientele. The government plays an important role in preparing the offer of tourism products. Its role should be to secure the area with high-speed internet, support innovation, develop smart destination tourism, create and support travel-tech incubators.
2. Rethink tourism from a sustainability perspective. The availability of individual travel enabled its mass. Some localities have thus become overcrowded, which can have negative consequences for nature, cultural and historical monuments, monuments, but also for the local population. In tourism, it is important not only the number of visitors and the number of tourists who visit the site but also the contribution of tourists to the destination itself. The ability to maintain a balance between the three pillars of tourism - economic, social and environmental - is now becoming even more important. An important element is the cooperation of all stakeholders. In addition to businesses in the field of tourism, they are also voluntary, non-profit organizations, strategic visions of the city, the region and the entire state. The role of the government is to develop a future vision, based on which tourism entities know where and how to direct their activities.

When it comes to the development of tourism, it is primarily dependent on the development of a specific destination. In order to be able to develop tourism in the long term while respecting the three basic pillars of sustainable tourism - economical, environmental and social, it is necessary to set a strategy for tourism development, which is then concretized by individual tourism companies in the destination (Dwyer et al., 2016). When it comes to the case of traditional destination cities, the strategy for the development of the destination site is set by the city or the relevant Higher Territorial Unit. In addition to tourism companies, tourism organizations also operate in Slovakia (at the regional level) (Pauhofová & Stehlíková 2018, Tamásy, 2006). They aim to support and develop tourism at the national level, i.e. associations, unions, clusters and networks of tourism enterprises. Their work ultimately brings the region funds in the form of an influx of tourists.

2.4. Tourists as consumers of tourism

Consumer behavior has a dynamic character, which means that with the growth of needs and desires and opportunities to satisfy them, the consumer's orientation visibly changes towards quantitative and qualitative consumption. The meaning of the word consumer must be distinguished from the meaning of the word customer. The consumer as a marketing concept represents only one of the possible types of customers (Jánošová, 2017). Customers (subscribers) can be divided into the following groups:

- Consumers - people and households. Consumers buy products for their own use.
- Manufacturers - companies. They buy products for their further use (processing and production).
- Traders - individuals and organizations. They buy products to resell them.
- State - state institutions, authorities and non-profit organizations. They buy products to perform public services.
- Foreign customers - any of the above groups whose residence, registered office or place of business is located in a foreign state.

The basic indicator of the analysis of consumer behavior in tourism is consumer satisfaction itself (Grillitsch & Sotarauta, 2020), which depends on his feelings, his pleasure or disappointment, and his expectations, which are compared with the comparison of consumer utility with usefulness expected. The consumer in tourism is of interest due to the dynamic nature of consumer behavior. The consumer in tourism is currently characterized by (Bakar & Rosbi, 2020):

- high demands and insight into the procurement and consumption of services, which can be attributed to previous positive or negative experiences with traveling to domestic or foreign destinations,
- higher availability of information thanks to new and constantly improving technological advances,
- begins to abandon the preferences of material consumption of goods and focuses its attention on the area of quality of life, where the need for self-realization with efficient use of free time dominates,
- consumer segments are gradually emerging, which are characterized by a high degree of individualization in the consumption of services; groups of consumers are emerging who have special needs and interests in the field of leisure, gastronomy or social activities,
- consumer is in tourism now understood as a “challenger” - a person who determines which service he is interested in and which service he does not accept. Entrepreneurs doing business in the tourism sector must respond adequately and flexibly and adapt the offer to meet the requirements of the consumer and also exceed his expectations. In the past, the offer was made by the service provider and the consumer was a passive recipient of the service.

3. METHODOLOGY

Within the European Union, in 2019 the average share of tourism was 9.5% of GDP and employed on average 11.2% of the total number of employed persons. An above-average share of tourism within the EU-2810 countries was registered in Spain (14.3%) and Italy (13%). Compared to the average values of the EU 28 countries, the representation of tourism in the V4 countries is lower (OECD, 2019, WTTC, 2019). In 2019, Poland had the lowest share of tourism in GDP (only 4.7%), employing 5% of the total number of employed persons.

Table 1. Tourism in V4 countries and EU in 2019

Country	Tourism/GDP	Employees in tourism	Employees in tourism %
Slovak republic	6,3%	162 000	6,3%
Czech republic	6,5%	414 400	8%
Hungary	8,3%	449 200	10%
Poland	4,7%	811 800	5%
EU	9,5%	22 600 000	11,2%

Source: World Travel and Tourism Council, 2021

The second country with the lowest share of tourism in the group is Slovakia, where tourism accounts for 6.3% of GDP and accounts for the same percentage of employment. In the Czech Republic, tourism accounts for 6.5% of gross domestic product and 8% of employment. The highest share of tourism is in Hungary, where it accounts for 8.3% of GDP and 10% of total employment (OECD, 2020). From the point of view of evaluating the performance of tourism, an important indicator is the number of overnight stays of tourists in a given country (Bakar & Rosbi, 2020). Overnight stays express the performance and popularity of a given country.

The restrictions resulting from the spread of COVID-19 in 2020 have hit the tourism industry the hardest. Services offered by companies and businesses in the field of tourism, such as accommodation, catering, transport services, arts and entertainment, fell by tens of percent year on year (Farzanegan et al., 2020). In the first wave of the pandemic that hit Europe in the spring of this year, in some cases, there could have been a 100% drop in sales across the industry for several weeks (Gössling et al., 2020). Such a development was significantly reflected in the development of GDP in countries where tourism is one of the main industries of the economy. From the available Eurostat data for the first three quarters of 2020, we can find all popular tourist destinations at the top of the EU countries with the largest economic downturn, such as Spain, France, Italy, etc. Within Slovakia, the GDP fell by -6% per 1 to Q3 2020.

In the country, the size of tourism can be very well expressed by the number of nights spent in hotels and other tourist accommodations. In this respect, Slovakia turned out relatively favorably, with a decrease of 37% year-on-year in the first nine months of 2020. Foreign tourists make up more than a third of all guests in Slovak hotels and accommodation facilities. In 2020, their number fell by half, while the number of overnight stays of Slovak tourists fell by 30% compared to 2019 (Eurostat, 2019).

When it comes to the situation in tourism before the corona crisis in 2019, the greatest demand within Slovakia was for accommodation in the Žilina region. Paradoxically, however, it did not dominate the popularity of domestic or foreign travelers. Among the domestic, the Prešov region with the Tatras was the most popular, and among the foreigners, the Bratislava region with the capital of Slovakia was the most interesting. However, restrictions on travel have brought

significant changes in the number of visitors to Slovak regions. Urban destinations, which are attracting a mix of typical travelers and tourists, but also workers, took it the most (Butoracová Šindlerová & Hoghová, 2020). Žilina region thanks to this, in 2020 became the most visited by both domestic and foreign travelers.

In this contribution, we present the results of our marketing research in 2020, which deals with marketing communication between specific regions of Slovakia and the public, while also taking into account their tourists. In the contribution, we use a comparison the occasion of comparing the number of visitors to Slovakia and the number of overnight stays in January, February, and March in the years 2017 - 2021. In the contribution we present the results of correlation to express the dependence between the specified variables. We also deal with the analysis of our selected items from the questionnaire, which we determined based on their relevance to our presented issues. For overall clarity and comprehensibility, we present the results of the research graphically processed.

4. RESULTS

In our contribution's practical part, we present graphically processed results of research carried out in the form of a questionnaire in July, and August 2020, in which 12 cities and 203 municipalities of the Slovak Republic participated. These results focus on the communication of the regions with the public, taking into account visitors/tourists. In the practical part, we also included a comparison of the number of visitors to Slovakia and the number of overnight stays (number of nights) in January, February, and March (total) in the years 2017, 2018, 2019, 2020, 2021.

In the following graph, we present a comparison of visitors to our country with visitors who stayed for the night, taking into account the foreigner and our citizens. The graph is divided into 5 blocks/years - from 2017 to 2021. The data are valid for January, February, and March (total). These specific months are chosen, as the statistics on attendance and overnight stays for 2021 and the remaining months are not yet known.

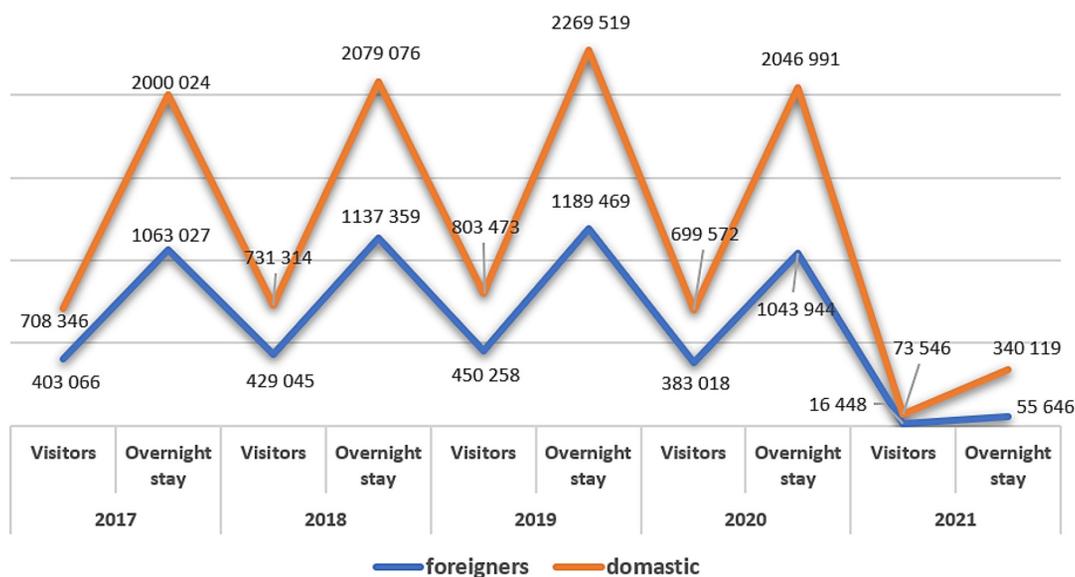


Figure 1. Visitors/Overnight stays

Source: Own processing based on Slovak Statistics - Development of tourism in accommodation facilities in the Slovak Republic

A slight decrease in visitors and the number of overnight stays (for January, February, March) can be seen in 2020 when the number of foreign visitors falls below 400,000 and the number of domestic visitors below 700,000. However, the number of overnight stays (number of nights) for both foreigners and visitors did not show significant differences compared to previous years. A significant decrease did not occur until 2021, when due to measures and the unfavorable pandemic situation, Slovakia registered only 16,448 foreign visitors and 17,546 domestic visitors. The number of overnight stays of domestic visitors decreased from 2 million (2020) to 340,119 thousand, which represents a decrease of 83%, and the number of foreign visitors who decided to spend the night decreases from 1,043,944 to 55,646, which is a decrease of 95%.

If we look at March 2021 from the point of view of individual regions, in the context of visitors and the number of overnight stays, the following data were obtained.

Table 2. Visitors/Number of overnight stays

Region	Visitors	Overnight stays
Bratislava region	9957	24435
Žilina region	5489	24848
Prešov region	4045	21719
Trnava region	4043	26270
Banska Bystrica region	3627	22891
Košice region	3491	8270
Trenčín region	1748	15572
Nitra region	1603	4455

Source: Own processing

Table 3. Correlation Visitors/Overnight stays

	Visitors	Overnight stays
Visitors	1	
Overnight stays	0.586233056	1

Source: Own processing

Table 4. Cohen's interpretation of the correlation model

Cohen's interpretation of the correlation model	
Pxy	Interpretation
0,0 - 0,1	trivial correlation
0,1 - 0,3	low
0,3 - 0,5	medium
0,5 - 0,7	high
0,7 - 0,9	very high
0,9 - 1,0	almost perfect

Source: Own Processing

In the Bratislava region in March 2021, it was recorded that there was the highest number of visitors; the lowest number of visitors in the mentioned month was reported in the Nitra region. The number of overnight stays was the highest in the Trnava region and the lowest again in the Nitra region.

In the context of the statistical dependence between the number of visitors to Slovakia and the number of overnight stays in March 2021, we obtained the following data. After substituting the variables into the correlation calculation, we got a result of **0.586**. The independent variable X

represented the *Number of visitors*, the dependent variable Y represented the *Number of overnight stays*. The relationship between these 2 variables is expressed by the already mentioned result of 0.586. The closer the result is to $k + 1.0$ or $k - 1.0$, the more dependent the relationship between the examined variables. Our result expresses a dependence that is large/high according to the interpretation of the Cohen correlation coefficient, as it is in the range of 0.5 - 0.7.

Twelve cities and 203 municipalities participated in the questionnaire survey, which we carried out in August and September 2020. The respondents were employees of the city and municipal authorities; within the cities, we primarily addressed the departments of regional/strategic development and marketing, and within the municipalities, we targeted the questionnaire directly to the mayor or deputy. The questions in the individual sections are aimed at finding out the current situation and progress in the implementation of marketing communication at the regional level in the areas of internal communication, communication with citizens, entrepreneurs and visitors. For the needs of the article, we selected and graphically processed several questions with answers from respondents.

Do you carry out an analysis/survey of the traffic of your municipality/city, or another survey focused on tourism/tourists?

A well-functioning organization is acting based on the information it receives. The information obtained, both internal and external, is used to decide on the future direction. This method of obtaining information at the level of regions, and local governments can also be used. Data obtained from the field can serve as a powerful tool for changing decision-making models and ways to meet the set goal not only for the organization but also for the municipality and its bodies. We were therefore interested in whether the surveyed authorities carried out surveys within their region in order to find out certain facts.

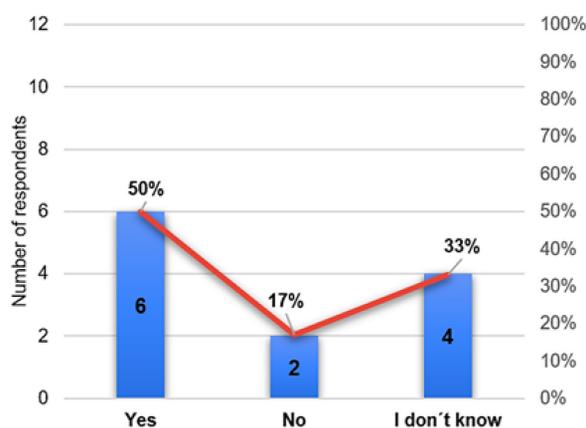


Figure 2. City - survey of the traffic or another research

Source: Own processing

This survey is carried out in 6 cities, thus equal to 50% of the respondents. Respondents who marked Yes work in the Department of Territorial and Strategic Development. Two respondents indicated the option No, so the survey did not have to be carried out during their work at the office, but it is necessary to take into account the possibility that it was carried out in previous periods and also does not exclude its possible future implementation. Four respondents were in favor of the answer I don't know; the knowledge of internal employees about the surveys carried out is a great advantage in the progress of the city. There are various possibilities to use the collected data.

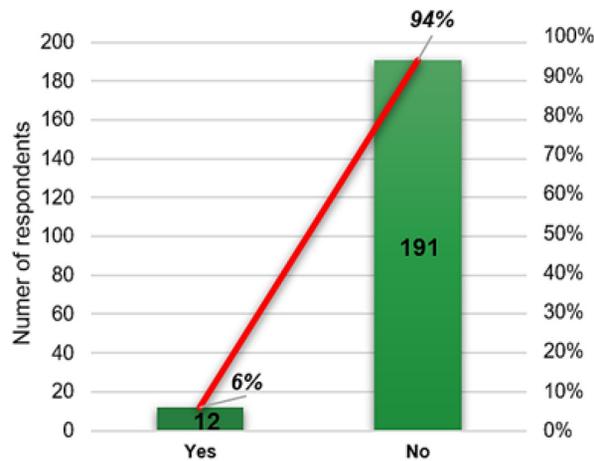


Figure 3. Municipality - survey of the traffic or another research

Source: Own processing

In the case of municipalities questionnaires, we can see the predominance of negative answers. Most respondents answered “No” to the question of conducting surveys. “Yes” was indicated by 12 respondents and the option “No” by the remaining 191 respondents. The implementation of surveys in municipalities has the advantage of a simpler direct address, again we assumed a significantly lower number of choices of option No.

Does your municipality/city have a tourist office/tourist center?

The tourist office or center serves primarily to provide information about the region, leisure opportunities, providing guide services with qualified guides, organizing themed trips, and programs. They also offer promotional materials linked to the region and inform about the possibilities for visitors.

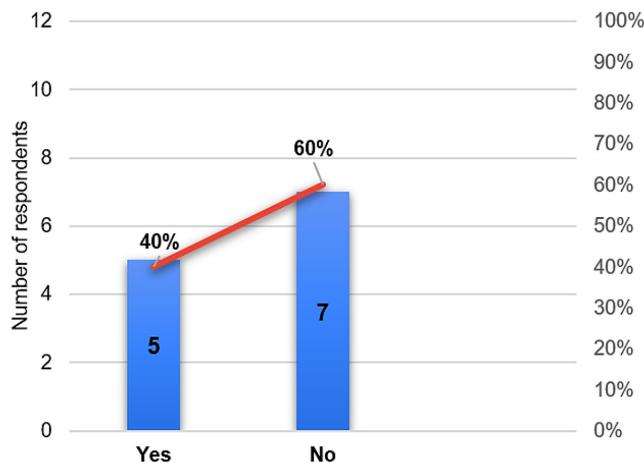


Figure 4. City – tourist office/tourist center

Source: Own processing

More than half of the surveyed cities have a tourist office, which tourists can use if interested. The operation of these offices is most regular primarily during the period of the highest attendance in the region and during the so-called “deaf” months, their operation is limited. From the point of view of visitors, however, it is desirable to have at least a seasonal tourist office, which is available for them if necessary.

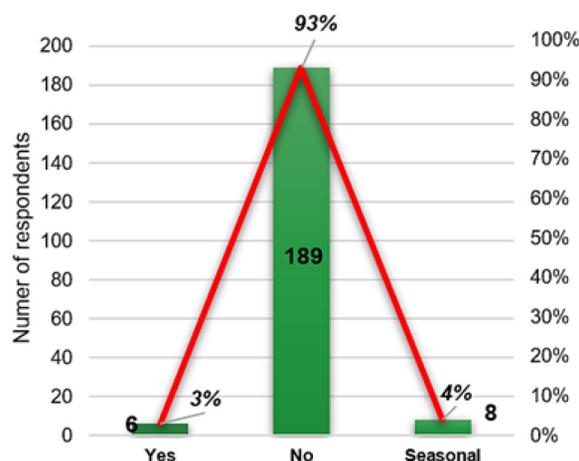


Figure 5. Municipalities - tourist office/tourist center

Source: Own processing

The tourist office is created mainly in those villages that are located near attractions of various kinds and are an attraction from the visitor's point of view. In addition to the tourist office, these municipalities also have other services/businesses that have a chance to “survive” outside the city bustle precisely because of the nearby tourist attraction.

Does your municipality/city have the marketing department or the person(s) entrusted with these activities?

In the sphere of regions and local governments, cities and municipalities have an important function, and that is the concentration and direction of the development of the relevant territorial units. The application of marketing management to the decision-making process has a direct influence on this function. However, this cannot be done without the relevant experts in the field of marketing cities and municipalities.

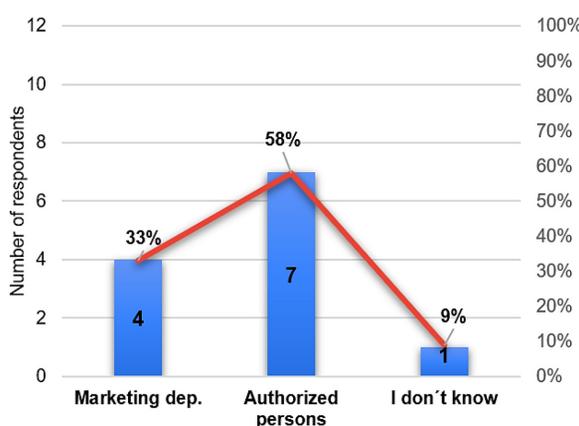


Figure 6. Cities - Marketing department

Source: Own processing

The specific section dedicated to marketing activities has four cities out of 12. The authorized persons, who are responsible for the management and implementation of these activities, have 7 seats and to the given question 1 answered “I don't know”. The four cities that identified the first option (established Marketing Department / Section) are the largest in terms of population within the cities involved in the research.

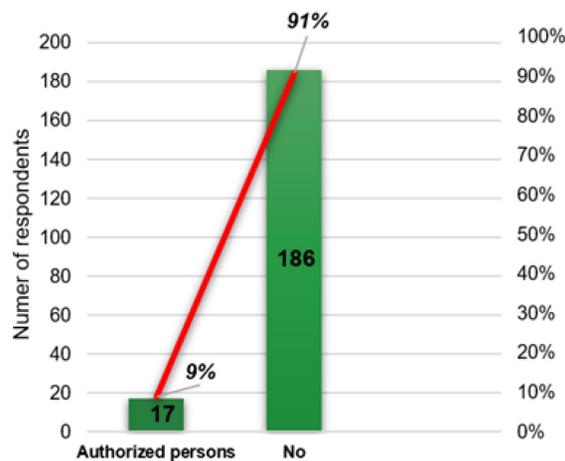


Figure 7. Municipalities – Marketing department

Source: Own processing

The marketing department does not have any of the municipalities established. Given the structure of municipal offices, sizes and budget, we did not even expect an answer of this type. What surprised us, however, was the finding that the authorized persons who would be in charge of marketing activities are not represented in larger numbers. Only 17 municipalities out of 203 stated that they have such a person.

At present, in addition to their primary tasks of consolidating their economic, political and social position in an increasingly competitive environment, cities and municipalities must also meet the wishes and needs of those interacting with the territory. Marketing and its tools are inextricably linked to this. By using them synergistically, it is possible to influence target groups and create a positive image of the city or village. The most visible tool of the marketing mix is marketing communication and its communication mix. The specificity of marketing communication at the regional level lies primarily in its objectives, which, even if they are set for any purpose, the result is always reflected in increasing the well-being of citizens in various areas.

5. DISCUSSION AND FUTURE RESEARCH DIRECTIONS

The future of tourism in Slovakia is going to be marked by increasing pressure on competitiveness. As a consequence, changing aims, trends, new possibilities for fast and cheap travel and other facts can be marked. The solution to success can be described as marketing elements implemented in the field of tourism; for example, the media represent an ever-increasing opportunity to increase the awareness of the given locality among the target group. However, this requires a thoughtful approach and strategy, which should be developed under a collective vision of specified categories of tourism. The resulting cooperation and communication at the regional and local levels lead to strong partnerships between tourism marketing stakeholders /stakeholders.

When it comes to the case of creating a concept of tourism support, it is important to realize that the diversity of tourism in Slovakia can also be a significant obstacle in determining further development. In determining the strategy of tourism development, it is crucial to consider the specific needs of individual types of tourism, in the sense of which, for example, urban type of tourism needs other incentives such as rural type of tourism or tourism in emerging destinations. In this respect, there should be a specification of the categorization of tourism and the subsequent prioritization of objectives. The tourism industry is also associated with the general

shortage of skilled labor in Slovakia. Given the seasonal nature of tourism and the labor intensity of the industry (both skilled and unskilled labor), it is problematic to ensure sufficient manpower to maintain the scope and quality of products and services provided in the industry. Representatives of entrepreneurs in the industry point out that in recent years this shortcoming has become an increasing obstacle to further development and increasing competitiveness.

6. CONCLUSION

Besides the national concept of tourism, it is important to focus on the local character and its management, which would take into account the imbalance of traffic in individual regions. The goal should be to link destinations with lower / insufficient traffic and destinations whose visitor capacity is exceeded. Taking into account the specificity of tourism, primarily in terms of seasonality and workforce, it is necessary to think about the possibility of employing a workforce outside Slovakia, so of course, there is no obligation to motivate the people of Slovakia to be interested in working in tourism. The business community would welcome new compensation schemes and instruments, whether in the form of a state contribution for them or consumers themselves. The sectoral recovery calls for the completion of the infrastructure as such, especially the lack of missing bike paths, rest areas, insufficient parking in tourist centers and the like. From a marketing point of view, it is mainly about supporting a collective vision of the strategic direction of regions and countries as such, recruiting marketing specialists, creating strong partnerships between stakeholders at all levels and more effective use of marketing communication tools. Within the specific barriers associated with COVID-19, which have arisen in the tourism industry, there is a need to accept and address potential threats arising with regard to the impact on employment, sales, as well as the existence of tourism offer in destinations. The recovery of the industry will depend to a large extent on the development of the epidemiological situation, stimulation of demand for products, i.e. tourism services, as well as the ability to take support measures and the rate of drawing financial assistance intended for businesses in the sector in which economic activity has been completely stopped, respectively, limited by the impact of measures to alleviate the COVID-19 pandemic in Slovakia. According to everything above, addressing the consequences of COVID-19 will be a priority in order to restart it and develop in the future.

ACKNOWLEDGEMENT

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REFERENCES

- Albalate, D., & Bel, G. (2010). Tourism and urban public transport: holding demand pressure under supply constraints, *Tourism Management*, Vol. 31 No. 3, pp. 425-33.
- Andrades, L., & Dimanche, F. (2019). Destination competitiveness in Russia: tourism professionals' skills and competences, *International Journal of Contemporary Hospitality Management*, Vol. 31, No. 2, pp. 910–930. <https://doi.org/10.1108/IJCHM-11-2017-0769>
- Bakar, A. N., & Rosbi, S. (2020). Effect of Coronavirus disease (COVID-19) to tourism industry, *International Journal of Advanced Engineering Research and Science (IJAERS)*, Vol. 7, No. 4, pp. 189-193.

- Bichler, B. F. (2019). Designing tourism governance: The role of local residents. *Journal of Destination Marketing & Management*.
<https://doi.org/10.1016/j.jdmm.2019.100389>.
- Bramwell, B., & Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism*, pp. 411-421.
- Butoracová Šindleryová, I., & Hoghová, K. (2020). Brand Marketing of Regional Products – A Potential of Strategic Tool in Regional Development. *Communication Today*. Vol. 11, No. 1. p. 164-185. ISSN 1338-130X.
- Deuze, M. (2020). The Role of Media and Mass Communication Theory in the Global Pandemic. *Communication Today*. Vol. 11, No. 2, pp. 4-21. ISSN 1338-130X.
- Dwyer, L. et al. (2016). Modified Importance–performance analysis for evaluating tourism businesses strategies: comparison of Slovenia and Serbia. *International Journal Tourism Research*, Vol. 18, No. 4, pp. 327–340. <https://doi.org/10.1002/jtr.2052>
- Farzanegan, M. R. et al. (2020). International Tourism and Outbreak of Coronavirus (Covid-19): A Cross-Country Analysis, *Journal of Travel Research*, Vol. 6, No. 1.
<https://doi.org/10.1177/0047287520931593>
- Gössling, S. et al. (2020). Pandemics, tourism and global change: a rapid assessment of Covid-19. *Journal of Sustainable Tourism*, Vol. 29, No. 1, pp. 1–20.
<https://doi.org/10.1080/09669582.2020.1758708>
- Gregorová, M. et. al. (2015). *Cestovný ruch a regionálny rozvoj*. Banská Bystrica: Univerzita Mateja Bela v Banskej Bystrici Belianum.
- Gretzel, U. et al. (2020). *e-Tourism beyond COVID-19: a call for transformative research*, 22, 187-203.
- Gretzel, U., & Scarpino-Johns, M. (2018). Destination resilience and smart tourism destinations, *Tourism Review International*, Vol. 22. No. 3, pp. 263-76.
- Grillitsch, M., & Sotarauta, M. (2020). Trinity of change agency, regional development paths and opportunity spaces. *Progress in Human Geography*, Vol. 44, No. 4. pp. 704–723.
<https://doi.org/10.1177/0309132519853870>.
- Hrout, S. A., & Mouhamed, B. (2014). *Human Resource Management Practice Tourism and Hotel Industry*,
Retrieved from https://www.shs-conferences.org/articles/shsconf/pdf/2014/09/shsconf_4ictr2014_01076.pdf
- Jánošová, D. (2017). *Regional Marketing from the View of Selected Factors*. Katowice : Wydawnictwo UNIKAT 2.
- Kumudumali, S. H. T. (2020). *Impact of Covid-19 on Tourism Industry: A Review*. MPRA,
Retrieved from <https://mpra.ub.uni-muenchen.de/id/eprint/102834>
- Ministerstvo dopravy a výstavby Slovenskej republiky. *Terminológia vybraných pojmov v cestovnom ruchu*. Retrieved from <https://www.mindop.sk/ministerstvo-1/cestovny-ruch-7/informacie/cestovnyruch/terminologia-v-cr-pdf-183-kb>
- OECD (2019). Regional, rural and urban development.
Retrieved from <http://www.oecd.org/regional/regionaldevelopment.htm>.
- OECD (2020). *OECD Tourism Trends and Policies 2020. Key Findings*.
Retrieved from <https://www.oecd.org/cfe/tourism/2020-Tourism-Brochure.pdf>
- Pauhofová, I., & Stehlíková, B. (2018). Identifying the relationship between unemployment and wage development in the Slovak Republic. *Ekonomicky Casopis*, Vol. 66, No. 5, pp. 503–521.
- Sigela, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117, 312-321

- Šoltés, V., & Repková Štofková, K. (2016). The Impact of Business Environment on Regional Disparities. *CBU International Conference Proceedings*, Vol. 4, pp. 187–191.
<https://doi.org/10.12955/cbup.v4.760>.
- Szymanska, E. (2018). *Sustainable Tourism – Theory versus Practice*. 28th International Scientific Conference on Economic and Social Development – Paris, 17-25. ISSN 1849-7535.
- Tamásy, C. (2006). Determinants of regional entrepreneurship dynamics in contemporary Germany: A conceptual and empirical analysis. *Regional Studies*, Vol. 40, No. 4, pp. 365–384.
<https://doi.org/10.1080/00343400600612137>
- Vigliarolo, F. (2020). Economic phenomenology: fundamentals, principles and definition. *Insights into Regional Development*, Vol. 2. No. 1, pp. 418-429.
[http://doi.org/10.9770/IRD.2020.2.1\(2\)](http://doi.org/10.9770/IRD.2020.2.1(2)).



Tourism Sector in the Crisis: An Evidence of Slovak Travel Agency Satur and Tourism Industry Practitioners from New York

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Flexible measurements
against crisis;
Satur;
New York



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Abstract: *The tourism industry together with related industries have been attracting researchers' focus since the outbreak of the COVID-19 crisis due to the immense pandemic impact on this sector. The objective of this chapter is to analyze the overall influence of the pandemic and post-pandemic period on the global tourism sector and the related industries in Slovakia. The authors have selected the example of a Slovak travel agency and investigated its financial performance during the time of the Covid-19 crisis, which experiences an extreme decline in total revenues. Besides, the authors consider an empirical example from a tourism practitioner in New York, who behaves actively and experiences a successful exchange against the shock of the crisis. The favorable news of recovery slowly appearing was the inspiration for the scientific paper which in the end makes suggestions and formulates potential expectations of the future sustainable development of the tourism industry.*

1. INTRODUCTION

Tourism as a cross-sectional type of industry belongs to the tertiary sector or service sector as the third of the three economic sectors of the three-sector theory. Due to its significance, it is also an industry of public interest. Tourism is a powerful engine of global economic development since its achievements were observed in the two first decades of the twenty-first century. Its growing performance experienced an incredible shock after an astonishing period of the last half of the twentieth century. (Saxunova, LeRoux, 2019). The outbreak of the Covid-19 epidemic has had a serious impact on the global economy, and the tourism sector can be regarded as bearing the brunt.

Visa restrictions, flight suspensions, border closures, social distancing, and other measures have brought the global tourism industry into a state of almost complete shutdown. Tourism-related service industries such as airlines, travel agencies, hotels, and attractions have entered an unprecedented period of the Great Depression. As a result, the livelihoods of millions of tourism workers have been severely affected (UNWTO, 2020). The hoteliers could attract only entrepreneurs and business individuals leading to a significant decline in the selling rate (Chalupa, Chadt & Jenckova, 2021). In addition, the economy in 2020 experienced a significant slowdown worldwide and so did Slovakia compared to previous years. The main reason for

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travel restrictions or numerous lockdowns was that the spreading pandemic of COVID-19 has prevented tourism activities at home and abroad.

The social distancing, quarantine (both mandatory and voluntary), as well as lockdowns, proved to be one of the world’s most psychological and economic experiments where the most developed, as well as the developing economies have been put to the ultimate test (Muruga, 2022). The knock-on effects of this pandemic on different countries and territories have been devastating, especially in terms of human suffering, deaths, and lost jobs. Furthermore, the pandemic has resulted in pushing many countries into recessions. The entire problematics of tourism comprises a broad scale of activities and the vast majority of them were drastically affected. Regarding the Covid-19 pandemic’s influence on tourism - usually destination managers, including hotel, shop owners and managers, who always, when planning a new season, hope to match their expectations and values to those of the tourists’ ones visiting their targeted places. The managers’ effort was aimed at making their clients satisfied (Suhud, Utami & Candra, 2021), but in the COVID-19 era, they were facing no expectations because of spreading lockdowns and various restrictions. To contain the spread of the virus and reduce the burden on healthcare systems, governments around the world implemented travel and public gathering restrictions, bans, lockdowns, and quarantines that have affected lately more than 90% of the global population (Gössling et al., 2020).

COVID-19 could ultimately be responsible for a decline of between 20% and 30% in international tourist arrivals, totaling US\$300-450bn in losses. This is even worse than the impact of SARS in 2003 (UNWTO, 2020).

Individual lifestyles will have to modify as a result of the COVID-19 pandemic, with changing cultures, values, and traditions. New forms of tourism including slow tourism and smart tourism may also drive future tourism activities. Such changes are likely to force businesses to reconsider their service designs and distribution channels. (Wen et al., 2021).

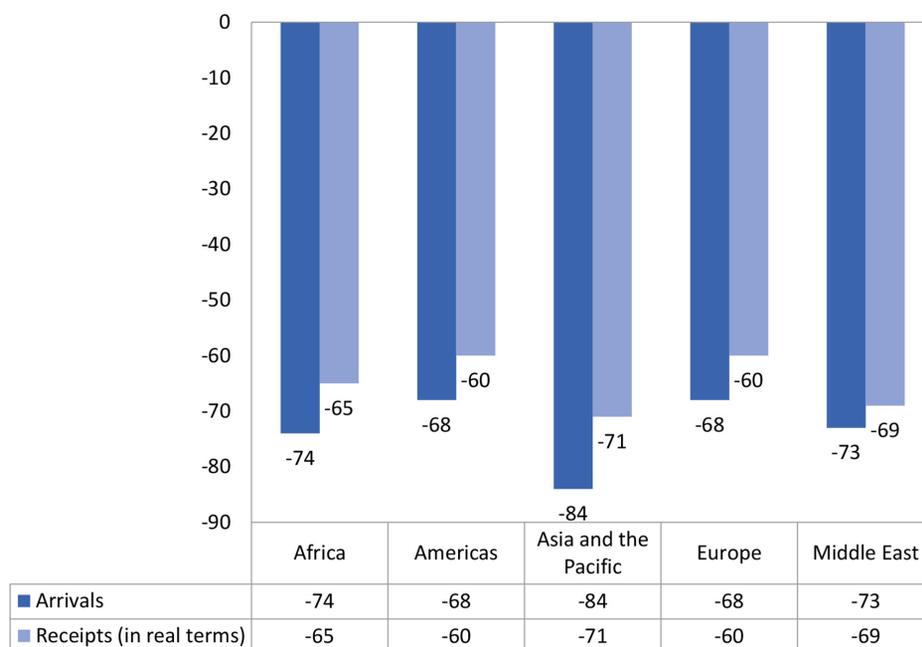


Figure 1. Change by region of international tourist arrivals & tourism receipts in 2020

Source: Elaborated by authors based on the source (World Tourism Organization, 2022)

The overall international tourist arrivals in 2020 were 402 million, representing a -73% change compared with the previous year, and the international tourism receipts were 533 billion dollars, representing a -64% decrease in real terms than the one in 2019. The change by region is illustrated in Figure 1, which shows that each region experienced a great loss in both of the indicators, especially the Asia and the Pacific.

Another example of indicating the shock of the pandemic to the tourism sector is the tourism expenditure. The international tourism expenditure was growing steadily year by year and reached 1,391 billion dollars in 2019. However, a similar depression appeared after the outbreak of Covid-19 in 2020 leading to the expenditure change by region over the previous year (2019) as shown in Figure 2.

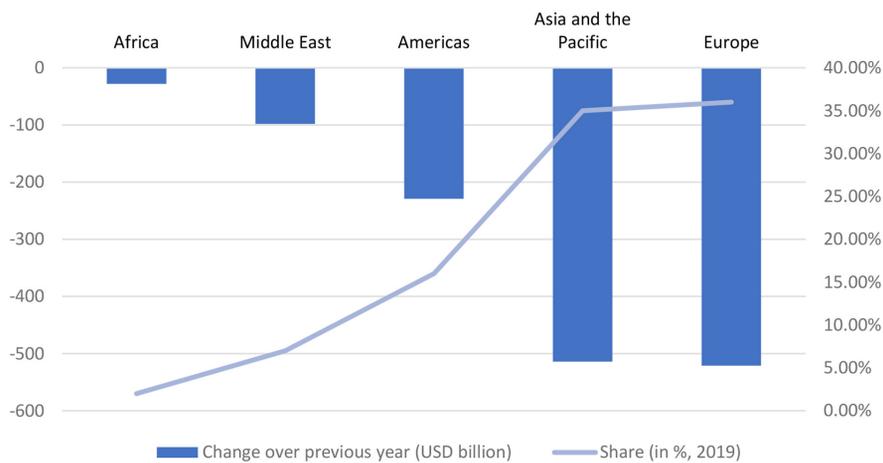


Figure 2. Change by region of international tourist arrivals & tourism receipts in 2020

Source: Elaborated by authors based on the source (World Tourism Organization, 2022)

This chapter aims to provide an overview of the performance of the global tourism sector, and in Slovakia, under the shock of the COVID-19 crisis. Our research is based on desk research, which is mainly conducted utilizing secondary data from various sources. Our research sample includes data from the reports from the United Nations, World Travel & Tourism Council, the World Tourism Organization and the „Survey on domestic and outbound tourism“ made by the Statistical Office of the Republic of Slovakia (further abbreviated SUSR) in 2021. The scientific study comprises the content divided into seven sections: an introduction, the overall assessment of the tourism sector position in the time of crisis, the performance of the tourism sector in Slovakia, flexible measurements applied from a Slovak travel agency- Satur in order to fight against the COVID-19 epidemic, an empirical transformation example from one of travel industry practitioners from New York, expectations of the future recovery and development of sustainable and resilient tourism sector (future research directions), finalizing at the end of the scientific study with proposals of several strategic thinking ideas how to recover tourism sector.

2. THE OVERALL SITUATION OF THE TOURISM SECTOR IN A TIME OF CRISIS

The COVID-19 pandemic crisis originated in December 2019 in Wuhan, China, when on January 20th, 2020, the WHO reported the first outbreak. Due to strong measures taken by the Chinese government, most of the rest of the world seemed to be convinced that the problem would stay concentrated in China. As noted in the Global Risk Report (WEF, 2020), pandemics were considered to be quite unlikely (Ramelli & Wagner, 2020).

Health policies were implemented to prevent hospitals from being overwhelmed. In the tourism sector, especially in hospitality and transportation, the impact of such policies was dramatic and immediate. According to the August–September issue of the World Tourism Barometer (UNWTO, 2020a), international tourist arrivals saw a decline of 65% during the first half of 2020 compared to the same period of the previous year, with arrivals in June down by 93%. Northeast Asia and southern Mediterranean Europe suffered the largest declines, reporting drops of 83% and 72%, respectively. According to this issue, the plunge in international demand was expected to be close to 70% for the entire year of 2020, especially as some destinations reintroduced restrictions on travel due to the second wave of infections and expected that a return to 2019-level tourist arrivals would take up to 4 years. Similarly, the WTTC predicted a 73% reduction in international arrivals for 2020 in its worst-case scenario considering a second wave of the contagion (WTTC, 2020b).

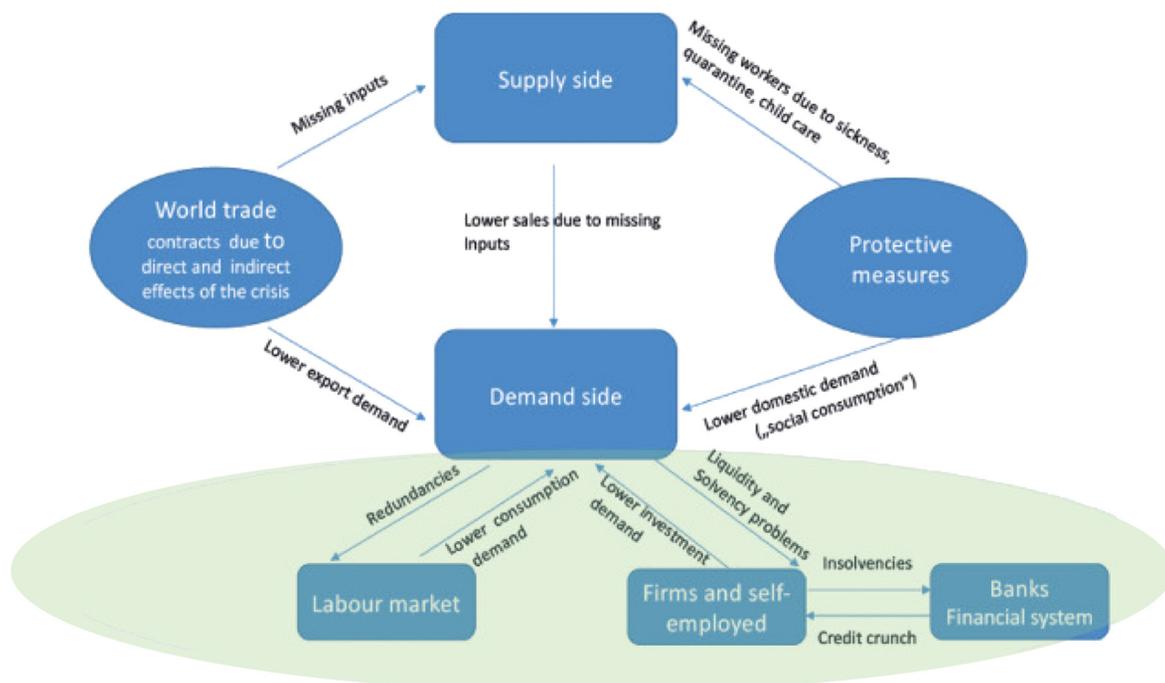


Figure 3. Effects of COVID-19 on aggregate supply and demand

Source: (Bofinger et al., 2020); (Arbulú et al., 2021)

Referring to Figure 3, the authors analyze the effects of COVID-19 on aggregate supply and aggregate demand. Shortly after the dramatic health consequences emerged, the economic implications began to be analyzed (Baldwin & Weder di Mauro, 2020; Bofinger et al., 2020). Initially, most analyses focused on the supply consequences of the lack of intermediate inputs produced by China for world manufacturers. This condition has produced a contraction in world trade (Gopinath, 2020) since the COVID-19 outbreak. Shortly after the Covid-19 outbreak, as a consequence of many workers falling ill and of the policies to mitigate the spread of the virus (e.g., school closings, quarantines, border closures), the number of workers drastically decreased, thus causing another supply shock. We also have to consider the demand shock caused by the decrease in consumption as a result of the decline in income and lower export demand. This plunge in demand will lead to job losses that will lead to another drop in consumption. Furthermore, companies and self-employed people have reduced their investment demand and faced liquidity and solvency problems. Finally, this situation will have negative effects on the financial system (Bofinger et al., 2020).

According to Turner II et al. (2003) definition, tourism vulnerability is used to measure the degree to which a destination is likely to experience harm due to its accidental exposure to risk. In this respect, COVID-19 has raised questions about a change in the perception of tourism growth. Former studies used to favor expansion (both in quantitative and qualitative terms), driven by the current globalization processes.

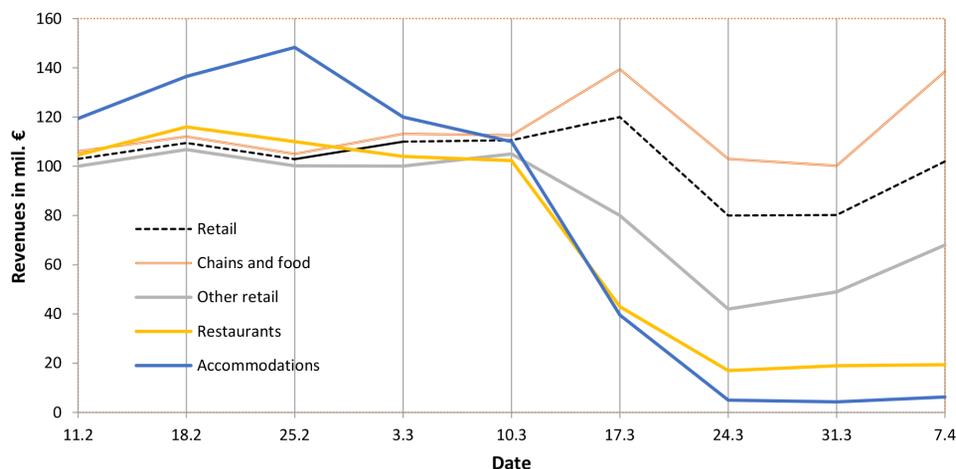
3. THE PERFORMANCE OF THE TOURISM SECTOR IN SLOVAKIA

On February 27, 2020, due to the outbreak of the COVID-19 pandemic in Europe, a Central Crisis Staff Committee was established by the Ministry of Health of the Slovak Republic under the leadership of the Minister of the Interior of the Slovak Republic and with the participation of the Chief Hygienist, representatives of the Ministry of Health, the Ministry of Defense, the Ministry of Transport, the Ministry of Foreign Affairs and European Affairs and the Ministry of Finance of the SR.

Thus, on March 6, 2020, following the confirmation of the first case of COVID-19 in Slovakia, the Central Crisis Staff Committee decided on the following measures:

- Prohibition of all arrivals and departures from Italy from Monday, March 9, 2020 and the continuation of passenger temperature measurements at the airports in Bratislava (the capital city), Košice and Poprad.
- Prohibition of visits to all hospitals, prisons, social services homes and children’s homes.
- Recommendation of the public to consider participation in mass events - sports, cultural events, discos, etc.

On March 10, 2020, the Central Crisis Staff Committee continued banning the organization of sports, cultural and public events in Slovakia for 14 days. “Mass events of a sporting, cultural, social or other nature” included theatrical, film, audiovisual performances, exhibitions, concerts, discos, sporting events, holy masses, balls, weddings and other mass events. Persons returning from Italy China, Iran and South Korea were ordered to remain in quarantine with their family members living in the same household. The response to the measurements introduced, the economy of tourism and related industries in Slovakia have experienced a huge crash since that time as shown in Graph 1.



Graph 1. The revenues of hotels and restaurants that are affected the most after the outbreak of the pandemic (7-day average sales, 100- 5.2.2020)

Source: Elaborated by authors based on the source: (eKasa, FSSR, IFP)

The revenues of hotels and restaurants have declined sharply since March 14, 2020, when shopping malls were required to be closed, except for pharmacies, groceries and drugstores. Regarding the economic data on the development of the Slovak economy from March 2020 till now, collected by the Statistical Office of the Slovak Republic, it can be stated that the pandemic will significantly affect the development of the economy in the coming years.

Table 1. Number of trips and overnights (domestic and outbound) in Slovakia in 2019 - 2020

		2019	2020	
Domestic trips	Long trips	Number of trips	2,406,178.000	1,168,896.000
		Number of overnight stays	17,344,977.000	9,444,983.000
		Average number of overnight stays	7.200	8.100
	Short trips	Number of trips	5,249,407.000	2,993,088.000
		Number of overnight stays	11,230,593.000	6,361,716.000
		Average number of overnight stays	2.100	2.100
Outbound trips	Long trips	Number of trips	2,909,859.000	477,469.000
		Number of overnight stays	24,117,293.000	3,690,102.000
		Average number of overnight stays	8.300	7.700
	Short trips	Number of trips	1,487,940.000	355,323.000
		Number of overnight stays	3,391,020.000	841,562.000
		Average number of overnight stays	2.300	2.400

Source: Elaborated by authors based on the source: (SUSR, 2020)

The forecast assumed that the economy would recover at the end of 2020. The forecast of the Ministry of Finance of the Slovak Republic (MFSR) and the main economic indicators are shown in Table 2, and the assumption is set up under the scenario that it will be necessary to introduce more lenient measures to manage it compared to the end of 2020.

Table 2. Prognosis of MFSR - Key indicators of the economy (2020 - 2024)

Indicator	Prognosis				
	2020	2021	2022	2023	2024
Gross domestic product					
GDP, s.c. in %	-4.8	3.7	4.2	5.0	0.7
GDP, b.c. in bil. €	91.6	96.9	104.9	113.2	116.5
Private consumption, s. c. in %	-1.0	0.2	2.4	3.6	3.9
Private consumption, b.c. in %	1.1	2.5	6.9	6.8	5.6
Government consumption in %	0.3	4.9	4.1	1.8	-0.4
Fixed investments in %	-12.0	-0.3	16.7	15.2	-12.2
Export of goods and services	-7.5	10.5	3.1	6.0	4.0
Import of goods and services	-8.3	10.9	3.9	6.5	2.4
Labor market					
Employment (state reporting)	-1.8	-0.8	0.6	1.0	0.4
Wages, nominal / real	3.8/1.8	5.4/2.8	5.5/1.3	5.1/1.9	4.8/3.2
Unemployment rate	6.7	7.0	6.7	5.7	5.2
Inflation					
CPI	1.9	2.5	4.2	3.1	1.5

Source: Dujava et. al, 2021.

This situation affected the “Survey on domestic and outbound tourism” carried out in households based on a representative sample of the respondents older than 15 years old from the point of a significant slowdown in tourism and also to the difficulties in implementation of the survey in households. Outcomes of the survey bring us information about the number of residents, who actively participated in tourism, as well as information about the destination and length of their trips or division by age groups of tourism participants.

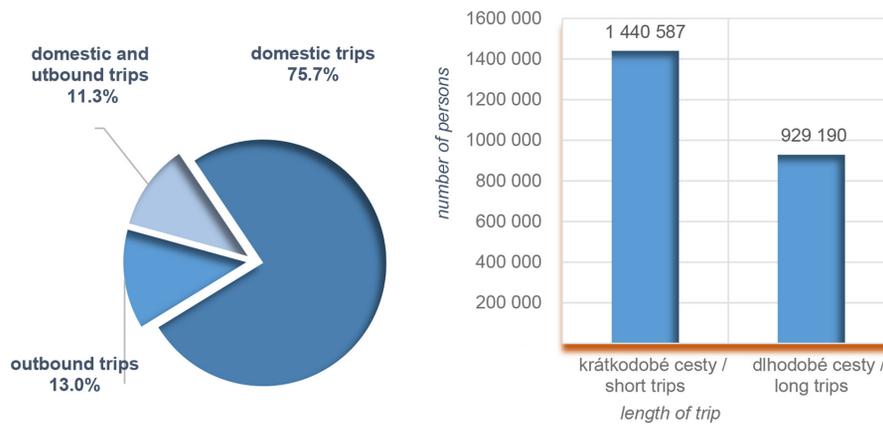


Figure 4. Participation in tourism by destination and length of the trip in Slovakia in 2020

Source: Elaborated by authors based on the source: (SUSR, 2020)

In Figure 4, the authors summarize that in 2020 respondents preferred: a) travelling in Slovakia -75,7% of domestic trips (on the left) and b) short trips to long trips (on the right).

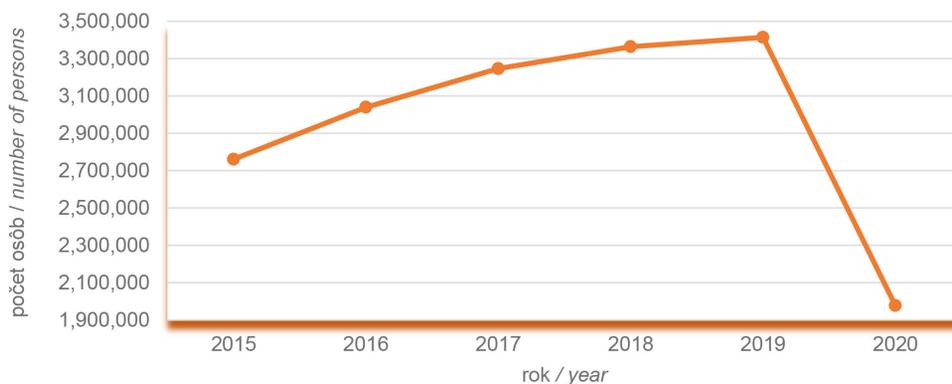


Figure 5. Participation in tourism by destination and length of the trip in Slovakia in 2020

Source: Elaborated by authors based on the source: (SUSR, 2020)

4. FLEXIBLE MEASUREMENTS APPLIED FROM A SLOVAK TRAVEL AGENCY – SATUR AIMED TO FIGHT AGAINST THE COVID-19 EPIDEMIC

Satur is the largest travel agency in Slovakia with a turnover of almost EUR 70 million, 150 employees and the widest network of 44 branches. It offers a wide portfolio of products in the form of 8 product lines (Summer, Family, Exploring the World, Winter, Wellness, Exotics, Cruises and Exclusive by Satur). With the arrival of 2020, Satur also changes its slogan to “Satur IS HOLIDAY” attempting to keep attracting the customers.

However, as a typical example of a Slovak company in the tourism sector, Satur has experienced a huge loss in 2020 - a decline of 454% compared to the previous year. The annual liabilities to assets (L/A) ratio reached 95.49% (10.5% higher than in 2019).

Key indicators of Satur from its financial reports are listed in Table 3 and evaluated. The bad news is from the two credit scoring, which the Altman Z-score (an international scoring model, considered as the output of a credit-strength test that gauges a publicly traded manufacturing company’s likelihood of bankruptcy) suggested 0.48 in 2020, meaning that the company faces a very high risk of bankruptcy. Moreover, another score- Index 05, which is a Czech bankruptcy

and bonity index for company efficiency valuation was applied. In comparison with Altman Z-score, it is considered to be a young model developed in 2005. The same as Altman Z-score, this model classifies the companies into three different levels based on the probability of bankruptcy. The final value of the scoring model is calculated by financial ratios, each multiplied by a different coefficient based on the importance of individual financial ratios. This score results in 0.03 in 2020, compared to 57.21 in 2019 (a very financially stable), highlights and warns before the high bankruptcy risk for the company. The demonstrated data implies what an upsetting depression the company has experienced during the pandemic period and the post-pandemic period which may require a long time for the whole industry to recover. The travel agency Satur has taken active measures to fight against the pandemic crisis and attempted to keep its customers. Those effective policies include:

- 1) **Project „Satur Flexi Winter 2021/2022“.** This project aims to provide customers with more flexibility and guarantee. The specific advantages of this project are illustrated in Table 4.
- 2) **Satur considers the reasonable insurance policies as the additional services.** Satur offers the option of purchasing comprehensive travel insurance, including Covid insurance from the European Travel Insurance Company for purchased stays and tours. In the meantime, Satur offers advantageous PCR testing and testing management through its partners throughout Slovakia. The price of the service includes confirmation in English, which is more convenient for customers around the world.
- 3) **Coronavirus spread map.** Satur prepared a quick and concise overview of the entry conditions into individual countries. Detailed information about entry conditions and conditions of return to Slovakia can be found on the Covid map when a customer clicks on the country on the map or enter it in the search box on the right of their website. This map also marks the countries and regions in different colors - Green for the safe countries, where the negative test is not required, and Red for those risky countries, from which the obligation to prove a negative PCR test result upon arrival at the Slovak airport applies and the Blue color is for the country that customer can travel to. Satur offers residential and sightseeing tours.
- 4) **Regularly update the latest epidemic policy and reminders.** Help customers find the safest destinations and trips by providing information in fast and efficient access. Earning money through saving customers' time.
- 5) **Cheaper offers and easier registration for the refund.** From August 31, customers can request a refund for the missed trips. To keep them in the process as little as possible, Satur has prepared a simple online form, which helps customers request a refund in the comfort of their own homes. Customers even don't have to sign anything, go anywhere, or even make a phone call. Everything, including the payment of the funds, will be done electronically.

Table 3. Key financial indicators of Satur in 2020 compared with 2019

Indicator	2019	2020	Change
Net turnover, Operating income, Sales, Profit/Loss			A year decline by
Sales excluding inventory and capitalization (in mil. €)	67.328	10.008	85.14%
Operating income (in mil. €)	68.496	11.100	83.79%
Net turnover (in mil. €)	67.328	10.008	85.14%
EBITDA (in €)	403,767.000	-1,314,692.000	425.61%
Profit/Loss after taxes (in €)	392,070.000	-1,388,043.000	454.03%
Return			A decline by
ROE (return on equity)	18.18%	-180.5%	198.68
ROA (return on assets)	2.48%	-8.15%	10.63
ROIC (return on invested capital)	18.18%	-180.5%	198.68
Resource efficiency ratio			Longer by

Asset turnover days	85.83 days	621.23 days	535.40 days
Inventory turnover days	0.01 days	0.03 days	0.02 days
Days total receivables outstanding	32.38 days	353.29 days	320.91 days
Days short-term payables outstanding	76.17 days	526.5 days	450.33 days
Margins			A decline by
EBITDA margin	0.6%	-13.14%	13.74
Gross margin	3.67%	-6.62%	10.29
Net profit margin	0.58%	-13.87	14.45
Operating margin	0.37%	-14.36%	14.73
Liquidity ratios			A decline by in %
Cash ratio	0.390	0.360	7.692
Quick ratio	1.130	1.030	8.850
Current ratio	1.130	1.030	8.850
Liabilities to assets			A decline by
Liabilities to assets	86.38%	95.49%	9.11
Non-current liabilities to assets	0.05%	0.04%	0.01
Current liabilities to assets	85.5%	90.36%	4.86
Credit scoring			A decline by in%
Altman Z-score	4.560	0.480	89.474
Index 05	57.210	0.030	99.948

Source: Elaborated by authors based on the source: (Annual report of Satur, 2020).

Table 4. Advantages of project “Satur Flexi Winter 2021/22”

Provision	Price	Stay in Slovakia	Sightseeing tours	Exotic trips	Skiing
100% guarantee of return money	Free of charge	√	√	√	√
Free cancellation		√	x	√/x	√
Free change of destination		x	√	√	√
Free change of name		√	x	√/x	√
Half deposit		√	√	√	√
Additional services					
Comprehensive travel insurance	According to the price of European Travel insurance (ECP)	√	√	√	√
COVID insurance	According to the price of European Travel insurance (ECP)	√	√	√	√
Test management	€49/ person	√	√	√	√

Source: Elaborated by authors based on the source: (Pricelists of Satur, 2020).

5. AN EMPIRICAL TRANSFORMATION – MINI-CASE STUDY OF TRAVEL INDUSTRY NEW YORKERS’ PRACTITIONERS

New York is a popular tourist capital of the world, but it has become the hardest-hit area by the global pandemic. In this section, the authors choose an interview conducted by The United Nations News with a Chinese tourism industry practitioner in New York over the phone. From this interview, readers can get a glimpse of the impact of the Covid pandemic on the tourism industry in New York and the impact on the livelihoods of other tourism practitioners.

The company is called Times International Travel Agency (TITA) and was established in 2013. At present, 10 full-time employees work there. Every year in the peak season, previously it used to be summer, in addition, during the National holidays and Chinese New Year, TITA employed

extra part-time employees, about 20 people. The main business is to organize mid-to-high-end private customized tours and business, touristic and governmental receptions.

The business has four 15-seat Mercedes-Benz, five 7-seat-station wagons for use in operations, plus some large cars, which are jointly leased from external bus companies, and which caused huge pressures for the company during Covid, due to the insufficient utilization. In order to maintain the vehicles functioning, TITA has a policy of replacing a batch of vehicles every three years, and then refinancing their purchase; it implies a very large pressure to manage vehicle loan payments on time. They utilize vehicles in operations and vehicle insurance costs a year at about \$7,000, also the monthly insurance expenses are very huge. During this period, the pressure is substantial. The managers are now in discussions with insurance companies and loan companies. The two sides can cooperate and try to reduce the monthly loan repayment limit a little bit, but the pressure remains still very high.

As far as the overall situation of operating before and after the pandemic, TITA had high competitiveness before the outbreak and performed well, but currently, it faces depression like others. TITA has been growing rapidly since its foundation in 2013 with the continuous increase in China's consumption level; more and more Chinese people have traveled to the United States. On January 28, 2020, as the epidemic progresses, China announced that all outbound delegations would be discontinued immediately. The return of the business industry in the USA was almost zero. Except for some simple businesses like booking return air tickets for international students, which probably only accounts for about 5%, it is basically a stagnant stage. Originally, during the Spring Festival in 2020, TITA booked 22 groups. In the end, there were only two groups, and all the rest of the orders were cancelled.

It's urgent to strike a way for TITA to mitigate the impact of this crisis, whose business halt has greatly affected their financial situation. As early as the end of January 2020, TITA was thinking over the ways to transform. The direction of the transformation changed from tourist reception to cooperation with Amazon in the United States for some transport services. The transport was approved for about a month, until the end of February and the beginning of March in 2020. TITA started to formally do delivery work. At that time, the epidemic was the most serious in China. Together with the Chinese community in New York, TITA jointly purchased a large number of anti-pandemic supplies, masks, and goggles, and mailed them back to China, and then waited until the application was approved at the end of February. Changes took place at that time, and the epidemic became increasingly serious in the United States, too.

After TITA joined Amazon, they began delivering some fresh products for Amazon. With the changes in the epidemic, the sales of fresh products skyrocketed. TITA started delivering fresh products, which was totally new to them. The transport industry is not the main business for most travel practitioners but it is inevitable to act under such circumstances. The income decreased to one-third of the original amount, hardly enough for their daily consumption of drinks and food.

As for working hours, due to the epidemic situation, TITA now adopted a rotation system, which means that employees should take turns when they went out to work in order to avoid cross-infection, they could not go out together. Therefore, the working time of about a week was reduced to about 2 to 3 days a week for an average person to maintain a basic income. In addition to the company, New York State also introduced an interest-free loan. If the epidemic continues to

develop, it is estimated that in 3 to 5 months, the employees may also apply for a loan to help them. At the same time, the federal side also announced that there would be assistance for the business. The latest policy is that if the annual income is less than 75,000 US dollars, you can receive a check for 1,200 US dollars. This should also be an immediate solution for employees.

The \$2 trillion relief plan that was issued by the US federal government to respond to the Covid pandemic includes aviation and hospitality. Tourism is an industry that has been hit hard and is one of the key targets of support. On the other hand, TITA is also carrying out some activities to serve and contribute with its activities back to the community. It is now united with the Chinese community in New York and then spends a few days a week carrying out the basic food delivery such as fresh vegetables, seafood, and meat and eggs for the Chinese citizens (door-to-door delivery activities).

6. EXPECTATIONS OF FUTURE RECOVERY, TOURISM RESILIENCE AND DEVELOPMENT OF THE TOURISM SECTOR

Climate change and environmental degradation are an existential threat to Europe and the world, therefore to face this task is indeed a serious challenge to be tackled. Let's go back to the past to recollect a broad action strategy, the so-called Agenda 21 anchoring sustainability concept for tourism accepted in 1992, which was proposed at the Earth Summit, held in Rio de Janeiro. The global economic crisis commencing in 2008, unfortunately, interrupted the tourism development process, which was discontinued; now for the second time, almost entirely, the hope of the Green Deal, signed in 2020, that should transform the EU into a modern, resource-efficient and competitive economy also stalled due to the pandemic COVID-19, but it was quickly understood that this initiative could also assist the world to get out of the COVID-19 pandemic and revive tourism again. COVID-19 outbreak in 2020 brought the tourism sector to almost a standstill and when the first rays of optimism for travelling reappeared, a serious conflict in 2022 put out the spark in an affected territory.

The Brundtland Report (2012) presented the definition of sustainability as “meeting the needs of the present generation without compromising the ability of future generations to meet their own needs”. There are basic sustainability principles identified by the team of Fletcher's researchers (2013): a) holistic approach to planning and strategy; b) protection of the environment (biodiversity) and man-made heritage; c) preservation of the essential ecological processes; d) facilitation and engagement of public participation; e) guarantee ability of productivity to be sustained into the long term future; f) requirement for a better level of fairness and opportunity between different countries. Choucri (1997) defined sustainability as the process of managing social demands without eroding life support properties or mechanisms of social cohesion or resilience. The concept of sustainable development can be conveyed as wise utilization, sound planning and budgeting, or responsible evolution/progress. Responsible business conduct is based on the premise that all businesses should always make a positive contribution to the economic, environmental and social progress of the countries where the businesses function (Wils, Kamuya, & Choucri, 1998). The big danger for sustainability issues is a dramatic increase in demand for natural resources, such as fossil fuel, land and minerals not only in emerging BRIC (Brazil, Russia, India and China) economies. Figure 6 illustrates essential determinants that should be well thought over and incorporated into the strategy for the revival and recovery, not only of the tourism industry.

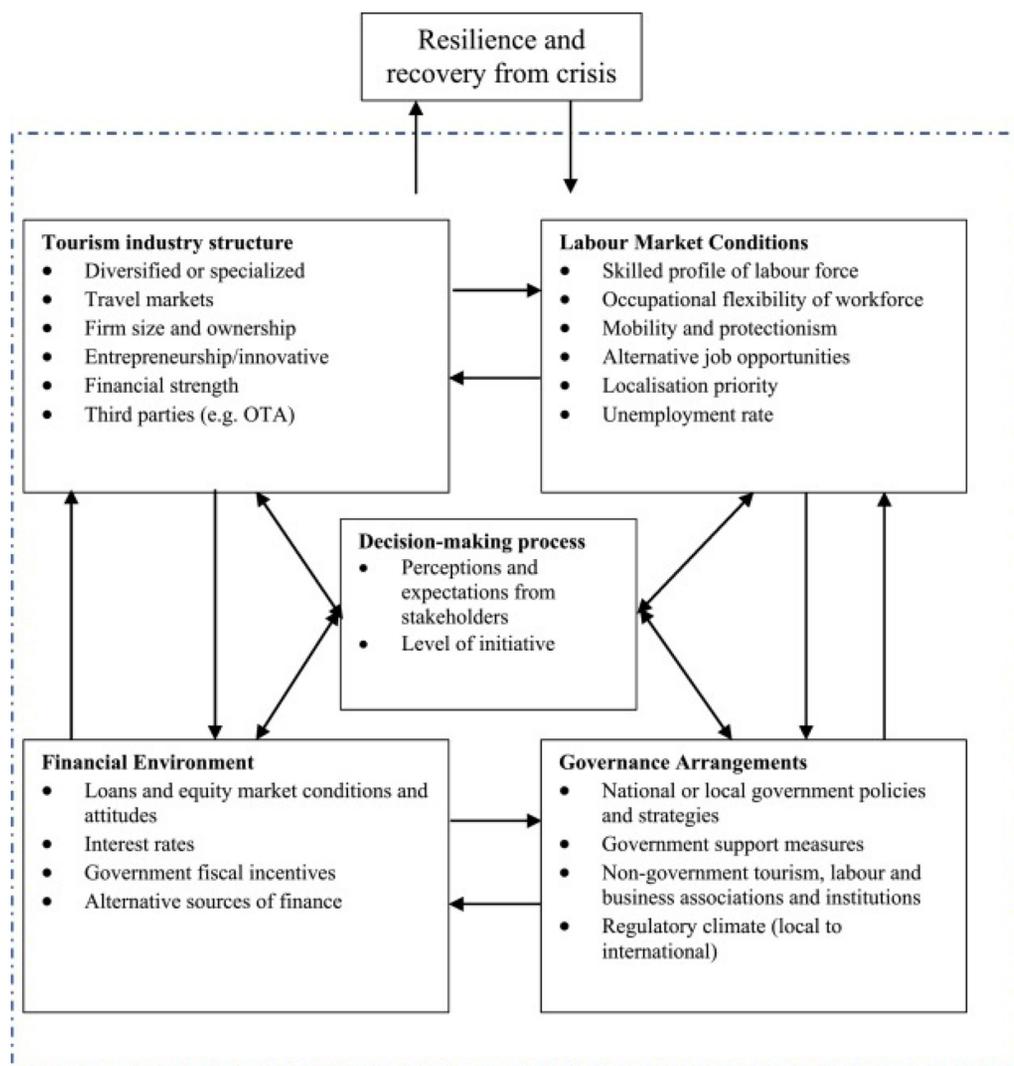


Figure 6. Determinants of economic resilience and tourism recovery

Source: (Martin & Sunley, 2015), (McCartney, Pinto & Liu, 2021)

Strategic thinking is also to concentrate on the system's speed of recovery or return to its pre-shock position. This definition of resilience was termed 'engineering resilience' by the ecologist Holling (1973); it is the time of system recovery, defined as a speed when a "system that has been displaced from equilibrium by a disturbance or shock returns to that equilibrium".

Governments should take initiative in promoting responsible business conduct in coordination and cooperating with enterprises, the general public, trade unions, civil society and other official government departments motivating and encouraging best practices. The role of careful governments worldwide could be to encourage their businesses and managers to obtain an eco-certificate, indicating a mark of high quality, environmentally, economically and socially sound products (Haaland and Aas, 2010) for the sustainable success of its enterprise. (Dash, Singh, and Vashko, 2016) have proposed a framework for obtaining an eco-certification and using it as a strategic tool to position products for a range of tourists.

According to the Ministry of Finance of the Slovak Republic, the Slovak economy is recovering more moderately from the third wave of the pandemic but will continue to grow. For the entire year 2021, Slovak GDP was expected to grow by 3.7%, but the reality was only 3%. The

expectation for the future years is 5% in 2022, and 4.8% in 2023. Although household consumption was expected to fall at the end of the year and the recovery in the labor market would be postponed, the impact of the coronavirus, but moreover, sudden high inflation due to the conflict in Ukraine on the economy and employment is difficult to predict; expected more modest growth than at the end of last year (assumed by the macroeconomic forecast for the years 2021 - 2024 of the Institute of Financial Policy (IFP) of the Ministry of Finance of the Slovak Republic) may vary based on the conflict development.

Overall, the authors would be optimistic about the recovery and the future development of the tourism industry, if this would be the only factor influencing economic growth nowadays. The COVID-19 pandemic is not just for a selected industry, it is a big test for the whole world, there would be a belief in the fast economic recovery after the pandemic is overcome in the future because the reason for the depression is not an economic issue, it is caused by an epidemic situation, but the favorable start of tourism may be affected now due to the situation in Ukraine, it is assumed to have an economic impact not only on the tourism, but the whole economy, especially in the EU member states, and especially in the countries that are very close geographically and are economically tied with the countries involved in the conflict.

7. FUTURE RESEARCH DIRECTIONS

The next interesting thematic related to the Covid is whether there would be a 5th wave, even though the rate of the vaccination has been increasing, and there are more modern medical alternatives for people. Some researchers start surging the demand and supply of many complementary and alternative medicines (CAM) and practices. Recent studies have shown increasing CAM information requests addressed to pharmacists and other healthcare staff from members of the public and patients aimed at prevention, symptoms relief, or treatment of COVID-19 (Paudyal. V. et al., 2021). However, the relationship between applying those traditional-herbal medicines/alternatives to the vaccines and the decrease in the cases of the positive COVID-19 raises questions for further research. The doubts about the expected economic recovery of all sectors have not been finished yet, so it is a problematic task to reliably determine the time for the pandemics to end.

As for the European countries, for which the unemployment rate is expected to reach 6.7% in 2022, and will be decreasing (the future development will show), the future recovery of the economy is expected especially under the support of investments from the EU Recovery Plan.

8. CONCLUSION

In the end, we summarize our recommendations on which components we consider relevant, and what should be included in building a strategy for recovery in the tourism sector. The potential strategic direction should be focused on the accomplishment of tourism recovery by incorporating the following essential aspects:

1. The high-quality management, primarily focused on the touristic destination, highlighting the opportunity, a) to obtain medical care benefits for travelers by local management in the tourist destination, b) of being informed on the latest development of the Covid-19, coronavirus spread map, c) to buy insurance packages pro-tourism recovery, d) to be provided tourist-friendly manuals, as what to do in case of a surprising local virus outbreak.
2. The effectiveness of coordination and alignment of interactions among numbers of relevant entities, including municipal government, enterprises and non-business entities

- to find financial and non-financial support to businesses that innovate their activities to restart tourism; criteria for government subsidies, first at domestic touristic communities and abroad as well, “emphasize the priority of creating a favorable environment for small-scale business development and supporting the provision of resources and capabilities” (Dias et al., 2021).
3. Creation of attractive innovative products for the tourism sector (for example: China, as a destination for global medical tourists (Weng et al., 2022), university centers organizing conferences and scientific symposiums related to post Covid-19 research, recovery stay packages offered by spas, sport activities programs to increase physical conditions of people of all age categories).
 4. Maintaining high-quality standards of provided services, especially relevant when devoted to the health care, psychical care and environmental care,
 5. Profiled destination marketing related to COVID-19 recovery in the health care area, but also in the social area as people almost forget to socialize, and so on.
 6. Enhance education across the world (developed and developing regions); education objectives should be focused on obtaining such knowledge and practical skills which would result in value creation in production and services. The effort shall be aimed at the tourism industry in order to achieve sustainable and resilient products leading to customer satisfaction, complying with the criteria of the corporate social responsibility quality product, in the tourism sector as well. (Saxunova, Hector, Kajanova, & Slivka, 2022).
“Education in emerging countries and developing economies should strengthen local production valorization and promote marketing strategies that foster the sustainable consumption of products manufactured in their own countries” (Camacho et al, 2022) to encourage the recovery of one element within the global chain of touristic product and services.
 7. Digitalization of services in tourism – ordering the accommodation, travelling tickets etc. Moreover, the Covid-19 pandemic situation strengthened by having a digital alternative almost for each area, whether an industry sector, non-profitable enterprises or governmental departments; tourism, health care, education, and financial and many public services or any other type of institutions, financial or non-financial ones. (Saxunova, Le Roux, 2021)

As the world has been facing an unprecedented global health, social and economic emergency with the COVID-19 pandemic, travel and tourism is among the most affected sectors with airplanes grounded, hotels closed and travel restrictions in effect in virtually all countries around the world. As the World Tourism Organization strives to lead the restart of the tourism industry, the “Travel Restriction Report” also pointed out, how the governments of different countries issue travel recommendations to their citizens. An analysis of the top ten source markets for tourists that currently recommend no unnecessary travel abroad found, showed that these sources accounted for 44% of international inbound tourists in 2018. The World Tourism Organization pointed out that in the next few weeks or months, the recommendations made by governments will play a key role in the process of restarting and resuming the tourism industry. There is still room for future research on the impact of the COVID pandemic on the tourism industry and all the related economic activities.

We finalize our study by citing researchers Martin and Stunley (2015) who stressed that “Economies have always been prone to major perturbations and shocks: recessions, major policy changes, currency crises, technological breakthroughs, and the like, can all disrupt and destabilize the path and pattern of economic growth. It is within regional, urban and local economies and communities that such shocks and disturbances work out their effects and consequences.

Nationally—or globally—originating shocks are rarely spatially neutral or equitable in their impact or implications.” Covid -19 shock entirely confirms these lines proving the rareness of spatial neutrality or equitability; the impact of the COVID-19 on the countries, individuals, enterprises, or consequences of various government policies that are being hit by the pandemic shock in the 21st century gave a mankind a big lecture, which is worthwhile being remembered and learned by it.

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REFERENCES

- Arbulú, I., Razumova, M., Rey-Maqueira, J., & Sastre, F. (2021). Can domestic tourism relieve the COVID-19 tourist industry crisis? The case of Spain. *Journal of Destination Marketing & Management*, 20, 100568. <https://doi.org/10.1016/j.jdmm.2021.100568>
- Bofinger, P., Dullien, S., Felbermayr, G., Fuest, C., Hüther, M., Südekum, J., & di Mauro, B. W. (2020). 18 Economic implications of the COVID-19 crisis for Germany and economic policy measures. *Mitigating the COVID Economic Crisis: Act Fast and Do Whatever*, 167.
- Brundtland, G. H. The Brundtland Report, a 25-year-old milestone. (2012). Accessed November 4, 2019. <http://downtoearth.danone.com/2012/04/04/the-brundtland-report-a-25-year-old-milestone/>.
- Camacho, L.J., Ramírez-Correa, P., & Salazar-Concha, C. (2022). Xenocentrism and Formal Education: Evaluating Its Impact on the Behavior of Chilean Consumers. *Journal of Risk and Financial Management* 15: 166. <https://doi.org/10.3390/jrfm.15040166>
- Chalupa, S., Chadt, K., & Jenckova, J. (2021). Impact of National Measures Connected to COVID-19 Pandemic on the Hotel Front-Office Communication Themes. *IBIMA Business Review*, Vol. 2021 (2021), Article ID 823718, DOI: 10.5171/2021.823718
- Choucri, Nazli. The Political Logic of Sustainability. MOST Program. Paris: UNESCO. (1997).
- Dash, Tapas. R., Satyendra Singh, and Irina Vashko. “Tourism, eco-tourism and sports tourism: the framework for certification.” *Marketing Intelligence & Planning*, 34(2), (2016). 1-22.
- Dias, A., Patuleia, M., Silva, R., Estêvão, J. & González-Rodríguez., M.R. (2021) Post-pandemic recovery strategies: revitalizing lifestyle entrepreneurship, *Journal of Policy Research in Tourism, Leisure and Events*, DOI: 10.1080/19407963.2021.1892124
- Dujava, D., Hojdan, D., & Žúdel, B. (2021). Tretia vlna spomalioživenie ekonomiky: Makroekonomická prognóza na roky 2021 – 2024. Inštitút finančnej politiky, Ministerstvo financií SR.
- Fletcher, John, Alan Fyall, David Gilbert, and Stephen Wanhill. *Tourism: Principles and Practice*. Harlow, United Kingdom: Pearson Education Limited, 2013.
- Gössling, S., Scott, D., & Hall, C. M. (2021). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20. <https://doi.org/10.1080/09669582.2020.1758708>
- Haaland, Hanne, and Øystein Aas. (2010). EcoTourism Certification – Does It Make a Difference? A Comparison of Systems from Australia, Costa Rica and Sweden. *Scandinavian Journal of Hospitality and Tourism* 10, no. 3 (2010): 375–85. <https://doi.org/10.1080/15022250.2010.486262>.
- Holling, C. S. (1973) Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4: 1–23.

- Martin, R., Sunley, P. (2015). On the notion of regional economic resilience: Conceptualization and explanation. *Journal of Economic Geography*, 15 (1) (2015), pp. 1-42. doi:10.1093/jeg/lbu015
- McCartney, G., Pinto, J., & Liu, M. (2021). City resilience and recovery from Covid-19: The case of Macao. *Cities*, 112, 103130. <https://doi.org/10.1016/j.cities.2021.103130>
- Ministerstvo dopravy a výstavby SR, Ministerstvo hospodárstva SR. Schéma štátnej pomoci v zmysle článku 107, odsek 3, písm. b ZFEÚ v znení Dodatkov č. 1 a č. 2UNWTO. Issue 5, August/September 2020. World tourism barometer, volume 18 (2020). From <https://www.e-unwto.org/doi/epdf/10.18111/wtobarometereng.2020.18.1.5>.
- Muruga, K. (2022). Effect of COVID-19 Pandemic on Health Systems. *IBIMA Business Review*, Vol. 2022, Article ID 799143, DOI: 10.5171/2022.799143.
- Paudyal, V., Sun, S., Hussain, R., Abutaleb, M. H., & Hedima, E. W. (2021). Complementary and alternative medicines use in COVID-19: A global perspective on practice, policy and research. *Research in Social and Administrative Pharmacy*. <https://doi.org/10.1016/j.sapharm.2021.05.004>
- Saxunová, D., & LeRoux, C. L. (2019). Tourism industry in rural and urban areas: Slovakia and United Arab Emirates examples. In: Proceedings of International Scientific conference MIC 2019. Opatija, Croatia, <https://doi.org/10.26493/978-961-6832-68-7.15>
- Saxunova, D., & Roux, C. L. L. (2021). Digital Transformation of World Finance. In R. G. Ahangar, & A. Salman (Eds.), *Investment Strategies in Emerging New Trends in Finance*. IntechOpen. <https://doi.org/10.5772/intechopen.93987>
- Saxunova, D., Hector, H., Kajanova, J., & Slivka, P. (2021). Integrity of the Corporate Social Responsibility and Management of Financial Services in the Digital Era. In (Beatrice Orlando, Ed.), *Corporate Social Responsibility*. IntechOpen. <https://doi.org/10.5772/intechopen.101057>
- Suhud, U., Utami, H., & Candra, E.P. (2021). A Study of Tourists' Satisfaction in The Context of Textile-Based Tourism Destination. *IBIMA Business Review*, Vol. 2021 (2021), Article ID 568693, DOI: 10.5171/2021.568693
- Turner, B. L., Kasperson, R. E., Matsone, P. A., McCarthy, J. J., Corell, R. W., Christensene, L., Eckley, N., Kasperson, J. X., Luers, A., Martello, M. L., Polsky, C., Pulsipher, A., & Schiller, A. (2003). A framework for vulnerability analysis in sustainability science. *Proceedings of the National Academy of Sciences of the United States of America*, 100(14), 8074–8079. Scopus. <https://doi.org/10.1073/pnas.1231335100>
- Wen, J., Kozak, M., Yang, S., & Liu, F. (2020). COVID-19: Potential effects on Chinese citizens' lifestyle and travel. *Tourism Review*, 76(1), 74–87. <https://doi.org/10.1108/TR-03-2020-0110>
- Wen, J., Wang, C.C., Goh, E., Su, Z. and Ying, T. (2022), "Traditional Chinese medicine as a tourism recovery drawcard to boost China's inbound tourism after COVID-19", *Asia Pacific Journal of Marketing and Logistics*, Vol. 34 No. 2, pp. 385-400. <https://doi.org/10.1108/APJML-10-2020-0732>
- Wils, A, Maten, M. Kamiya, and Nazli Choucri. (2019). "Threats to Sustainability: Simulating Con-flict within and ..." Accessed November 4, 2019. https://gssd.mit.edu/sites/default/files/imce/threats_to_sustainability.pdf
- WTTC. Research note: Travel & tourism recovery scenarios 2020 and economic impact from COVID-19 (2020). June 2020. Retrieved from: <https://wtcc.org/Research/Economic-Impact/Recovery-Scenarios-2020-Economic-Impact-from-COVID-19>
- European Commission. (2021). A European Green Deal. June 2021. Retrieved from https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en



Efficiency Evaluation in the Tourism Sector in Croatia and Serbia: Applications of Data Envelopment Analysis

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Abstract: *Tourism is one of the most contributing economic sectors globally and is especially important for developing economies, due to its contribution to GDP, creation of new jobs and its impact on economic development. The tourism sector has gained a lot of attention from academia and governments due to its strategic position in the economy. Its efficiency and performance are closely researched and analysed. One of the leading non-parametric methodologies that have been often used to evaluate relative efficiency of homogeneous entities is the Data Envelopment Analysis (DEA).*

The main goal of this chapter is to identify, present and explore the applications of DEA in different aspects of Croatian and Serbian tourism. Other goals are to present and analyse the findings of the twelve surveyed papers and to highlight the benefits and limitations of the DEA methodology. Additionally, this research represents an incentive and an inspiration to other academic members and researchers to apply the DEA methodology in their future studies when analysing and investigating efficiency in the tourism sector, as well as any other economic sector.

1. INTRODUCTION

Tourism is one of the largest and most important economic sectors, due to its contribution to GDP, rate of employment, exports and, therefore, economic development and growth. It is “an important mechanism of economic development and an important generator of new working posts in many countries”. Furthermore, it has always been an area of great interest for governments of developing countries in their efforts to increase the economic benefit from tourism development” (Banožić et al., 2015).

As Cvetkoska & Barišić (2014) state, “tourism, in general, interferes in almost all spheres of social and economic development”. Notwithstanding, it is “one of the most dynamic and complex activities among contemporary socio-economic phenomena” (Hodžić, Bogdan & Bareša, 2020) that impacts the socio-economic development and “the long-term economic growth through different channels, such as currency flow, infrastructure investment, stimulation of other sectors and income generating” (Schubert et al., 2011; Pavković et al., 2021). Therefore, it is undeniable that tourism is strategically important for the developing countries’ economies especially considering its characterization as a continuously growing and developing industry in the last two decades (Prorok et al., 2019).

Global tourism represents “around 10% of the world’s economic activity” (Radovanov et al., 2020), “7% of the global trade, and 1 in 10 jobs” (Barišić & Cvetkoska, 2020). It is expected „to grow along with the world’s prosperity and well-being, but will be strongly influenced by contemporary trends such as socio-demographic trends; economic trends expressed through

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declining poverty and a growing middle class; technological revolution and evolution; digitalization of tourism; health and healthy lifestyle; political tensions; security; threats of terrorism, etc.“ (Nakovski et al., 2021).

One of the most important principles in any business is the principle of efficiency, which consists in achieving the most economic effects (outputs) with as little as possible economic sacrifices (inputs). Efficiency can also be defined as the ability to achieve goals with the minimal use of available resources. Efficiency represents one of the most crucial principles in organisations' operations and one of „the most important indicators for the successful operation“ (Cvetkoska & Fotova Čiković, 2021; Cvetkoska, 2011) which “refers to the relationship between the input and the output, i.e., using the minimum resources (human, organizational, financial, material, physical) to produce the desired production volume“ (Cvetkoska & Barišić, 2020). In this context, if the level of output has increased with the same level of input, or the level of output has remained unchanged, but the level of used inputs has decreased – this means the efficiency has increased. According to Greene (1993), “the empirical estimation of the extent to which observed agents achieve the theoretical ideal“ represents the measurement of efficiency. One of the leading non-parametric methodologies - the DEA methodology has been one of the most applied approaches when analysing relative efficiencies. The main goal of this chapter is to present this methodology and to present its applications in the investigation of efficiency in the Croatian and Serbian tourism sectors.

This chapter consists of 6 sections. After the first section (Introduction), a theoretical overview of the DEA methodology has been presented. The third and the fourth section provide a background on the Croatian and Serbian tourism sectors, respectively. The fifth section presents the surveyed studies on tourism that employ the DEA methodology regarding the Croatian and Serbian tourism and the last, sixth section opens up a discussion and concludes this chapter.

2. DATA ENVELOPMENT ANALYSIS: THEORETICAL BACKGROUND AND BASIC MODELS

There are three approaches to evaluating efficiency in the literature: the ratio indicators, the parametric and the nonparametric methods. The ratio indicators are the simplest approach and their limitation is they „cannot influence overall corporate efficiency“ (Micajkova & Poposka, 2013). The parametric methods of efficiency evaluation include the factor analysis, regression analysis, and stochastic frontier approach, which are employed for evaluation of the economic efficiency. And then there are the nonparametric methods, which include the Data Envelopment Analysis (DEA) and the Free Disposal Hull (FDH) (Vincova, 2005; Soysal-Kurt, 2017).

DEA is a primarily „data-oriented“ approach that uses the conversion of multiple input variables to multiple output variables for the evaluation of the DMUs (Cvetkoska, 2011). As a non-parametric methodology, it focuses on the extreme observations, whereas the parametric methods „focus on average tendencies and deviations from it“ and they can employ only one output, which is one of their biggest limitations (Cvetkoska & Fotova Čiković, 2021).

DEA has been introduced by Charnes, Cooper & Rhodes in 1978 but its origins date to Farrell (1957), who introduced the concept and measurements of technical efficiency. The two basic DEA models are the CCR and the BCC model. The main distinction between these models is the built-in assumption regarding the return to scale. The CCR model (originally named in

honour of the founders Charnes, Cooper and Rhodes) assumes a constant return to scale (CRS), i.e. „the output variables increase proportionally with input variables“ (Cooper et al., 2006), while the BCC model (which estimates the pure technical efficiency of the analysed DMUs) is based on the assumption of the variable return to scale (VRS), i.e. the increase in input variables does not lead to a change in the output variables in the same proportion. The CCR model is graphically represented as a straight line, whereas the BCC model is represented by a convex hull (Hodžić & Jurlina Alibegović, 2019).

Furthermore, there are two DEA orientations, namely the input-orientation and the output-orientation. The input-oriented DEA model assumes „minimization of inputs for the given level of output, whereas the output-oriented DEA model supposes maximization of outputs for the given inputs“ (Poldrugovac et al., 2016).

Interestingly, DEA has been originally designed to evaluate the efficiency of the non-profit sector (Barišić & Cvetkoska, 2020), but it soon spread to many other sectors and is today successfully implemented in many various sectors, such as banking (Micajkova & Poposka, 2013; Fotova Čiković & Cvetkoska, 2017), forestry (Šporčić et al., 2008), education (Obadić et al., 2011; Mihaljević Kosor et al., 2019), the health sector (Pereira et al., 2021), the public sector (Rabar et al., 2021) to measuring the efficiency of football clubs (Guzmán-Raja et al., 2021) and restaurants (Planinc et al., 2019).

In this chapter, the applications of DEA in the tourism sector in two developing countries (i.e. Croatia and Serbia) will be elaborated.

3. BACKGROUND AND PERSPECTIVES OF THE CROATIAN TOURISM SECTOR

Tourism occurred in Croatia in the 19th century, and ever since, it has been the main driver of Croatian economic development. Tourism affects the gross national product, level of employment and the balance of payment (Baldigara et al., 2012). This should come as no surprise, considering that Croatia has been pinpointed „as an ecological treasure of Europe, with 47% of its land and 39% of its sea designated as specially protected areas and areas of conservation“ (Gržinić, 2017). Banožić et al. (2015) state that “the clean sea, the coast, and the abundance of natural and cultural beauty are the advantages of Croatia’s tourism supply in the maritime part of the country”.

Croatian tourism is characterized by a high seasonality (during the summer season), dense concentration and development along the seaside and in the island regions (except for the capital city Zagreb) and high dependency on the interconnectedness of the islands and the mainland (Šimundić et al., 2021; Dujmović et al., 2020).

In 2018, Croatian tourism had a share of 2.1% of total tourist flows in the European Union and almost 20% of the total Croatian GDP (Šverko Grdić et al., 2019; Orsini et al., 2019). Tourism generates 24% of total employment in Croatia, i.e. 92,000 people in 2019 (Škrinjarić, 2018; Rašić, 2019). It is, therefore, no secret that Croatia is highly dependent on the tourism industry and that tourism is one of the “leading sectors of the Croatian economy” (Banožić et al., 2015). It has been proven that „the tourism-led growth hypothesis is valid for Croatia“ and that it has been a major factor in the overall long-run economic growth of the country (Svilokos et al., 2014; Perić et al., 2016).

The ongoing COVID-19 pandemic has imposed travel restrictions that impacted various sectors of the economy but mostly affected the tourism sector since it is almost completely „dependant on the transport and hospitality sectors, both of which were among the first to be affected by the corona crisis“ (Šimović et al., 2021). UNWTO (2020) states that tourism should be the main recovery sector and that it can „play the key role in future recovery efforts“. They define tourism as a „firmly established important contributor to sustainable development, economic growth, employment and international understanding“.

The news from the Croatian National Tourist Board (2021), however, seems promising. In July 2021, there were 3.7 million tourist arrivals and 25 million overnight stays (out of which 21.6 million were generated by foreign tourists). These results show a rise in the number of arrivals in comparison with 2020 by 47 per cent and a rise in the overnight stays by 33 per cent. Croatia, with its long tourist tradition and excellent possibilities for further growth, and as one of the most important tourist destinations in the Mediterranean, could use the lessons learned from the pandemic to transform its aspiration for growth and promote sustainability in tourism (Baldigara et al., 2012; Harchandani et al., 2021). There are many case studies of certain destinations that offer and develop sustainable tourism in the long run in Croatia. They also open discussion on sustainability, and sustainable tourism growth as well as environmental conscious tourism in Croatia (Škrinjarić, 2018).

Nevertheless, Šimundić & Kordić (2021) state that the great share of the tourism sector in Croatian's GDP „implies overreliance on tourism exercised by the country as a whole“. Šimović et al. (2021) additionally warn about the unsustainability of the current Croatian economic model. They also highlight the necessity to minimize the dependency of the Croatian economy on tourism, due to climatic, socio-political and other reasons. They claim that the ongoing COVID-19 pandemic has additionally shown the „urgent and fundamental“ need to change the economic model, since it has affected the rates of unemployment, but also impacted the decline in the turnover of many tourism-related activities, such as „agriculture, winemaking, fishing, food and the beverage industry, as well as catering, entertainment, the music industry, and others“. The overreliance of Croatia on tourism should gradually decline and its sustainable development and growth should focus on „new technologies, software production, creative industries with high added value, energetics and knowledge and creative economy in general“ (Dujmović et al., 2020). They (Dujmović et al., 2020) also add that tourism is a low-profit industry for the developing and underdeveloped countries and „it takes longer to obtain a return from an investment into the tourism industry and brings less added value“. In their paper, they continue to express their concern that tourism is not enough for Croatia's development and growth and that Croatia should not build its competitiveness solely on tourism. They go one step further and claim that Croatia should reduce the share of tourism in GDP below 5 per cent if it wants to become an economically developed country and that tourism should be a secondary activity (in their words: „the cherry on top of the cake“) and not one of the main economic activities, which is an interesting opinion to ponder over.

4. BACKGROUND AND PERSPECTIVES OF THE SERBIAN TOURISM SECTOR

The tourism industry in Serbia in 2017 had a share of 0.9% of GDP. Its direct contribution to employment was 32 000 jobs, representing 1.8% of the country's total employment. However, it is considered that tourism's „total contribution to the Serbian economy, including the effects from investment, supply chain and induced income impacts, amounted to RSD 294.6 billion in 2017,

or 6.7% of GDP“ (OECD, 2020). Some major changes in this sector have appeared in 2014, with the Government’s development and introduction of measures in four tourism-strategic regions, which affected the tourism sector positively, and reflected in the rise of its share in Serbian’s GDP. In 2019, before the COVID-19 pandemic, the tourism statistics were hopeful: Serbia had noted an increase in total arrivals and the number of overnight stays by 7%. However, the COVID-19 pandemic in 2020 had a severe impact on this sector. Namely, even though the Serbian Government has undertaken and implemented many preventative measures in order to protect this sector, its recovery will probably last „at least two to four years“ (China CEE Institute, 2020).

Even though Serbia has a favourable geographical position on the Balkan peninsula and a beautiful landscape, „the market potentials of its tourism industry have never been fully realized“. The reasons behind it were mostly due to the country’s questionable reputation during the 1990s and its financial crisis in 2009 (China CEE Institute, 2020). These factors affected the slow growth of the tourism industry in Serbia. Bogetić et al. (2020) have highlighted the „insufficient offer and unattractiveness of tourism offers“ as the crucial problem and issue in Serbian tourism. Radović (2016) on the other hand, suggests that Serbia should follow Slovenia’s example and footsteps in the development of rural tourism, which appears to be very successful in Slovenia. Furthermore, rural tourism has been stated as a special priority in National Sustainable Development Strategy in Serbia since 2007 and it enjoys a status of a „high potential sector with the vertical institutional structure supporting its development“ (Petrović et al., 2017).

This viewpoint is following the state’s measures for sustainable tourism development, which include „increasing levels of environmental consciousness, growing the interest in heritage and culture, strengthening local economic activity, as well as supporting the development of visitor activities that enable visitors to meet residents and engage in cultural tourism activities and events“ (OECD, 2020).

5. APPLICATION OF DEA IN EFFICIENCY EVALUATION OF THE TOURISM SECTOR IN CROATIA AND SERBIA

DEA is the leading nonparametric methodology that is used to evaluate efficiency in different industries. The main focus of this chapter is to survey, present and analyse the different applications of DEA in Croatian and Serbian tourism.

The authors have surveyed all the studies and papers that have investigated the efficiency of any aspect of the tourism sector in both analysed countries, searching both Scopus and Web of Science databases. However, some of the presented studies have not been published in papers indexed in the above-mentioned databases, but their findings are crucial to the completeness of this chapter. Therefore, a short presentation and analysis of the surveyed (12 in total) papers are given as follows.

Rabar & Blažević (2011) have employed both the CCR and BCC output-oriented DEA model to evaluate the touristic efficiency of Croatian counties in 2008. Notwithstanding, they have employed the window analysis DEA model for the period 2004 – 2008. Their goal was to identify the efficient counties which would represent a benchmark and to identify the inefficient counties in order to suggest appropriate measures. In their study, they used three inputs (number of beds, number of seats and number of employees) and three outputs (number of arrivals, number of stays, number of nights, revenue in thousands of kuna - HRK). The results of the BCC DEA model show

13 efficient and 8 inefficient counties, whereas the CCR model shows 10 efficient and 11 inefficient counties in 2008. The average efficiency score in the CCR model was 0.910 and 0.964 in the BCC model. Since in the BCC model, the number of efficient counties is 30 per cent higher than the results according to the CCR model, Rabar & Blažević (2011) decided to go forward with their research with the BCC output model only, because „it is more appropriate since it is most likely an effect of the scope of action“. The results of their DEA window analysis, on the other hand, show that Istria County has been the most efficient county in 2008. However, no county has been efficient in the whole period of five years. Two counties have been efficient in four years, while four counties have noted efficiencies in one, two or three years. A staggering number of 7 counties was inefficient in the whole observed period of 5 years.

Table 1. The DEA applications regarding the Croatian and Serbian tourism

Author/s and year of publication	Application	Time frame	Analysed countries	Applied DEA model
Rabar & Blažević (2011)	Evaluation of the tourism efficiency of Croatian counties	2008	Croatia (i.e. Croatian counties)	Output-oriented BCC and CCR DEA model
		2004-2008		
Cvetkoska & Barišić (2014)	Measuring the efficiency of 15 European countries in tourism	2004-2013	15 European countries (CRO + SRB)	DEA window analysis model
Cvetkoska & Barišić (2017)	Measuring the efficiency of the tourism industry in the Balkans	2010-2015	11 Balkan countries (CRO + SRB)	DEA window analysis model with the VRS
Soysal-Kurt (2017)	Measuring tourism efficiency of 29 European countries	2013	29 European countries (CRO)	Input-oriented CCR DEA model, with three inputs and three outputs
Ilić & Petrevska (2018)	Determination of tourism efficiency of Serbia and the surrounding countries	2016	15 Balkan and Southeast European countries (CRO+SRB)	Input-oriented CCR DEA model with CRS assumption
Škrinjarić (2018)	Assessment of the efficiency of environmentally conscious tourism industry	2011-2015	Croatia (i.e. of 21 Croatian counties)	Output oriented DEA model with VRS
Prorok, Šerić & Peronja (2019)	Analysis of overall and pure technical efficiency of tourism in Europe	2017	EU and non-EU countries, including Croatia and Serbia	Output-oriented CCR and BCC DEA model
Barišić & Cvetkoska (2020)	Analysing the Efficiency of Travel and Tourism in the European Union	2017	28 EU member countries (CRO)	Output-oriented BCC DEA model
Galic, Arifhodzic, Satrovic, Dalwai & Milicevic (2020)	Measuring tourism efficiency of NUTS II area of the Adriatic-Ionian region	2011-2014	41 regions in the Adriatic-Ionian region (CRO + SRB)	Input-oriented BCC DEA model + Malmquist method
Marcikić Horvat & Radovanov (2020)	Efficiency of tourism development	2013-2019	33 European countries (CRO + SRB)	Application of output-oriented BCC DEA model and TOBIT model
Radovanov, Dudic, Gregus, Marcikic Horvat & Karovic (2020)	Measuring tourism potentials of EU and Western Balkan countries	2011-2017	27 EU countries and 5 Western Balkan countries (CRO + SRB)	A Two-Stage DEA Model (output-oriented DEA + Tobit regression model)
Pavković, Jević, Jević, Nguyen & Sava (2021)	Determining Efficiency of Tourism Sector	2017	23 European countries (CRO + SRB)	BCC and CCR DEA model

Source: Authors

Cvetkoska & Barišić (2014) have employed the Window analysis technique to evaluate the efficiency of fifteen European countries (Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Greece, Italy, Macedonia, Montenegro, Portugal, Serbia, Slovenia and Spain) in tourism. The observed period is 10 years (from 2004 to 2013). They selected

two inputs (visitor exports and domestic travel and tourism spending) and two outputs (travel and tourism total contribution to GDP and travel and tourism total contribution to employment) for their DEA model. Their obtained results show no country from the sample to be relatively efficient every year in every window. The year with the highest efficiency results is 2004 and 2011 is the year with the lowest efficiency results. In terms of overall efficiency by years, they found 10 out of 15 countries to note an efficiency higher than 95%. They also found Montenegro to be the least efficient country, whereas Italy, Cyprus, France and Spain are the most efficient countries in their sample.

Cvetkoska & Barišić (2017) have focused on investigating the efficiency of the tourist industries of eleven Balkan countries (namely Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia, and Turkey) in the period of six years (2010-2015). They have implemented a DEA window analysis model with the variable returns to scale (VRS) assumption. Their model used two inputs (Visitor exports and Domestic travel and tourism spending) and two outputs (Travel and tourism total contribution to GDP and Employment). Their findings suggest that no country from the sample was efficient every year in every window. However, Albania, Croatia, Romania, and Turkey are found to be „most efficient countries in tourism“. Furthermore, they found that „the most efficient country in the whole observed period is Albania, while the least efficient country is Montenegro“. The lowest efficiencies in tourism were also noted for Serbia and Bosnia and Herzegovina. The average score of efficiency of the tourism industries in the whole sample is 0.9342. 2013 was the year with the highest, whereas 2011 was the year with the lowest efficiency. These results are consistent with the previous study by Cvetkoska & Barišić (2014).

Soysal-Kurt (2017) has investigated the tourism efficiency of 29 European countries by implementing the input-oriented and constant returns to scale DEA model for the year 2013. In his DEA model, he has selected tourism expenses, the number of employees and the number of beds as input variables, whereas tourism receipts, tourist arrivals and the number of nights spent are selected as output variables, i.e. three inputs and three outputs. His findings show that 16 out of 29 analysed countries are relatively efficient, while 13 countries are relatively inefficient. In this research, Croatia is one of the efficient countries with a relative efficiency score of 1, whereas Serbia has not been analysed.

Ilić & Petrevska (2018) have applied the DEA methodology to evaluate the tourism efficiency of Serbia and its surrounding countries (i.e. a total of 15 countries). In their study, tourism expenses and the number of beds are selected as input variables, whereas the number of arrivals and the number of nights spent and tourism revenue are selected as output variables. They analyse the year 2016. Their findings show that six countries are relatively efficient, while nine countries are relatively inefficient. The results also indicate that Croatia is relatively efficient in 2016, while Serbia has noted an efficiency result of 64.49%.

Škrinjarić (2018) has applied the DEA methodology to empirically assess the efficiency of the environmentally-conscious tourism industry of 21 Croatian counties in the period from 2011 to 2015. This study is revolutionary since it combines both economic and environmental variables in the total efficiency evaluation of the tourism industry as a sustainable business. The DEA model included number of beds, number of rooms, municipal waste in tourism (in tons), current expenditures on environment protection (in thousands of HRK), total investments on environment protection (in thousands of HRK), number of tourist arrivals, number of overnight

stays, total GDP (in thousands of HRK) and the surface of each county (in square kilometres), tourism pressure, reciprocal value of municipal waste, percentage of current expenditures, percentage of total investments in GDP and undesirable output municipal waste that were used as variables in the model. In her study, Škrinjarić (2018) has developed four DEA models in order to assess the efficiency of the Croatian counties concerning environmental consciousness. Her findings suggest that tourist arrivals in all Croatian counties are satisfactory but changes regarding the expenditures on environmental protection are needed for all the counties to become relatively efficient.

Prorok, Šerić & Peronjac (2019) have applied the DEA methodology to examine the efficiency of tourism in two groups of countries (EU and non-EU countries) in 2017. In their model, they have grouped the countries (i.e. the sample) in clusters of countries for more individual and detailed approach and analysis and in order „to form relatively homogeneous decision-making units that have similar or identical tourism potentials“. Thus, the selection of inputs has been conducted with the help of the principal component analysis method and every group (cluster) of countries had its own set of two input and two output variables. The results from this study show that Croatia (which was in the EU-countries group) has been relatively efficient in 2017 according to the BCC model, whereas the CCR model showed an efficiency score of 92,25%. Serbia, on the other hand, (together with Bosnia and Herzegovina and North Macedonia) has achieved „lower coefficient of total technical efficiency, while their coefficient of pure technical efficiency was one“. These findings imply that Serbia is ineffective in terms of scale, „possibly as a result of the non-existence or inefficient implementation of operational activities in the field of tourism, as well as of unfavourable conditions for its development“.

Radovanov, Dudic, Gregus, Marcikic Horvat & Karovic (2020) have investigated the tourism efficiency of 27 EU countries and five Western Balkan countries in the period from 2011 to 2017, employing a two-stage output-oriented DEA in combination with the Tobit regression model. They selected one input (T&T government expenditure, as a percentage of the total government budget) and three outputs (Average receipts per arrival, T&T industry employment - as a percentage of total employment and Sustainability of travel and tourism industry development,) in their DEA model. The results from the first stage of the DEA model show very high efficiency in the case of 15 EU countries, as well as a high-efficiency score of 1 for both Serbia and Croatia. The second stage of the model indicates that „sustainability of tourism development, the share of GDP, tourist arrivals and inbound receipts, as well as visa requirements and rate of use“ have all a very significant effect on relative tourism efficiency.

Galic, Arifhodzic, Satrovic, Dalwai & Milicevic (2020) have employed the BCC output-oriented model to evaluate the tourism efficiency of 41 NUTS (Nomenclature of Territorial Units for Statistics) II area Adriatic-Ionian Region in the period from 2011 to 2014. In their model, they use three inputs (number of persons employed, number of bed-places, arrivals) and two outputs (gross domestic product, nights spent). Their findings indicate that eleven NUTS areas, out of 41, are efficient. Adriatic Croatia has been one of the most efficient units (NUTS areas) with an efficiency score of 0.946547 in 2011 and a relative efficiency score of 1 in three consecutive years (2012-2014). Southern and Eastern Serbia has also noted three consecutive years of relative efficiency (2011-2013) and lowered its efficiency in 2014 (0.3301). Province of Vojvodina and Sumadija and Western Serbia have both experienced relative efficiencies in two consecutive years (2011-2012) and thereafter lowered their efficiencies. Continental Croatia is the only area that has not noted a relative efficiency result of 1 and notes an average efficiency score

of 15.86%. These findings are scientifically contributing to regional governments, policy-makers, academia and the interested public since this is the first efficiency measurement study with DEA using the 41 NUTS II area for the Adriatic-Ionian Region.

Barišić & Cvetkoska (2020) have concluded a cross-country study where they focused on the efficiency of travel and tourism impact on the GDP and employment in all the 28 EU-member states in 2017. Their output-oriented BCC DEA model used two inputs and two outputs (Internal travel and tourism consumption and capital investment as inputs, while travel and tourism's total contribution to GDP and employment as outputs). The results of their study show 13 (Bulgaria, Cyprus, Estonia, Germany, Greece, Hungary, Italy, Latvia, Malta, Portugal, Romania, Spain, and the United Kingdom) out of 28 EU countries to be relatively efficient in 2017 and 15 were not. The average efficiency of the whole sample is 0.9441, with maximum efficiency of 1, and a minimum of 0.7406. They have even gone one step further and have ranked each EU country (a rank of 1 for the efficient countries and a rank from 14 to 28 for the relatively inefficient EU countries). The scientific and practical contribution of this study is mirrored in the reference set for the inefficient countries that indicate „what changes should be made by relatively inefficient states, or more precisely how much they should increase the outputs to become relatively efficient“.

Marcikić Horvat & Radovanov (2020) have investigated the tourism efficiency of 33 European countries using a two-stage DEA model for the period from 2013 to 2019. Their developed output-oriented DEA model has selected one input (i.e. government expenditure for travel and tourism – T&T) and four outputs (average receipts per arrival, number of international tourist arrivals, T&T share of GDP and T&T share of employment). Their findings show that Serbia (as a part of the group of Western Balkan countries) has noted „the maximal level of efficiency during the whole 6-year period“, whereas Croatia (as a part of the group of New EU member states), had „obtained significantly higher efficiency scores than other countries“, i.e. both Serbia and Croatia noted a relative efficiency result of 100%. Furthermore, the highest average efficiency score was achieved by the EU15 group countries.

Pavković, Jević, Jević, Nguyen & Sava (2021) have developed a DEA model including three inputs (number of hotels and similar accommodation capacities, number of rooms, number of bed places) and three outputs (number of inbound tourists, number of bed-nights and tourism expenditure in dollars). The analysed sample incorporates 23 European countries, which were systemized into five groups as follows countries in transition (Serbia, Croatia, North Macedonia, Montenegro, Romania), Scandinavian countries (Sweden, Norway, Denmark), Eastern European countries (Hungary, Poland, Czechia), Mediterranean countries (France, Greece, Cyprus, Malta, Italy, Portugal, Spain) and Central and Western European countries (Slovenia, Austria, Belgium, Germany, the Netherlands). Their study reveals insightful information regarding the efficiency of the countries in transition, which are our subject of interest. Namely, Croatia is the only country that appears relatively efficient, whereas all the other countries in this group show high inefficiency. Furthermore, Serbia is the least efficient country in tourism, with an efficiency score of 20.94%. These authors have even gone a step further and have provided targets for improvement for Serbia to reach efficiency. Regarding the whole sample of 23 DMUs, only three countries appear relatively efficient and these are Croatia, Belgium and Denmark.

There are other articles regarding the efficiency of Croatian and/or Serbian tourism, but they have applied different methodologies. For example, Janković & Poldrugovac (2015) have used

benchmarking in order to compare the results of Croatian and Slovenian hotels. Kovačić, Topolšek & Dragan (2015) have implemented the SEM (Structural Equation Modeling) to analyse the tourism sector, travel agencies, and transport suppliers and Šimundić & Kordić (2021) have evaluated the efficiency of seaport authorities in Croatia using the output-oriented CCR model and output-oriented BCC model to identify the technical (TE), scale (SE) and overall technical efficiency (OTE). Perić & Nikšić Radić (2016) have investigated the causal relationship between the foreign direct and the number of international tourist arrivals in Croatia in the period from 2000 to 2012, implementing the ADF Test and the Johansen co-integration, Granger causality test and the Toda–Yamamoto test. Their findings imply that FDI in tourism has a causal relationship with the arrivals of tourists from abroad.

6. DISCUSSION AND CONCLUSION

In this chapter, a pragmatic perspective has been adopted and an objective presentation of both the upsides and downsides of the DEA methodology has been laid out as follows.

There are many discussions and open criticism regarding the limitations of the DEA methodology „on a number of methodological and substantive grounds regarding the DEA methodology“ (Fotova Čiković & Lozić, 2022). First of all, DEA does not estimate the absolute, but the relative efficiency of each DMU. Secondly, results could be biased if heterogeneous inputs and/or outputs are considered to be homogenous. Third, the efficiency results „could be influenced by outliers“. There is also the possibility that the comparison of the efficiency scores of the two samples could be useless. Furthermore, the fact that the standard DEA does not take into account the multi-period optimisation and the risk in the management decision-making process is a great limitation of this methodology (Hodžić, Bogdan & Bareša, 2020). Fotova Čiković & Lozić (2022) state the following limitations of DEA: the basic assumption that random errors do not exist can lead to frontier sensitivity to extreme observations and measurement errors; the ignorance of the impact of the exogenous variables; the lack of offered possibilities for the performance and efficiency improvement; challenges in the performance of additional statistical tests and sensitivity of the results to the selection of the used variables.

On the other hand, DEA has a handful of advantages when compared to conventional accounting methods. In this context, DEA makes it possible to give a comparison of the relative performance between multiple performance measures (Poldrugovac et al, 2016) and is commonly employed in benchmarking and obtaining guidelines for improvements in business performance and efficiency (Jardas Antonić & Pavlić Skender, 2015). Furthermore, DEA has a very practical component that allows for the identification of the best-practice DMUs that serve as benchmarks for the inefficient DMUs and does not depend upon a subjective opinion of researchers, which lowers the negative effect of various biases and mistakes (Hodžić, Bogdan & Bareša, 2020).

When compared to the parametric methodologies (i.e. regression in particular), there are many benefits to using the nonparametric methodologies. For example, the parametric methodologies obtain information regarding the average performance of the analysed entity and focus on average tendencies and deviations from it, whereas the non-parametric methods observe extreme observations. Another advantage of this methodology is there is no requirement for assessment or a priori knowledge of the weights of the inputs and outputs. The most important advantage when employing this methodology is „the possibility to include more than one output and to not set assumption for the production function“ (Cvetkoska & Fotova Čiković, 2021).

Furthermore, the advantage of efficiency information provided by DEA is that all the inputs and outputs of a business are taken into consideration and it provides a wider perspective of the performance (Poldrugovac et al, 2016). Additionally, DEA does not require functional dependence between input and output variables when solving fragmented linear programming and calculates the relative efficiency of decision-making units using multiple inputs and outputs not necessarily expressed in identical measurement units (cost, number of employees, etc.) (Jardas Antić & Pavlić Skender, 2015; Hodžić, Bogdan & Bareša, 2020).

Even though there are some limitations and setbacks to this methodology, its upsides are outweighing them by far. Stolp (1990) refers to both the upsides and downsides of DEA and points out the informativeness and usefulness of DEA as a tool for systematic sensitivity analysis.

The findings of the extensive literature review show that most of the twelve surveyed papers have applied the output-oriented DEA model (7 out of 12), two papers have applied the window DEA model and three papers have applied the input-oriented model. Most of these studies have been conducted for the period after 2010 and have applied the BCC DEA model (5 papers). Three studies have implemented both the CCR and BCC DEA models, whereas two papers have implemented the CCR DEA model. Two of the surveyed papers are analysing solely the Croatian tourism, while the rest (10 papers) are cross-country studies, mostly analysing the EU-member countries and the Western Balkan countries.

This paper represents an incentive to other scholars and academic members to implement and employ the leading nonparametric DEA methodology in their future research regarding the tourism sector. Notwithstanding, the presented studies and their invaluable findings provide new insights for the academia, the interested public and the government.

REFERENCES

- Alkier, R., Perić, G. & Miložica, V. (2021). Croatian tourism in the COVID-19 pandemic-current state and developmental perspectives. In: Christou, E., Fotiadis, A. & Alexandris, K. (eds.) *TOURMAN 2021 Book of abstracts: Restarting tourism, travel and hospitality: The day after*.
- Baldigara, T. & Mamula, M. (2012). Tourism statistics in Croatia: Present status and future challenges. *Procedia - Social and Behavioral Sciences* 44, 53 – 61.
- Banker, R. D., Charnes, A. & Cooper, W.W. (1984). Some models of estimating technical and scale inefficiencies in data envelopment analysis. *Management Science* 30 (9): 1078-092.
- Banožić, M., Žalac, G. & Sumpor, M. (2015). Mapping of tourism potential: The preconditions for the development of tourism in Continental Croatia. *Ekonomski vjesnik*, 28 (1), 69-83.
- Barišić, P. & Cvetkoska, V. (2020). Analyzing the Efficiency of Travel and Tourism in the European Union. In: Mladenović, N., Sifaleras, A. & Kuzmanović, M. (eds.) *Advances in Operational Research in the Balkans*. Springer Proceedings in Business and Economics. Cham, Springer International Publishing, 167-186 doi:10.1007/978-3-030-21990-1_10.
- Bogetić, S., Bešić, C. & Đorđević, D. (2017). Analiza potencijala domaćeg turizma u odnosu na globalne trendove i značaj za ekonomski razvoj Srbije [The analysis of domestic tourism potentials in relation to global trends and the importance for economic development of Serbia]. *Menadžment u hotelijerstvu i turizmu*, 5(1), 94- 104.
- Charnes, A., Cooper, W. W., & Rhodes, E. L. (1978). Measuring the efficiency of decision making units. *European Journal of Operations Research*, 2(6), 429–444. doi:10.1016/0377-2217(78)90138-8

- China CEE Institute (2020). Serbia economy briefing: Struggles of the tourism sector in Serbia during the COVID-19 pandemic IIPE. Weekly Briefing. Vol. 34, No. 2
- CNTB, C.N.T.B. (2021). News from the Croatian National Tourist Board: 3.7 million tourists visit Croatia in July. *Tourism: An International Interdisciplinary Journal*, 69 (3), 462-462. <https://hrcak.srce.hr/261839>
- Cooper, W. W., Seiford, L. M., & Tone, K. (2006). *Introduction to data envelopment analysis and its uses: With DEA-solver software and references*. New York, NY: Springer Science + Business Media.
- Cooper, W.W., Seiford, L.M & Tone, K. (2007). *Data envelopment analysis: a comprehensive text with models, applications, references and DEA-solver software*, 2nd edn. Springer Science+Business Media, LLC, New York.
- Cvetkoska, V. & Barišić, P. (2014). Measuring the Efficiency of Certain European Countries in Tourism: DEA Window Analysis. *Book of Proceedings of the International May Conference on Strategic Management – IMKSM14*. Živković, Živan (eds.) Bor: University of Belgrade, Technical Faculty in Bor, Management Department, 77-86.
- Cvetkoska, V. & Barišić, P. (2017). The efficiency of the tourism industry in the Balkans. *Proceedings of the Faculty of Economics in East Sarajevo*, 14; 31-41.
- Cvetkoska, V. & Fotova Čiković, K. (2021). Efficiency Analysis of Macedonian and Croatian Banking Sectors with DEA. *Economy, Business & Development*, 2 (2), 1-19 doi:10.47063/ebd.00003.
- Cvetkoska, V. (2011). Data Envelopment Analysis Approach and Its Application in Information and Communication Technologies. In: M. Salampasis, A. Matopoulos (eds.): *Proceedings of the International Conference on Information and Communication Technologies for Sustainable Agriproduction and Environment (HAICTA 2011)*, Skiathos, 8-11 September.
- Denona Bogovic, N. & Grdic, Z.S. (2020). Transitioning to a Green Economy—Possible Effects on the Croatian Economy. *Sustainability* 12(22): 9342. <https://doi.org/10.3390/su12229342>
- Dujmović, M. & Vitasović, A. (2020). Alternative View Of Croatian Tourism. *WIT Transactions on Ecology and the Environment*, 248, 41-49. doi:10.2495/ST200041.
- Farell, M. (1957). The measurement of productive efficiency. *Journal of the Royal Statistical Society, Series A*, 120, 253-281.
- Fotova Čiković, K. & Cvetkoska, V. (2017). Efficiency of the Macedonian banking sector: A non-parametric approach. *CEA Journal of Economics*, 12 (2), 17-26.
- Fotova Čiković, K. & Lozić, J. (2022). Application of Data Envelopment Analysis (DEA) in Information and Communication Technologies. *Tehnicki glasnik/Technical Journal*, Vol. 16/No. 1. Accepted for publication.
- Galic, M., Arifhodzic, M., Satrovic, E., Dalwai, T. & Milicevic, M. (2020). Measuring Tourism Efficiency Of NUTS II Area Of The Adriatic-Ionian Region. *Časopis za upravu i upravno pravo*. 2 (20), pp. 9-27.
- Greene, WH. (1993). The econometric approach to efficiency analysis. In: Fried HO, Lovell CAK, Schmidt SS (eds): *The measurement of productive efficiency: techniques and applications*. Oxford University Press, New York, 68–119.
- Gržinić, J. (2017). Sustainable Tourism Studies And Externalities In Croatian Tourism Development. *Third international scientific conference ERAZ 2017: Knowledge Based Sustainable Economic Development*. Udekom Balkan, Belgarde.
- Guzmán-Raja, I. & Guzmán-Raja, M. (2021). Measuring the Efficiency of Football Clubs Using Data Envelopment Analysis: Empirical Evidence From Spanish Professional Football. *SAGE Open*, 11 (1), DOI: 10.1177/2158244021989257

- Harchandani, P. & Shome, S. (2021). Global Tourism and COVID-19: An Impact Assessment. *Tourism: An International Interdisciplinary Journal*, 69 (2), 262-280. <https://doi.org/10.37741/t.69.2.7>
- Hodžić, S. & Jurlina Alibegović, D. (2019). The efficiency of regional government expenditure in smart tourist destination: the case of Croatia. In: Zadel, Z. & Smolčić Jurdana, D. (eds.) *Tourism in Southern and Eastern Europe 2019 - Conference Proceedings* doi:10.20867/tosee.05.35.
- Hodžić, S., Bogdan, S. & Bareša, S. (2020). The Financial Potential of Gastronomy for Tourism Development in Croatia. In: Peštek, A., Kukanja, M. & Renko, S. (eds.) *Gastronomy for Tourism Development*. Bingley, United Kingdom, Emerald, pp. 211-245 doi:10.1108/978-1-78973-755-420201010.
- Ilić, I. & Petrevska, I. (2018). Using DEA method for determining tourism efficiency of Serbia and the surrounding countries. *Hotel and Tourism Management*, 6(1), pp. 73-80. doi: 10.5937/menhottur1801073I
- Janković, S. & Poldrugovac, K. (2015). Benchmarking: prepoznavanje najbolje prakse v hotelirstvu. Spremljanje in primerjava dosežkov hrvaških in slovenskih hotelov / Pračenje i usporedba rezultata hrvatskih i slovenskih hotela / Ivanković, Gordana; Jerman Matea (eds.), 7-28.
- Jardas Antičić, J. & Pavlić Skender, H. (2015). Efficiency of Passenger Seaports as a Factor in Tourism Development. 2nd International Multidisciplinary Scientific Conference on Social Sciences & Arts SGEM 2015; Book 2, Vol.3. SGEM (eds.), 235-244.
- Jurčić, L. (2016). Hrvatsko gospodarstvo i svjetsko okruženje. *Ekonomski Pregled*, 67, 605–636.
- Kovačić, N., Topolšek, D. & Dragan, D. (2015). Tourism sector, Travel agencies, and Transport Suppliers: Comparison of Different Estimators in the Structural Equation Modeling. *Logistics & Sustainable Transport*, 6(1); 11-24.
- Marcikić Horvat, A. & Radovanov, B. (2020). Efficiency Of Tourism Development: Application Of DEA And Tobit Model. In Bevanda, V. & Štetić, S. (eds.) 5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era. DOI: 10.31410/tmt.2020.15
- Micajkova, V. & Poposka, K. (2013). Efficiency of Macedonian Banks: A DEA Approach. *Research Journal of Finance and Accounting* 4 (12): 141-149.
- Mihaljević Kosor, M. & Abramović, I. (2019). Mjerenje relativne efikasnosti sveučilišta u Hrvatskoj. In: Bevanda, V. (ed.), 3rd International Scientific Conference – EMAN 2019 – Economics and Management: How to Cope With Disrupted Times, conference proceedings. Association of Economists and Managers of the Balkans, Belgrade, Serbia. 185-191 doi:10.31410/eman.2019.185.
- Nakovski, D., Milenkovski, A. & Gjorgievski, M. (2021). Contemporary challenges of tourism. *UTMS Journal of Economics* 12(1): 95–103.
- Obadić, A. & Aristovnik, A. (2011). Relative Efficiency of Higher Education in Croatia and Slovenia: An International Comparison. *Amfiteatru Economic*, XIII (30), 362-376.
- OECD (2020). *Tourism in OECD Countries 2008: Tourism Trends and Policies*. OECD Publishing, Paris, <https://doi.org/10.1787/20767773>
- Orsini, K. & Pletikosa, M. (2019). *Croatia's Tourism Industry – Part 2: Curse or Blessing? Luxembourg: Publications Office of the European Union*. doi:10.2765/07914
- Pavković, V., Jević, G., Jević, J., Nguyen, P.T. & Sava, C. (2021). Determining Efficiency Of Tourism Sector In Certain European Countries And Regions By Applying DEA Analysis. *Journal of Process Management and New Technologies*, 9 (3-4), pp. 49-61

- Pereira, M.A., Ferreira, D.C., Figueira, J.R. & Marques, R.C. (2021). Measuring the efficiency of the Portuguese public hospitals: A value modelled network data envelopment analysis with simulation. *Expert Systems with Applications*, 181 (115169), DOI: 10.1016/j.eswa.2021.115169
- Perić, J. & Radić, M. (2017). FDI-led tourism growth hypothesis: empirical evidence from Croatian tourism. *European Journal of Tourism, Hospitality and Recreation*, 7(3), 168-175. <https://doi.org/10.1515/ejthr-2016-0019>
- Petrović, M.D., Vujko, A., Gajić, T., Vuković, D.B., Radovanović, M., Jovanović, J.M., Vuković, N. (2018). Tourism as an Approach to Sustainable Rural Development in Post-Socialist Countries: A Comparative Study of Serbia and Slovenia. *Sustainability*, 10, 54. <https://doi.org/10.3390/su10010054>
- Planinc, T. & Kukanja, M. (2019). Efficiency analysis of restaurants operating in the rural areas: The case of Slovenia. *Academica Turistica*, 12 (2), 133-145. DOI: 10.26493/2335-4194.12.133-145
- Poldrugovac, K., Tekavcic, M. & Janković, S. (2016). Efficiency in the hotel industry: an empirical examination of the most influential factors. *Economic Research - Ekonomska istraživanja*, 29, 1; 583-597.
- Prorok, V., Šerić, N. & Peronja, I. (2019). Analysis of Overall and Pure Technical Efficiency of Tourism in Europe. *Transactions on Maritime Science*, 08 (02), 219-229. <https://doi.org/10.7225/toms.v08.n02.007>
- Rabar, D. & Blažević, S. (2011). Ocjenjivanje efikasnosti hrvatskih županija u turizmu primjenom analize omeđivanja podataka. *Privredna kretanja i ekonomska politika*, 21(127): 25-55.
- Rabar, D. & Grbin, A. (2021). Comparative efficiency analysis of Croatian cities and municipalities: A non-parametric approach from a fiscal perspective. *Interdisciplinary management research*, 1, accepted for publication.
- Radovanov, B., Dudic, B., Gregus, M., Marcikic Horvat, A. & Karovic, V. (2020). Using a Two-Stage DEA Model to Measure Tourism Potentials of EU Countries and Western Balkan Countries: An Approach to Sustainable Development. *Sustainability*. 12(12):4903. <https://doi.org/10.3390/su12124903>
- Radović, G. (2016). Razvoj ruralnog turizma u Sloveniji – moguće smernice Srbiji [Development of rural tourism in Slovenia – potential guidelines for Serbia]. *Menadžment u hotelijerstvu i turizmu*, 4(2), 103-111.
- Rašić, I. (2019). *Sektorske analize: Turizam*. Ekonomski institut, Zagreb: Zagreb.
- Schubert, S. F., Brida, J. G., & Risso, W. A. (2011). The impacts of international tourism demand on economic growth of small economies dependent on tourism. *Tourism Management*, 32(2), 377-385. <https://doi.org/10.1016/j.tourman.2010.03.007>
- Šimović, V., Svetlačić, R. & Cegur Radović, T. (2021). Croatian tourism and economy in the age of Corona: reflections on the unsustainability of the current economic model. *Et2er - ekonomija, turizam, telekomunikacije i računarstvo*, 3 (2), 114-124.
- Šimundić, B. & Kordić, L. (2021). The Efficiency of Croatian Seaport Authorities. In: Karanovic, G., Polychronidou, P., Karasavvoglou, A., Maskarin Ribaric, H. (eds.) *Tourism Management and Sustainable Development. Contributions to Economics*. Springer, Cham.
- Škrinjarčić, T. (2018). Evaluation of environmentally conscious tourism industry: Case of Croatian counties. *Tourism: An International Interdisciplinary Journal*, 66 (3), 254-268.
- Soysal-Kurt, H. (2017). Measuring Tourism Efficiency of European Countries by Using Data Envelopment Analysis. *European Scientific Journal* 13 (10), pp. 31-49. doi: 10.19044/esj.2017.v13n10p31

- Šporčić, M., Martinić, I., Landekić, M. & Lovrić, M. (2008). Analiza Omeđivanja Podataka Kao Metoda Mjerenja Efikasnosti – Mogućnosti Primjene u Šumarstvu. *Nova mehanizacija šumarstva*, 29, 51-60.
- Stolp, C. (1990). Strengths and weaknesses of data envelopment analysis: An urban and regional perspective. *Computers, Environment and Urban Systems*. 14(2), 103-116. [https://doi.org/10.1016/0198-9715\(90\)90016-M](https://doi.org/10.1016/0198-9715(90)90016-M).
- Šverko Grdić, Z., Gregorić, M. & Krstinić Nižić, M. (2019). Investigating the Influence of Tourism on Economic Growth and Climate Change – The Case of Croatia. *CONTEMPORARY ECONOMICS*, 13 (2), 111-122, doi:10.5709/ce.1897-9254.302.
- Svilokos, T., Šuman Tolić, M. & Pavlić, I. (2014). Economic Growth and Tourism Demand in Croatia: The Cyclical Component Analysis. *Zagreb International Review of Economics & Business*, Vol. 17, Special Conference Issue, 65-80.
- UNWTO (2019). World Tourism Organization, International Tourism Highlights Madrid. <https://doi.org/10.18111/9789284421152>.
- UNWTO. (2020). COVID-19: UNWTO calls on tourism to be part of recovery plans. <https://www.unwto.org/news/covid-19-unwto-calls-on-tourism-to-be-part-of-recovery-plans>
- Vincova, K. (2005). Using DEA Models to Measure Efficiency. *BIATEC*, Volume XIII, 8/2005, National Bank of Slovakia.
- Wong, W.-P. (2021). A Global Search Method for Inputs and Outputs in Data Envelopment Analysis: Procedures and Managerial Perspectives. *Symmetry*, 13, 1155. <https://doi.org/10.3390/sym13071155>
- WTTC (2021). World Travel & Tourism Council. Retrieved October 28, 2021, from <http://www.wttc.org>.



Tourism Development Perspectives of Bosnia and Herzegovina: Possibilities and Limitations

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Abstract: *Tourism plays an important role and contributes to the overall economic growth and development of the country. As a dynamic industry, tourism contributes to the strengthening of many activities, such as transportation, services, and trade. Statistical data on tourist traffic in Bosnia and Herzegovina were constantly increasing until the outbreak of COVID-19. Intact natural, cultural and historical treasures, multicultural tradition and customs are attractive factors that draw tourists to visit Bosnia and Herzegovina. Other factors affect the development of tourism. This paper analyzes the natural, cultural and historical resources, legislation and organization of institutions as fundamental settings of tourism development in Bosnia and Herzegovina. Through primary research, the paper identifies possibilities and limitations for the faster development of tourism. The test methods used are the chi-square test and Cronbach's alpha.*

1. INTRODUCTION

Tourism is an economic activity framing cultural-historical (Tsartas 2000; Ismagilova, Safiullin & Gafurov, 2015; Luo & Chiou 2021); technological (Ali & Frew, 2010; Trunfio & Campana, 2019; Gosling, 2020), and natural resources (Gios, Gio, Notaro & Raffaelli, 2006; Ruban 2021). It is one of the main sources of income and development pillars of advanced and developing countries (Brida et al. 2011; Turner & Freiermuth; Costa 2017; Naseem, 2021), considered a significant part of international services exchange and a source of job creation (Thomandru et al. 2021). Numerous studies have examined the relationship between tourism development and economic growth. In countries where the tourism sector is not dominant relative to other major economic activities, this link is weaker (Shahzad et al. 2017). Studies supporting the tourism-led growth hypothesis showed a positive relationship between tourism and economic growth (Jackman & Lorde, 2010; Meyer & Meyer 2015; Wang & Ma, 2015; Brida et al. 2016; Ohlan 2017; Li et al., 2018; Badulescu et al. 2020).

That is why policymakers need to prioritize sustainable tourism development within economic development. The institutional framework also plays an important role in enhancing the tourism sector by creating a supportive environment that accelerates the processes related to tourism development. The private sector primarily sustains the tourism activity, but the role of the government is crucial in the development of the tourism industry at the policy level (Nawaz, & Hassan, 2016). Numerous research papers on tourism, deal with different subject areas (Daoudi & Mihalić, 1999; Vrdoljak-Salamon & Corak, 2012; Brumen, Gorenak, Rosi & Rangus, 2016; Wengel, 2017; Mihailovic & Popovic, 2018; Wiweka & Arcana, 2019; Khan, Bibi, Lorenzo, Lyu & Babar, 2020) one can conclude that it is a complex industry that requires a strategic approach in all segments of its activities to obtain the desired effects.

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This chapter explores the possibilities and limitations in the development of tourism in Bosnia and Herzegovina. First, it provides an overview of the literature on this subject, resource opportunities, tourist traffic, and legislation in Bosnia and Herzegovina. The research section examines the attitudes of service providers towards factors influencing tourism development in Bosnia and Herzegovina. The final section provides recommendations for future research and overcoming limitations.

2. LITERATURE REVIEW

Tourism involves an ecosystem of various stakeholders who need to design and promote travel experiences. The tourism value chain is complex, and tourists expect an integrated offer and experience (Mariani, 2016). That includes the integration of marketing activities, public-private partnerships, strategic planning, and branding, all intending to promote the tourist experience (Wang et al 2013; Gursoy et al 2015). From the Destination Management Organization perspective, well-integrated tourism resources contribute to better placement of the tourism experience (Karayilan & Cetin, 2016) thus enhancing the local economy.

The starting point for tourism development are natural and other resources, well incorporated into the tourist offer and promoted in the market. Tourism resources and attractions can be a key factor in making a travel decision (Stabler, Papatheodoru & Sinclair; 2010; Blasco et al., 2014; Manhas, Manrai&Manrai, 2016). Their characteristics attract and motivate tourists to visit a particular destination (Krešić, 2007, p 46). Willson and McIntosh (2007) consider landscapes as a kind of experience space, from which the tourist returns enriched with emotions portrayed as a visual attraction and new thinking. It means that there is the uniqueness of the destination as a key to its desired positioning, making the brand distinguishable to tourists (Mirabent, 2019). According to Burns and Holden (1995), for tourism resources to become attractive and sought after by tourists, they must be carefully selected and packaged to become a brand and a sphere of interest for tourists. Brand preference is a customer's choice through which he places a brand into a specific category of products and services he uses (Jaganjac & Obhodaš, 2019, p 54). Promoting a brand through a wealth of attractions is not enough to ensure the prosperity of the location. Attractions cannot compensate for deficiencies, such as poor infrastructure (Kotler, Haider & Rain, 2012, p 49) or inadequate institutional support.

Having renowned potentials and being one of the most rural areas in Europe, with more than 60% of inhabitants living in rural areas, Bosnia and Herzegovina can, among other types of tourism, develop rural tourism. Motivations of tourists for rural tourism refer to traveling to discover new cultures, explore new natural spaces and gastronomy, be in contact with the local population and contact with nature (Chai, Liu & Huang, 2008; Buffa, 2015; Han et al, 2017).

But, obstacles faced by affirmative stakeholders in this area are the undefined legal framework for the development of rural tourism, poor promotion and information (Kovačević, 2017; Šehić-Kršlak, 2018). The major obstacle to the development of tourism, in the context of the unique tourist destination of Bosnia and Herzegovina, is the complex institutional system, as well as the jurisdictions within the system. According to Vukadinović (2016), reorganization of the social system is one of the problems that causes social instability and is especially reflected in times of social crises. The fact is that the development goals of the entire country are not obligatory in the entities and Brcko District authorities. The complex structure of the state and absence of laws on tourism at the state level, allows the entities and Brcko District to create their own tourism policies, which often mislead potential tourists that it is about more states.

The development of tourism resources of Bosnia and Herzegovina should be based on cooperation in spatial planning, nature conservation, valorization of tourist potentials, to place a regional product, and should not be hindered by Bosnian legislation (Hodžić, 2008). Looking at the relationship between the economic policy and the economy of Bosnia and Herzegovina, the mismatch of relations results in stagnation in the development of tourism. This is the result of ignorance of the issue by the economic policy creators at the entity level, and not just a lack of strategy at the state level (Vukonić, B. 2016).

Bosnia and Herzegovina is abundant in various resources and attractions, based on which a tourist offer could be created, and thus mitigate the seasonality of tourism. Tourists' affinities towards travel and vacation change and are often not tied to the season and famous destinations but are geared towards more frequent travel and discovery of new tourist destinations. This contributes to the creation of products based on year-round supply in combination with various selective forms of tourism (Geić, 2011). According to the results of empirical research (Aljić, 2016) in Bosnia and Herzegovina, a revision of the Law on Tourism is required to increase economic efficiency. According to Kurtović (2007), affirmation of tourism in Bosnia and Herzegovina must be approached professionally and thoroughly based on a combination of attractive features, natural and anthropogenic resources, while respecting the principles of sustainable development.

3. TOURISM OF BOSNIA AND HERZEGOVINA THROUGH THE PRISM OF RESOURCE OPPORTUNITIES, TOURIST TRAFFIC AND LAW

Bosnia and Herzegovina is a state with a complex administrative structure consisting of two entities (Federation of Bosnia and Herzegovina and Republika Srpska) and the Brčko District. Throughout its historical past, it has been marked by a wealth of influences from different cultures, nations, customs and traditions making it unique. All three territorial units of Bosnia and Herzegovina are specific destinations with a wealth of natural and anthropogenic resources.

3.1. Natural and cultural-historical resources of Bosnia and Herzegovina as a prerequisite for tourism development

Tourist resources are natural and anthropogenic goods available in the tourist area in the form of a tourist destination. Kušen E. (2001) divides tourist resources into *basic tourist attractions* that can be potential and realistic; *other direct tourist resources*, such as tourist places, destinations, education of the population, tourist information, tourist catering facilities, etc. and *indirect tourist resources*, which consist of communal infrastructure, a preserved environment, transport connections, etc.

Favorable geographical position in relation to emitting markets, and orderly urban units, are more reasons to emphasize a serious approach to tourism development. Bosnia and Herzegovina is a predominantly mountainous country with different soil characteristics. The diversity of the terrain is reflected in the hilly-mountainous-upland parts, inter-mountainous and pre-mountainous depressions, formed in the youngest geological epochs. Bosnia and Herzegovina consists of two geographical and historical units: the Bosnian part in the north and the Herzegovinian part in the south.

Bosnian-Herzegovinian river flows belong to the Black and Adriatic Sea basins. The Black Sea basin covers an area of 35,700 km², or 70% of the territory of Bosnia and Herzegovina, while

the Adriatic basin covers an area of 12,410 km², or 30% of the territory of Bosnia and Herzegovina. Bosnia and Herzegovina has fresh and salt waters as well as thermo-mineral springs. The abundance of mineral water springs, of which the most famous springs are in Kiseljak, Kakanj, Srednji, Busovača, Srebrenica, Žepa, Tešanj, Maglaj, Žepče, Gračanica, etc., create a good predisposition for the development of health and spa tourism. The warmest thermal spring is the spa Ilidža, where the temperature is 58° C. In terms of composition, the thermal water of this spa is rich in sulfur and is used to treat many diseases. Thermal springs are also located in Fojnica, Olovo, Tuzla, Gradačac, Gračanica, Živinice, Teslić, Banja Luka.

The mountains occupy four-fifths of the country and belong to the Dinaric chain that stretches northwest-southeast. Sixty mountains in Bosnia and Herzegovina have peaks above 1.500 m above sea level, while eleven mountains have peaks above 2.000 m above sea level. The highest peak in Bosnia and Herzegovina is Maglić at 2.386 m above sea level. Forestry legislation is aligned with the Forestry Information System (FAO, 2004), which implies sustainable forest management for present and future generations. The variety of mountains with diverse biodiversity and forest stands provides ideal conditions for the development of sports, recreational, and health tourism in the Federation of BiH.

Although it abounds in natural resources, the specificity of terrain forms, a good climate with clearly limited seasons, and water resources, tourism in Bosnia and Herzegovina is still at an early stage of development in regard to life cycle of the destination. According to Natek & Natek (2000), the combination of Mediterranean and continental climate is a prerequisite for the development of a specific cultural and tourist offer. There are 23 areas of natural resources officially protected. According to the report of the Federal Ministry of Tourism and Environment (FMOIT, 2016), the resources are protected following the laws and institutional jurisdictions of Bosnia and Herzegovina and the IUCN categorization. The least resources (2) are protected in the category of Strict Reserves and Nature, as well as the Resource Management Areas, and the most in the category of protection of Nature Monuments.

Thanks to its rich history, Bosnia and Herzegovina has for centuries been a place of meeting and coexistence of different nations, which has contributed to the creation of a unique space in which different nations live together. Different religious affiliations opened the possibility of developing religious tourism. The most famous shrines are Medjugorje, the place of Our Lady's apparitions, located 25 km from Mostar; Ajvatovica Prusac - the largest Muslim pilgrimage site in Europe, where believers have been gathering for 500 years. The tekke at the source of the Buna in Blagaj was founded after the fall of Herzegovina under Turkish rule in the 15th century. Tvrdoš Monastery is a famous spiritual place, dedicated to the Mother of God, located near Trebinje. The Old Town of Srebrenik is first mentioned in history in 1333. There are also Gradačac tower, Gradina, Tower of Husein-Captain Gradašćević and Fortress of The Old Town of Travnik.

According to the Commission to Preserve National Monuments of Bosnia and Herzegovina (KONS, 2019), the UNESCO World Heritage List includes the Mehmed-pasha Sokolović Bridge in Višegrad and the area of Old Bridge in Old Town of Mostar. In addition to the listed goods on the potential list - Tentative list KNOS, there are the following goods: Sarajevo - a unique symbol of universal multiculturalism - permanently open city (1997), Vjetrenica Cave (2004), Natural architectural ensemble of Jajce (2006), Historical urban area Pocitelj (2007), Natural and urban area Blagaj (2007), Natural and historical area Blidinje (2007), Natural and historical area Stolac (2007), Rainforest Perućica (2017), Jewish cemetery in Sarajevo (2018).

3.2. Traffic in Bosnia and Herzegovina

An important factor for the development of tourism is the traffic connection that enables accessibility to tourist destinations. Bosnia and Herzegovina has four international airports: Banja Luka, Mostar, Sarajevo and Tuzla, but they are insufficiently used for the development of domestic tourism. The main airport of Bosnia and Herzegovina is Sarajevo and has good connections with most European destinations.

Road transport in Bosnia and Herzegovina has a very important role in the economic, and tourist contexts. The current situation, when it comes to the traffic in Bosnia and Herzegovina, is one of the limiting factors, due to the poor quality of road communications and their rank. With the construction of the Vc corridor (Budapest - Osijek - Sarajevo - Ploče), Bosnia and Herzegovina will be included in the main European transport network.

3.3. Tourist traffic in Bosnia and Herzegovina

According to the World Economic Forum (WEF, 2019) and the parameters of competitiveness in tourism, Bosnia and Herzegovina ranks 105th out of 140 countries. Key indicators show that revenue from international tourism amounted to \$ 826.2 million, accounting for 2.8% of total GDP, while employment in the tourism industry was 25.700 workplaces. According to the competitiveness index, based on a scale from one to seven, Bosnia and Herzegovina received the highest score for health and hygiene, price competitiveness, and safety and insurance, while the lowest-rated are natural and cultural resources and business travel.

In the Year 2019, 1.640.717 arrivals were realized in Bosnia and Herzegovina, which is 12% more than in the Year 2018, while the number of realized overnight stays for the same period increased by 11%. That tourism is an extremely sensitive branch to various influences can be concluded from the statistical data of tourist traffic from the Year 2020, where there was a rapid decline in tourist traffic caused by the COVID-19, where compared to the previous year there was a total decline in tourist arrivals by 69.65%, and the number of overnight stays by 63.34%. The decrease in realized arrivals of foreign tourists is 83.64% and in overnight stays 80%.

Table 1. Tourist traffic in Bosnia and Herzegovina

	2016	2017	2018	2019	2020	Index 19/16
Arrivals						
Total	1.150 039	1.307 319	1.465 412	1.640 717	498 090	142,67
Domestic	371 911	384 269	412 514	442 658	302 033	119,02
Foreign	778 128	923 050	1.052 898	1.198 059	196 057	153,97
Overnight stays						
Total	2.383 056	2.677 125	3.040 190	3.371 322	1. 235 971	141,47
Domestic	735 781	763 681	874 786	952 217	748 370	129,42
Foreign	1.647 275	1.913 444	2.165 404	2.419 105	487 601	146,85

Source: Agency for Statistics of Bosnia and Herzegovina. (2017-2021). Announcement-Tourism Statistics

Accommodation is an integral part of the tourist offer. Catering facilities, as a receptive element of the offer, can be viewed in a narrower and broader sense (Petrić, 2007). When it comes to the receptive element in the service of receiving guests in the narrow sense, most overnight stays are in catering facilities in the group of hotels and motels. Categorization is defined by laws and entity regulations.

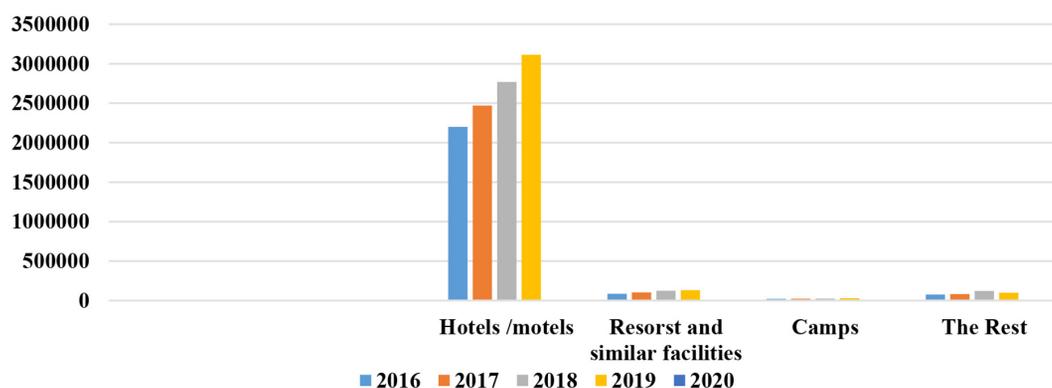


Figure 1. Achieved overnight stays by accommodation capacity

Source: Authors based on data from the Agency for Statistics of Bosnia and Herzegovina

3.4. Tourism legislation

The Constitution of the state of Bosnia and Herzegovina regulates the field of tourism as a shared jurisdiction between the entities of the Federation of Bosnia and Herzegovina and Republika Srpska, while the Brčko District has a separate jurisdiction. Ministry of Foreign Trade and Economic Relations, as a state institution, is responsible for tourism, but the adoption of tourism policy takes place with the consent of both entities. Within the Ministry of Foreign Trade and Economic Relations, there is a task force for coordination of activities, adoption of conclusions and drafting of proposals for solutions in the tourism sector of BiH. Tourism and hospitality in Bosnia and Herzegovina is regulated by 10 laws and 44 bylaws (see Figure 2), (Aljić, 2016).

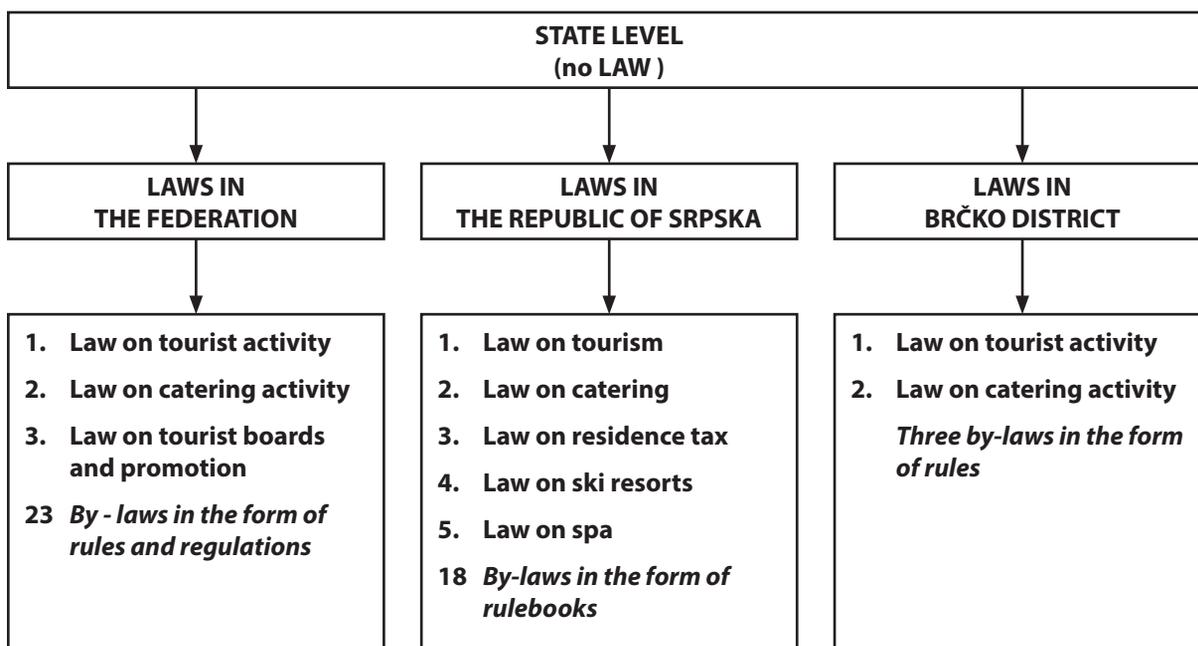


Figure 2. Legislation in the field of tourism in Bosnia and Herzegovina

Source: Aljić, 2016.

The complex and layered structure with the divided jurisdictions, where each of the entities and cantons can create their laws in the field of tourism, represent an obstacle to the faster development of tourism.

4. RESEARCH METHODOLOGY

A survey questionnaire consisting of 14 questions examined the attitudes of tourism service providers towards the possibilities and limitations of tourism development in Bosnia and Herzegovina. The answers to the questions about possibilities and limitations are on the Likert scale, from 5 (Strongly agree) to 1 (Strongly disagree). Responses were received from 72 service providers. MS Excel package is used for analysis. Testing methods are chi-square test, Cronbach alpha. Chi-square test is used for nominal data type (age, gender, qualifications). For internal consistency reliability Cronbach alpha is used. All tests are conducted at 5% level of significance.

By examining attitudes following hypotheses are tested:

H₀: B&H tourism is an important industry with great opportunities, but also limitations that slow down its development.

H₁: B&H has resources that enable the affirmation of various forms of tourism

H₂: The main factors limiting the development of tourism are infrastructure and legislative

Table 2. Sample structure

Description		Number	Percent
Gender	Male	36	50,00
	Female	36	50,00
Age	18-25	9	12,50
	26-35	10	13,89
	36-45	16	22,22
	45-55	24	33,33
	Over 55	13	18,06
Qualification	High school	21	29,17
	Bachelor 180 ECTS	13	18,06
	Bachelor 240 ECTS	30	41,67
	Master / PhD	8	11,11
Activity	Tourist agency	9	12,50
	Hotel/Motel	16	22,22
	Tourist organization	9	12,50
	Landlord (suite, room, camp)	8	11,11
	Restaurant/cafe bar	18	25,00
	Transport	6	8,33
	Other	6	8,33

Source: Authors

Data show that over 74% of participants are older than 35 years, and about 51% are older than 45 years. This implies the need to pay more attention to age structure in tourism. Data show that the most of participants (70.8%) have a high school education and a bachelor's degree.

5. RESULTS AND FINDINGS

5.1. Descriptive statistics

The following is an analysis of the general data of the participants.

Chi-square test ($p=0.96254$) shows that there is no statistically significant difference in distribution based on gender and age. There is a significant degree of uniformity in the number of respondents by gender. A total of 37 respondents (51.4%) are over 45 years old.

Table 3. Data recapitulation by gender and age

Group		Male	Female	Total
1	18-25 years	4	5	9
2	26-35	5	5	10
3	36-45	7	9	16
4	45-55	13	11	24
5	Over 55	7	6	13
	Total	36	36	72

Source: Authors

Chi-square test ($p=0.01536$) shows that there is a statistically significant difference in distribution based on gender and qualification. There are more female respondents in the group with high school education. On the other hand, there are more male respondents with a bachelor's degree and master's/PhD degree.

Table 4. Data recapitulation by gender and qualification

	Qualification	Male	Female	Total
1	High school	6	15	21
2	Bachelor 180 ECTS	9	4	13
3	Bachelor 240 ECTS	14	16	30
4	Master/PhD	7	1	8
		36	36	72

Source: Authors

Chi-square ($p=0.01081$) shows that there is a statistically significant difference in the distribution of age and qualification. Most of the respondents are in groups of 45-55 years (14, 20%) and 36-45 years (7, 10%) with bachelor's degrees. In total, most of the respondents have bachelor's degrees (30, 40%).

Table 5. Data recapitulation based on age and qualification

Group	Description	High school	Bachelor 180 ECTS	Bachelor 240 ECTS	Master/PhD	Total
1	18-25	6	3	0	0	9
2	26-35	2	2	5	1	10
3	36-45	2	6	7	1	16
4	45-55	7	1	14	2	24
5	Over 55	4	1	4	4	13
	Total	21	13	30	8	72

Source: Authors

Table 6. Data recapitulation by activity

Nº		Number	Percent
1	Tourist agency	9	12,50
2	Hotel/Motel	16	22,22
3	Tourist organization	9	12,50
4	Landlord (suite, room, camp)	8	11,11
5	Restaurant/cafe bar	18	25,00
6	Transport	6	8,33
7	Other	6	8,33
	Total	72	100,00

Source: Authors

Data show that 18 respondents (25 %) work in restaurants and 16 respondents (22.22%) work in hotels. The least response was in the categories of transport and other.

5.2. Analysis of responses

The data show that most respondents gave a score of 4 (I mostly agree) and 5 (I completely agree).

Table 7. Recapitulation of responses to questions

Aspect	P	Question	Values					Average	StDev
			1	2	3	4	5		
Possibilities	1	B&H has natural resources suitable for tourism development	0	0	1	7	64	4,88	0,37
	2	B&H has cultural and historical resources that might be a part of the tourist offer	0	0	1	13	58	4,79	0,44
	3	B&H has possibilities to develop different forms of tourism (health, cultural, gastronomic, etc.)	0	0	2	18	52	4,69	0,52
	4	B&H has rich and diverse traditional valuables (customs, culture, gastronomy)	0	0	1	20	51	4,69	0,49
	5	Public/private partnership is a good model to promote tourism in B&H	1	1	23	30	17	3,85	0,85
		Sums of ratings	1	1	28	88	242		
Limitations	1	Road communications of B&H are insufficiently developed and of poor quality	0	1	1	10	60	4,79	0,53
	2	Air traffic in BiH is insufficiently used for touristic purposes	0	1	6	26	39	4,43	0,71
	3	Legislation in the field of tourism is inadequate and not affirmative for businessmen	0	1	7	16	48	4,54	0,73
	4	Institutional frame in tourism is complex and unharmonized at the state level	0	0	5	19	48	4,60	0,62
	5	B&H as a tourist destination is insufficiently visible and not adequately promoted on international tourism market	0	0	3	20	49	4,64	0,56
		Sums of ratings	0	3	22	91	244		

Source: Authors

Possibilities - There were no responses with values 2 or 1 to a total of 4 out of 5 questions. The frequency of value 3 (I cannot decide) to question 5 is high. It is higher than the total value of 3 in the group Limitations. This had the effect of a low average and a high standard deviation for the same question. This may indicate several causes (distrust of the concept, negative experiences, insufficient knowledge, etc.), and thus the need for a deeper analysis of the causes of this attitude.

Limitations - There were no values 2 or 1 to a total of 2 out of 5 questions. There is a total of 22 answers with a value of 3 (I can't decide) with an almost even distribution on 3 out of 5 questions. The highest frequency is in question 3, followed by question 2. It is indicative that three questions from the Limitation group were answered with a value of 2 (I generally disagree). In this group, the second-lowest average is on question 2, related to air traffic, as a consequence of the distribution of answers of values 4 and 5.

Overall, the highest averages are for questions 1 and 2 from Possibilities and question 1 from Limitations. Excluding the lowest average for question 5 from Possibilities, low averages are observed for questions 2 to 5 in Limitations. Those are lower than the lowest average for

questions 2, 3, and 4 from Possibilities. This may indicate the need for additional analysis (e.g. consistent application of the law, use of available resources, etc.).

Statistical analysis of answers - involves the calculation of Cronbach alpha to measure the consistency of the responses given by the Likert scale.

Table 8. Recapitulation of Cronbach-alpha calculation

Aspect	Question	Cronbach	Cronbach
(1)	(2)	(3)	(4)
Possibilities	1 B&H has natural resources suitable for tourism development	0,71085	0,75224
	2 B&H has cultural and historical resources that might be part of the tourist offer	0,65842	
	3 B&H has possibilities to develop different forms of tourism (health, cultural, gastronomic, etc.)	0,68486	
	4 B&H has rich and diverse traditional valuables (customs, culture, gastronomy)	0,66376	
	5 Public/private partnership is a good model to promote tourism in B&H	0,84238	
Limitations	1 Road communications of B&H are insufficiently developed and of poor quality	0,78071	0,81087
	2 Air traffic in BiH is insufficiently used for touristic purposes	0,77609	
	3 Legislation in the field of tourism is inadequate and not affirmative for businessmen	0,70525	
	4 Institutional frame in tourism is complex and unharmonized at the state level	0,77149	
	5 B&H as a tourist destination is insufficiently visible and not adequately promoted in international tourism market	0,81843	

Source: Authors

Column (4) gives the Cronbach's alpha value for all answers. Column (3) gives the value of Cronbach's alpha if the answers to the given questions are omitted, thus measuring the impact of that item on the total score.

Possibilities - Cronbach's alpha (0.75224) shows a high degree of consistency in the response structure. The value is significantly higher (0.84238) if answers to question 5 are omitted. This complies with the conclusion that answers to this question significantly deviate from others. Omitting the answers 2 and 4, and partly 3, result in lower Cronbach alpha values. This implies the attitude of respondents on the high importance of these aspects for tourism.

Results confirm hypothesis H₁: B&H has resources that enable the affirmation of various forms of tourism.

Limitations - Cronbach alpha (0.81087) indicates that there is a high degree of consistency in the response structure. The omission of any answer does not result in an increase of Cronbach alpha value above the one that applies to the whole sample. The omission of the answer to question 5 slightly increase Cronbach alpha. Omission of question 3 results in a decrease of Cronbach alpha. This is a consequence of the higher fluctuation in answers to other questions. This may indicate the attitude of the respondents about the impact of this aspect on tourism.

Results confirm hypothesis H₂: The main factors limiting the development of tourism are infrastructure and legislation.

In the accordance with the above, it can be concluded that analysis confirms hypothesis H_0 : B&H tourism is an important industry with great opportunities, but also limitations that slow down its development. There are possibilities concerning natural, cultural, and historical resources. On the other hand, limitations mostly relate to infrastructure and legislation.

6. FUTURE RESEARCH DIRECTIONS AND CONCLUSION

Bosnia and Herzegovina is still a new and insufficiently researched tourist destination that must invest a lot of effort to become recognizable in world tourism flows. The abundance of natural and cultural-historical resources is indisputable, but they must be valorized in order to serve the development of tourism. This opens up opportunities for the development of various forms of tourism, enabling a stronger contribution to the Bosnian-Herzegovinian economy, which was confirmed by Hypothesis H_0 . The continuous increase in tourist traffic, except for the COVID-19 pandemic, indicates that Bosnia and Herzegovina is an interesting destination. But, work should also be done on the protection of natural and cultural resources, both within the state list of protection of resources and the UNESCO list. The slow development of the tourism industry is conditioned by the complex institutional structure and massive legislation, which slows down the faster growth and development of tourism.

To undertake activities to improve the tourism environment special emphasis should be on a few aspects. There is a need to enhance the promotion of tourism and other development content, which can help the overall development and improvement of tourism, as an important industry. The public-private partnership should be considered a good model of tourist destination management. This model would involve all relevant stakeholders to define the direction of development and affirmation of the tourist destination. If we take into account that the respondents from conducted research are from the private sector, it can be assumed that they are dissatisfied with the support of government institutions and the public sector, so they were rigid in supporting this model.

The normative (legal) framework is hindering the affirmation of tourism and catering, which is confirmed by the answers of the respondents to whom these regulations apply. Institutions should, as soon as possible, start amending legal regulations. Both constructive and objective suggestions of all economic entities to which the regulation applies should be taken into account during the procedures of passing laws. The human resource structure of the respondents indicates the need to strengthen the interest of young people to work in this industry. Cooperation with higher education institutions can help not only in terms of higher education but also long-life learning concepts so that employees can cope with the demands of a competitive market. Road communications are insufficiently developed and of poor quality and their revitalization depends on government institutions as decision-makers. Interest in overcoming limitations should be recognized by policymakers, making tourism the source of economic development.

The research results indicate that tourism is an important industry with numerous possibilities for further development. In order to conduct in-depth research on possibilities and limitations for the development of tourism in Bosnia and Herzegovina, additional research, that would involve other stakeholders, not just service providers, is recommended. The results also indicate the need for additional research in order to analyze the content of obtained answers.

REFERENCES

- Ali, A., Frew, A.J. (2010) *ICT and its Role in Sustainable Tourism Development*. In: Gretzel U., Law R., Fuchs M. (eds) *Information and Communication Technologies in Tourism 2010*. Vienna, Austria: Springer. https://doi.org/10.1007/978-3-211-99407-8_40
- Aljić, M. (2016) Uticaj zakonske regulative, strateških dokumenata na ekonomske efekte i razvoj turizma u Bosni i Hercegovini. *Proceedings, SKEI international conference*, 123-133. Vitez: University "Vitez"
- Agency for Statistics of Bosnia and Herzegovina (2017-2021). *Announcement-Tourism Statistics*. Retrieved October 15, 2021, from <https://bhas.gov.ba/Calendar/Category?id=19&page=9&statGroup=19&tabId=2>
- Badulescu, A., Badulescu, D., Simut, R., & Dzitac, S. (2020). Tourism – economic growth nexus. The case of Romania. *Technological and Economic Development of Economy*, 26(4), 867-884. <https://doi.org/10.3846/tede.2020.12532>
- Buffa, F. (2015). Young tourists and sustainability. Profiles, attitudes and implication for destination strategies. *Sustainability*, 7(10), 14042–14062. <https://doi.org/10.3390/su71014042>
- Blasco, D., Guia, J., & Prats, L. (2014). Tourism destination zoning in mountain regions: a consumer-based approach. *Tourism Geographies*, 16 (3), 512-528. <https://doi.org/10.1080/14616688.2013.851267>
- Brida, J.G., Punzo, L.F., & Risso, W.A. (2011). Tourism as a factor of growth: The case of Brazil. *Tourism Economics*, 17(6), 1375-1386. <https://doi.org/10.5367/te.2011.0094>
- Brida, J.G., Cortes-Jimenez, I., & Y Pulina, M. (2016). Has the tourism-led growth hypothesis been validated? A literature review. *Current Issues in Tourism*, 19(5), 394-430. <https://doi.org/10.1080/13683500.2013.868414>
- Brumen, B., Gorenak, M., Rosi, M., & Rangus, M. (2016). Regional Tourism Indicators and Smart Specialization Strategy. *Lex Localis - Journal of Local Self-Government*, 14(3), 422-432. DOI: [https://doi.org/10.4335/14.3.419-430\(2016\)](https://doi.org/10.4335/14.3.419-430(2016))
- Burns, Peter M., Holden, A. (1995). *Tourism, A New Perspective*. London, New York: Prentice Hall
- Cai, L. A., Liu, J., & Huang, Z. (2008). Identifying rural tourism markets: A practical tool. *Journal of Hospitality & Leisure Marketing*, 17(3–4), 418–434. <https://doi.org/10.1080/10507050801985153>
- Costa, J. (2017). How are companies and destinations surfing the wave of global tourism? Strategic question overview. *Worldwide Hospitality and Tourism Themes*, 9(6), 588- 591. <https://doi.org/10.1108/WHATT-09-2017-0055>
- Daoudi, A., & Mihalič, T. (1999). Strategic importance of tourism as a part of an integrated development strategy of countries and places. *The Tourist Review*, 54(3), 18-18. <https://doi.org/10.1108/eb058309>
- Forestry Information System (2004). *Global Forest Resources Assessment Update 2005 – Terms and Definitions*. Forest Resources Development Service, Forest Resources Division. Final Version. Retrieved October 1, 2021, from <https://www.fao.org/3/ae156e/ae156e00.html>
- Federalno ministarstvo okoliša i turizma (2016). Strategija i akcioni plan za zaštitu biološke raznolikosti Bosne i Hercegovine 2015-2020. Retrieved October 1, 2021, from https://www.fmoit.gov.ba/upload/file/okolis/NBSAP%20BiH_20160315_bos.pdf
- Geić, S. (2011). *Menadžment selektivnih oblika turizma*. Split, Republika Hrvatska: Sveučilište u Splitu. Sveučilišni studijski centar za stručne studije
- Gios, G., Goio, I., Notaro, S., & Raffaelli, R. (2006). The Value of Natural Resources for Tourism: A Case Study of the Italian Alps. *International Journal of Tourism Research*, 8(2), 77 – 85. <https://doi.org/10.1002/jtr.552>

- Gossling, S. (2021) Technology, ICT and tourism: from big data to the big picture. *Journal of Sustainable Tourism*, 29(5), 849-858. <https://doi.org/10.1080/09669582.2020.1865387>
- Gursoy, D., Saayman, M., & Sotiriadis, M. (2015). *Collaboration in tourism businesses and destinations*. Bingley, UK: Emerald Group Publishing Limited.
- Han, H., Kim, W., & Kiatkawsin, K. (2017), Emerging youth tourism: fostering young travelers' conservation intentions. *Journal of Travel and Tourism Marketing*, 34(7), 905–918. <https://doi.org/10.1080/10548408.2016.1261758>
- Hodžić, K. (2008). Potencijalni ekonomski efekti prekogranične saradnje. Slučaj Euroregije Dunav-Drava-Sava u funkciji razvoja turizma. In J. Osmanković., Pejanović. M., Domazet.A. (Ed.). *Zbornik radova sa Međunarodne konferencije: Euroregije i jugoistočna Evropa* (pp. 169-185). Sarajevo: Fakultet političkih nauka. Akademija nauka i umjetnosti Bosne i Hercegovine. Ekonomski institut <https://library.fes.de/pdf-files/bueros/sarajevo/06044.pdf> , Retrieved October 14, 2021
- Ismagilova, G., Safiullin, L., Gafurov, I. (2015). Using Historical Heritage as a Factor in Tourism Development. *Procedia - Social and Behavioral Sciences*, 188, 157-162. <https://doi.org/10.1016/j.sbspro.2015.03.355>
- Jackman, M., & Lorde, T. (2010). On the relationship between tourist flows and household expenditure in Barbados: A dynamic OLS approach. *Economics Bulletin*, 30(1), 472- 481.
- Jaganjac, J., & Obhodaš. I. (2019). Impact of non-financial metrics on business performance: A case study of travel agencies in Bosnia and Hercegovina, *International Journal of Management Cases*, 21(1), 51-67.
- Karayilan, E., & Cetin, G. (2016). Tourism destination: Design of experiences. In M. Sotiriadis & D. Gursoy (Eds.), *The handbook of managing and marketing tourism experiences* (pp. 65-84). Bingley, UK: Emerald Group Publishing Limited.
- Khan, A., Bibi, S., Lorenzo, A., Lyu, J., & Babar, Z.U. (2020). Tourism and Development in Developing Economies: A Policy Implication Perspective. *Sustainability*, 12(4), 1618. <https://doi.org/10.3390/su12041618>
- Kotler, P., Haider, H.D., & Rain, I. (2012). *Marketing lokacija*. Sarajevo, Bosna I Hercegovina: TKD, Šahinpašić.
- Kušen, E. (2001). Turizam i prostor klasifikacija turističkih atrakcija. *Prostor: Znanstveni časopis za arhitekturu i urbanizam*, 9(1), 1-12. <http://hrcak.srce.hr/10801>
- Krešić, D. (2007). Faktori turističkih destinacija u funkciji konkurentnosti. *ActaTuristica*, 19(1), 45-82. <https://hrcak.srce.hr/76305>
- Kurtović, H. (2007). Uticaj mjera ekonomske politike Bosne i Hercegovine na planiranje i razvoj turizma u zemlji. *Društvena istraživanja*, časopis Pravnog fakulteta Univerziteta u Zenici, 1(1), 15-25.
- Kovačević, B. (2017). Poljoprivredno stanovništvo u BiH. In Cvitković, I. (Ed.), *Demografske i etničke promjene u Bosni i Hercegovini* (pp. 128-155). Sarajevo: Akademija nauka i umjetnosti Bosne i Hercegovine. DOI: 10.5644/PI2017.172.00
- Komisija za očuvanje nacionalnih spomenika Bosne i Hercegovine-KONS (2019). Nacionalni spomenici-svjetsko naslijeđe BiH. Retrieved August 19, 2021, from <http://kons.gov.ba/Content/Read/nacionalni-spomenici>
- Li, K.X., Jin, M., & Shi, W. (2018). Tourism as an important impetus to promoting economic growth: A critical review. *Tourism Management Perspectives*, 26, 135-142. <https://doi.org/10.1016/j.tmp.2017.10.002>
- Luo, H., & Chiou, B.S. (2021). Framing the Hierarchy of Cultural Tourism Attractiveness of Chinese Historic Districts under the Premise of Landscape Conservation. *Land*, 10(2), 216. <https://doi.org/10.3390/land10020216>

- Mihailović, B., & Popović, V. (2018). Management of Service Marketing: A Perspective of Modern Tourism Sector. In V. Bevanda & S. Štetić (Eds.), *3rd International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era* (pp. 143-159). Belgrade: Association of Economists and Managers of the Balkans with Faculty of Tourism and Hospitality, Ohrid, North Macedonia. DOI: <https://doi.org/10.31410/tmt.2018.143>
- Manhas, P.S., Manrai, L.A., & Manrai, A.K. (2016). Role of tourist destination development in building its brand image: A conceptual model. *Journal of Economics, Finance and Administrative Science*, 21(40), 25-29. <https://doi.org/10.1016/j.jefas.2016.01.001>
- Mariani, M.M. (2016). Coordination in inter-network co-opetition: Evidence from the tourism sector. *Industrial Marketing Management*, 53, 103-123. <https://doi.org/10.1016/j.indmarman.2015.11.015>
- Meyer, D.F., & Meyer, N. (2015). The role and impact of tourism on local economic development: A comparative study. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, 21(1:1), 197-214.
- Mirabent, S. V. (2019). European urban destinations' attractors at the frontier between competitiveness and a unique destination image. A benchmark study of communication practices. *Journal of Destination Marketing & Management*, 12, 37-45. <https://doi.org/10.1016/j.jdmm.2019.02.006>
- Natek, K., & Natek, M. (2000). *Države svijeta*. Zagreb, Republika Hrvatska: Mozaik knjiga.
- Nawaz, M.A., Hassan, S. (2016). Investment and Tourism: Insights from the Literature. *International Journal of Economic Perspectives*, 10 (4), 581-590.
- Naseem, S. (2021). The Role of Tourism in Economic Growth: Empirical Evidence from Saudi Arabia. *Economies*, 9(3), 117. <https://doi.org/10.3390/economies9030117>
- Ramphul, O. (2017). The relationship between tourism, financial development and economic growth in India. *Future Business Journal* 3(1), 9–22. <https://doi.org/10.1016/j.fbj.2017.01.003>
- Ruban, D.A. (2021). Natural Resources of Tourism: Towards Sustainable Exploitation on a Regional Scale. *Sustainability*, 13 (12), 6685. <https://doi.org/10.3390/su13126685>
- Shahzad, S.J.H., Shahbaz, M., Ferrer, R., & Kumar, R.R. (2017). Tourism-led growth hypothesis in the top ten tourist destinations: New evidence using the quantile-on-quantile approach. *Tourism Management*. 60, 223-232. <https://doi.org/10.1016/j.tourman.2016.12.006>
- Stabler, J.M., Papatheodorou, A., & Sinclair, M.T. (2010) *The Economics of Tourism*. UK: Routledge
- Petrić, L. (2007). *Osnove turizma*. Split. Republika Hrvatska: Ekonomski fakultet
- Šehić-Kršlak, S. (2018). Koncept ruralnoga turizma u funkciji privrednoga razvoja u Bosni i Hercegovini. In Jurdana, D.S. & Milohnić. I. (Eds.), *Novo vrijeme-vrijeme za ruralni turizam*. Paper presented at 4th International Rural Tourism Congress, Fakultet za menadžment u Turizmu i ugostiteljstvu, Opatija, Maj, 2018, (pp. 379-385). Opatija: Fakultet za menadžment u Turizmu i ugostiteljstvu. Hrvatska udruga za turizam i ruralni razvoj
- Turner, R., & Freiermuth, E. (2016). *Travel & Tourism. Economic Impact 2016, World*. London, UK: World Travel & Tourism Council
- Mariapina, T., & Campana, S. (2019). Drivers and emerging innovations in knowledge-based destinations: Towards a research agenda. *Journal of Destination Marketing & Management*. 14, 100370. <https://doi.org/10.1016/j.jdmm.2019.100370>
- Tsartas, P. (2000) Environmental and Cultural Tourism Resources: Problems and Implications for their Management. In Briassoulis, H., & van der Straaten J. (Eds.), *Tourism and the Environment. Environment & Assessment* (pp. 203-220). Dordrecht: Springer. https://doi.org/10.1007/978-94-015-9584-1_12

- Vrdoljak-Šalamon, B., & Čorak, S. (2012). Journal TOURISM: Content analysis in the period 2000-2011. *Tourism: An International Interdisciplinary Journal*, 60(4), 457-474. <https://hrcak.srce.hr/94262>
- Vukonić, B. (2016). Tourism-an outsiders' view. *Acta Economica Et Turistika*, 1(2), 115-124. <https://hrcak.srce.hr/160093>
- Vukadinović, S. (2016). Tranzicijska institucionalna infrastruktura kroz organizaciju vlasti. *Tranzicija*, 18(37), <https://hrcak.srce.hr/170429>
- Wei, W., & Ma. H. (2015). On Econometric Analysis of the Relationship between GDP and Tourism Income in Guizhou, China. *International Journal of Business Administration*, 6(4), 41–47. DOI: <https://doi.org/10.5430/ijba.v6n4p41>
- Wang, Y., Hutchinson, J., Okumus, F., & Naipaul, S. (2013). Collaborative marketing in a regional destination: Evidence from Central Florida. *International Journal of Tourism Research*, 15 (2), 285–297. <https://doi.org/10.1002/jtr.1871>
- Wiweka, K., & Arcana, K.T.P. (2019). Rethinking the Theory of Tourism: What is Tourism System in Theoretical and Empirical Perspective?. *Journal of Business on Hospitality and Tourism*, 5(2), 318.337. DOI: 10.22334/jbhost.v5i2.176
- Wengel, Y. (2017). Demystifying Theories in Tourism Research. *Journal of Tourism Futures*, 3 (2), 198-199. <https://doi.org/10.1108/JTF-09-2017-059>
- Willson, G. B., & McIntosh, A. J. (2007). Heritage buildings and tourism: An experiential view. *Journal of Heritage Tourism*, 2(2), 75-93. <https://doi.org/10.2167/jht024.0>
- World Economic Forum (2019). The Travel & Tourism Competitiveness Report 2019: Traveling and Tourism at a Tipping Point. Retrieved August 09, 2021, from http://www3.weforum.org/docs/WEF_TTCR_2019.pdf



Historical and Cultural Potentials in the Area of Durres in the Function of Its Sustainable Development

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Abstract: *Today, in general, all over the world, there is more and more talk about the economic growth of developed and developing countries. One of the successful branches that have contributed to the economic growth of these countries is tourism.*

Albania is a country with an ancient history reflected in its rich cultural heritage with national and international values. To date, the preservation of its values has been associated with the preservation of national identity, pride, and wealth, while the integration into regional development policies is seen as a good opportunity not only for the preservation of cultural heritage but also for its real contribution to the sustainable economic and social development of the country.

Based on the historical and ethnocultural study of Albania in general, and the city of Durres in particular, there is a need for a scientific study oriented to this economic, historical, and cultural attraction, useful and profitable for the regional economy in particular and with a direct impact on the Albanian economy in general.

This study highlights the instruments and the way of studying the tourist areas to turn them into important economic centers for the region itself and the national economy.

The problem can be posed in this way: Today in Albania there is a need for serious studies on sustainable development, especially in the field of tourism, studies which have not been lacking, but which should be specifically oriented towards a more concise than generalized form, studies that focus on medium or long-term solutions for the development of tourism, mainly historical and cultural, as an important direction for the economic and social development of the country.

There are natural resources, human resources, capital, and entrepreneurship initiatives that need to be recognized, valued, oriented, and promoted to increase investment in regional and national tourism. But there is also a significant lack of knowledge on the instruments to be used by these entrepreneurs to be part of success rather than failure, as has happened in some cases for those who have dared to invest in this important sector of the economy and national culture.

In the framework of this study, tourism is considered important for sustainable development in the city of Durres. The diversity of cultural monuments, cultural traditions, and traditional hospitality, constitute a strong attraction for domestic and foreign tourists.

The aim of this study is the presentation of the tourist potential for the sustainable development of the Durres region, to serve its promotion, as well as the establishment of the relevant tourist infrastructure that will strongly influence the increase of tourists' interest to visit and create an image for a more attractive and long-term destination.



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1. INTRODUCTION

Tourism has the potential to transform the society and culture of a country. Tourism is often the catalyst for significant economic and social changes, the context for intercultural exchange, and scene for the manifestation of cultures and traditions. Thus, from the development of tourism, local economies are strengthened as a result of the increase of direct investments or in the supporting sectors, the widening of employment opportunities as well as the intensification of the cash flow and circulation. Tourism is rightly considered by the Albanian government as a strategic sector that is followed with special attention in the development programs of the country and the design of its image. In this context, tourism has become part of the government-subsidized promotional messages on prestigious channels such as CNN, which, among other things, promote, in addition to tourism development, the attraction of foreign investment and the country's image around the world.

When we talk about tourism we must keep in mind that tourism activity is very diverse, as are its impacts on the economic, cultural, and social development of a country or local community. However, in this paper, we will focus on historical and cultural tourism, mainly in the district of Durres, the opportunities that exist, as well as their use for its economic development. The city has a great potential for the development of tourism and other supporting sectors through the combination of coastal tourism with cultural and historical. Such a combination would extend the tourist activity throughout the year and would significantly contribute to the increase of tourism revenues and the economic and social development of the district. Such a reality is still lacking in Durres as a result of the lack of adequate logistical infrastructure and sufficient information at the institutional level, which is mainly related to the insufficient organization of information offices, which should take more responsibility for processing, presentation, and circulation of data about the cultural and historical values of the district.

This paper is based on a survey that has identified the interest for tourism different from that of the coastal beach offered in Durres, as well as to what extent the existing tourist infrastructure and local and central public institutions are ready to develop it. The use of surveying in the field of tourism is a scientific method used in many countries with consolidated tourism such as France, Italy, Spain, Greece, etc. Its importance lies in the rapid collection of information, especially in areas of activity that know about their dynamism. Based on these premises, the survey is thought to serve the needs of this paper which aims at a general and rapid observation of the problems of the development of cultural and historical tourism in the Durres city.

The paper is organized into three parts. The first part of this paper is given a definition and meaning of cultural and historical tourism in general. The second part presents the cultural and historical destinations of tourism offered to domestic and foreign vacationers and interprets the data on the level of development of tourism in Durres. The paper concludes with some reflections and recommendations for changing the state of tourism in the Durres area.

2. PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of this study is to highlight the tourism potential of the Durres area and the role that cultural tourism can play in the sustainable development of this region. The study aims to:

1. To identify the values and tourist, economic, and cultural potentials in the area of Durres in the function of its sustainable socio-economic development.

2. Evaluate cultural attractions through tourist attendance and the benefits derived from them.
3. To analyze those attractive elements for foreign visitors in the territory that are used, as well as the expectations of socio-economic benefits of the community, from the presence of cultural attractions in their territory.
4. Identify current problems of tourism and cultural heritage management, related to the preservation of its values and tourism use.
5. Analyze every technological opportunity, through the creation of extensive information on cultural heritage monuments, tourist spots, and destinations for tourists and the promotion of their values and potentials.

The central problem that we try to answer in this study is this: What development potentials does tourism in the Durres area offer and how can they be integrated?

3. METHODOLOGY

For the realization of this study, a series of methods have been used such as that research, statistical method, method of surveys, method of direct field observations, and cartographic methods.

The research methods used include all existing literature on sustainable development and tourism development in the Durres area: various studies and publications of local and foreign sociologists, archaeologists, and researchers related to tourism and cultural heritage of the Durres region, national and international projects undertaken in the framework of the development of cultural tourism in the area and their management, strategic plans of socio-economic development of Durres region, statistical summaries conducted by national and international organizations (UNWTO, ATLAS, UN, GTZ, SNV) on the development of tourism, the number of tourists, revenues provided by tourism, etc.

The method of surveys and interviews is one of the basic methods of this study, used to obtain primary quantitative and qualitative data. It was conducted through the design and implementation of surveys of 300 (three hundred) questionnaires for three target groups: foreign tourists 70 (seventy), local community 150 (one hundred and fifty), and a tourist site 80 (eighty) questionnaires. Through the use of this method, it is intended to highlight the importance of the development of cultural tourism in the socio-economic development of the local community. Also, the questions contained in the questionnaires aimed to find out the opinion of tourists on the cultural offer and tourist services in the visited area. The survey also highlighted the problems faced by tourist facilities from a socio-economic perspective. The statistical method is used to show statistical data on the number of tourists, accommodation units, income from tourist activities, etc. This method was also used during the implementation of the questionnaires in cases when the questions were of a quantitative nature (collection of quantitative information on revenues, expenditures, etc.).

The comparison method is used to compare statistical data during the analysis of surveys. This method has also been used in the chronological comparison of the development of tourism during two different periods (before the '90s and after 1990 until today).

4. OVERVIEW OF THE CITY OF DURRES

4.1. Geographical features

The city of Durres lies on the Adriatic Sea with a coastal length of about 30 miles. It is located only 39 km away from the capital, Tirana. To the east and northeast, it is bordered by the district of Tirana and to the south by the district of Kavaja. Durres is the most important node of sea, road, and rail transport in the country. The height above sea level goes up to two meters. The western coast of the province is bathed by the waters of the Adriatic Sea (Qiriazi Perikli, 2001). The city of Durres occupies an area of 46.1 km² and represents 10.67% of the area of the district. Old Durres city and its new part, together with the beach area from Porto Romano to Kavaja Rock lie in the form of an arch along the Adriatic coast, occupying most of the sea bay of Durres. In the territory of Durres grow plants of Mediterranean flora: juniper, laurel, cypress, olive, and coastal pine. Durres is very rich in fruit trees such as peaches, figs, cherries, plums, etc. Durres is also known for waterfowl. Marine fauna is quite diverse (Municipality of Durres Official site).

The waters of Bisht-Palle represent a habitat for ducks, corals, and seagulls that spend the winter here.

4.2. Climatic Conditions and Demographics

Durres is characterized by its typically Mediterranean climate with hot and dry summers and mild and wet winters. Average annual temperatures vary from + 25 ° C in July to + 10 ° C in January. The amount of precipitation fluctuates around 1000 mm per year. The long solar radiation during the year is one of the biggest natural resources of the city. 200 sunny days a year, of which over half with a temperature above 20 ° C, make Durres one of the hottest centers in the Mediterranean. The average air temperature reaches + 18 ° C, while that of water is 22 ° C. The Adriatic Sea is one of the natural resources of the city of Durres. The Adriatic waters are blue and clear. Salinity fluctuates from 30 to 36‰ (Doka Dhimiter; Draçi Bilal, 2009).

Today, the city of Durres has over 290,697 inhabitants, thus being the second city in terms of population after the capital of Albania. After the '90s, years of long and difficult transition that the country was going through, Durres became the second city in the country to attract the largest population, mainly from the remote areas of Albania. In addition to internal migration, Durres is also the city that has recognized first and foremost, more than anyone else, the massive external emigration of the population. Today, almost every family in Durres has a person who works abroad, who has invested in their country, especially in sectors such as trade, services, construction, etc. (Qiriazi Perikli, 2001).

Durres today is the most important port city of Albania. In the southern part is its beach more than 10 km long. During the summer period in Durres, more than 150,000 tourists come to the beach of the Adriatic Sea. The monuments of the ancient city have stood the test of time and are still in good condition today. Durres is an interesting destination for historical tourism.

Traces of the ancient metropolis are found everywhere in Durres and this small piece of land still preserves a part of our history and the old world. Only 30 minutes away from the capital, its coast has traditionally been the second home of the tyrants, while in recent years it has become a favorite resort even for Albanians outside the borders of Albania.

It is tedious and with various problems, in fact all the mess created by the investments made during these transition years on this coast, but logic makes us hope that all this investment made will bear fruit maybe in a few years (Doka Dhimiter, 2005).

Almost unbearable and unsatisfactory is the contrast between which this city lives: the ancient ruins between the buildings of the socialist system, the Italian architecture of some streets and buildings, dozens of palaces and new buildings (beautiful and ugly), sandy beaches, filled with tourists, garbage and partitions separating those who now own a strip of sand and sea.

4.3. History of Durres

The city, described 2070 years ago by the Romans as the “tavern of the Adriatic” is today not only the oldest city inhabited without interruption and the largest port of the country but also the largest tourist destination in Albania. It has survived for centuries to the present day. It is an important port, administrative, economic, commercial, political center, etc., for centuries, and has always been present in the history of the Mediterranean Basin, especially in the Adriatic Sea. Visiting museums, facilities, and monuments, as well as the city itself and its immediate surroundings best reflect the historical, archaeological, ethnographic, natural, and urban values (Durres Municipality, Official Website).

A history of about 3 thousand years testifies to the continuity of the city to this day. The origins of the city are Illyrian, a period from which derives the first name of the city was Epidamn and later Dyrrhachium, but the founding date of this city is considered the year 627 BC when the Greek settlers from Corfu settled. In 313 BC the city was taken over by one of the leaders of the Illyrian kingdom Glaukia, while a few years later in 283 BC it passed under the rule of King Monum. King Monun would be the first king to receive the first coins of this city which shows the early commercial development of the ancient city of Durres. This was a strong reason that in 229 BC this city agreed with Rome, which was one of the superpowers of ancient times. In the 4th century, the city experienced a great economic boom, which brought a flourishing of life and large constructions of the city as a fortification wall, etc. Durrah was considered by Rome as a strategic point and was used as a point of support against the kings of Macedonia. For this reason, the Romans who had both control and strategic and economic interests built the Egnatia road which started from Durres and went east to Constantinople (Milan Shuflaj, translation 2004).

In the I-III century AD, Durres had significant development and became the main commercial center and the main port of the eastern Adriatic coast. At the same time, one of the most famous centers of the ancient city was built, but also of today, such as the amphitheater. Durres Amphitheater is the largest and most important, not only in Albania but also in the Balkans. This work of architectural, artistic, and historical value was built during the reign of Emperor Trajan. The amphitheater has an elliptical shape with a diameter of 136 meters and a height of about 20 m. The amphitheater was discovered by excavations carried out during the 1966 expedition led by Vangjel Toci.

It was declared a Cultural Monument in 1973, with the letter of the Ministry of Education and Culture no. 1886, dated 10.06.1973. The city of Durres has been known for a short time during the period 1914-1920 and is the capital of the Albanian state under the rule of Prince Vid, which tells us about its importance today. Today, the city of Durres is the most important port and tourist center of the country and the second most important city in all directions after the capital of the country, Tirana (Xhaferri Manjola; Tase Mirela, 2020).

5. GENERAL INFORMATION ON CULTURAL AND HISTORICAL TOURISM

First of all, it is appropriate to clarify the concept of cultural and historical tourism. In most cases, cultural and historical tourism is understood as the motivated travel of tourists by the culture and history of a particular region or country in general and in particular by art, monuments, and the most important archaeological sites.

Cultural and historical tourism is focused on visiting traditional communities which have social practices, special art forms, various customs and traditions, monuments, and archaeological spaces, which marks the difference from other forms of tourism. For some others, more than a motivated journey, cultural and archaeological tourism is an interaction between people, places, and cultural and archaeological heritage.

Cultural and archaeological tourism means the use of assets in urban areas, historic cities, or large cities and their cultural institutions such as museums, theaters, or concert halls. It also means tourism in rural areas, including the organization of cultural festivals and the presentation of tradition in these areas.

For Hilary du Cros, Bob McKercher, cultural tourism includes four elements: tourism, the use of cultural heritage assets, the consumption of experience and products, and the tourist (2002: 6). Combining these factors both authors give this definition “cultural tourism is a tourist activity in which cultural heritage assets are presented for consumption by the tourist” (McKercher and du Cros, 2002: 9). Thus cultural and historical tourism, in addition to an entertainment activity, include the transformation into a “product” of cultural traditions and values. Such an approach of cultural and historical tourism has been taken into account in the design of the survey that has been conducted for this paper.

It should be borne in mind that the commercialization of cultural and historical heritage assets as part of tourism activity makes it “classified nowadays between two idealized extremes: either as deeply positive or as profoundly negative” (Doja, 2007). The negative view of the development of cultural and historical tourism brings to attention the dependence created by the cash flows of tourists, the erosion of cultural and historical values after their commercialization and indiscriminate use, and the concern of the local community regarding the use of living resources.

The positive attitude of such a “transformation” means increasing local income and employment as well as re-evaluating and increasing the visibility of monuments and cultural and historical areas, but also their maintenance and protection in the context of tourism commercialization. This is the perspective that will be extensively addressed in this paper.

Cultural and historical tourism has begun to become popular in recent years in Europe. Thus, depending on the source or destination, it is estimated that 35 to 70 percent of tourists are considered cultural tourists (Antolovic, 1999). Studies show that cultural tourists spend more than ordinary tourists, so it is thought that it has a greater impact on the economic development of the locality in particular and the country in general.

Cultural and historical tourism began to be distinguished as a special service in the early 70s when some scholars noticed that a category of tourists traveled to visit and understand the cultural heritage and historical monuments. In 1976, the International Scientific Committee for

Cultural Tourism - the International Council on Monuments and Spaces (ICOMOS) - adopted the Cultural Tourism Charter. The main purpose of such an enterprise was to draw attention to the existence of historical and cultural values by helping to create a different image of cities, protecting culture and maintaining archaeological monuments, opening the perspective for the development of tourism and economy through the creation of connections through the intensity of holidays and cultural tourism. Such a combination encourages the expansion of tourism throughout the year, the development of services and other support activities (handicrafts, transport, agriculture, construction, etc.), and encourages the development of policies aimed at respecting the privacy of locals and the preservation of monuments, archaeological sites and cultural values exposed by potential damage (Tase Mirela; Xhaferri Manjola 2021).

6. DEVELOPMENT OF CULTURAL TOURISM IN DURRES

In terms of cultural tourism, Albania has many cultural heritage assets with national and international values, which have already aroused the interest of visitors, especially international ones, e.g. Butrint National Park, (UNESCO World Heritage Site). Other destinations in Albania are Amphitheater in Durres, Dajti National Park, Thethi, Voskopoja, and many other cultural, natural, and historical beauties. Regarding the development of cultural tourism in the region of Durres, it is rich and diverse, where the first beginnings are quite early.

If we were to refer to different definitions of tourism and its origins in Albania, and mainly in Durres, we would rightly ask the question: Did Durres constitute the center of civilization in antiquity, and does it remain an attractive and entertaining place for those who visited it? As mentioned above, the city of Durres, described 2070 years ago by the Romans as the “Adriatic tavern” is today not only the oldest inhabited city and the largest port in the country but also the largest tourist destination in Albania. This is shown by the large number of tourists who visit Durres throughout the year (Tase Mirela; Xhaferri Manjola, 2019).

In addition to the significant socio-economic development, the presence of cultural objects very important for the time is the organization of trade fairs and the celebration of numerous religious holidays, which brought to the city many travelers and visitors from the surrounding countries, as well as the farthest north, east and south. The presence of the sea and the fact of being the most important port city in antiquity, the Middle Ages and today, is an indication of the frequent movements of people, coming and going for commercial purposes or with interest to visit the city. Scholars testify that the social and cultural life here was distinguished for a high level of development at all times. The main types of cultural tourism that are applied in Albania, mainly in the Durres area, are listed in the Table 1:

Unlike previous periods, in the years 1945-1990, Albania under the socialist system implemented the country's isolation policies, preventing the arrival of foreign tourists and relying only on the views of social tourism, tourism for all, and at the expense of the pact. This type of tourism would be controlled and administered by the state, both in accommodation structures and in various services.

In addition to hotels, workers' camps, and pioneer camps, there were accommodation facilities in the tourist areas of the country. In the years 1960-1990 the city of Durres was the most frequented tourist destination mainly for holidays (annual leave). After the 1990s, tourism in the Durres area had a great deal of vitality, mainly maritime tourism, while a little later, cultural

and historical tourism began to spread, where today we are talking about this type of tourism that makes the city of Durres and the surrounding provinces very attractive and visitable by tourists all year round with an increasing number, mainly foreign ones (Hoti Afrim, 2006).

The rich cultural heritage of the Durres area has enabled the development of one of the most frequented types of tourism in the world today, the cultural and historical one. The interest in knowing the history, culture, traditions, and customs pushes more and more tourists, both local and foreign, to visit this geographical space. Based on the analysis of the potential of cultural heritage and the interest that this potential presents for the tourist attraction, we conclude that cultural tourism can be considered as a priority for the development of tourism in Durres (Doja. A, 2007).

Table 1. Types of cultural tourism

Types of cultural tourism	Typical places/activities of interest
Heritage tourism	Visits to castles Palaces and ground floor houses Archaeological sites Monuments Architecture Museum Religious site
Art tourism	Visits to theaters Concerts Gallery Festivals Carnivals and events Literary site
Creative tourism	Photography Painting Cooking Craftsmanship Language learning
Urban cultural tourism	Historic cities Art and heritage attractions Shops Night life
Rural cultural tourism	The village Farm or agritourism Ecomuseums Cultural landscapes National parks Trails
Indigenous cultural tourism	Ecotourism Visits to cultural centers Arts and crafts Cultural performances Festivals
Popular cultural tourism	Parks and attractions Complex shops Sporting events Media and film events

Source: Authors

6.1. The impact of cultural tourism on socio-economic development in Durres

The socio-economic development of Durres is closely related to the natural and human resources it possesses. Currently, the features of an agricultural-industrial economic development, thanks to the numerous assets, not only natural but also cultural ones, have given opportunities for the development of the natural and cultural tourism industry. From the surveys conducted with the three target groups (foreign tourists, community, and tourist units) it is noticed that the interest in the development of tourism in Durres is high. The cultural potentials contained in the study space are quite attractive to all visitors, but especially to foreign tourists coming to the area. Compared to a year ago the number of foreign tourists has increased, some of them have even visited the city more than once (Xhaferri Manjola, 2018).

From the surveys conducted with this target group (as expressed by the analysis of the questionnaire), the main motivation for foreign tourists to visit the city of Durres is maritime and especially cultural and historical, specifically to get acquainted with the objects of material culture, as well as traditions and other elements of spiritual culture. The results show that 81% in the overall assessment are satisfied with the geographical-cultural offer and with some of its elements such as churches, museums, traditional architecture, local cuisine, hospitality, etc. The problems identified regarding the lack of infrastructure, both road, and tourism (hotel services, lack of tourist information, guides, maps, souvenir shops, etc.) should be considered.

From the surveys conducted with the local community (residents of the most visited tourist areas), it results that they are very interested in the development of tourism. Residents know the cultural potentials that are located in their area and the importance they present for the development of tourism. The declared monthly income is not very high and only a small percentage of the 17% have tourism activity as the main source of income.

Given the fact that respondents have a high level of education (79% with university and secondary education) about 91% view the development of tourism with great interest, considering it as an important economic resource for their families.

The surveys conducted with tourism units show the direct impact of tourism development on increasing their economic income. A good number of them said that during the peak of the tourist season, their income increases 2 times more than during the other period of the year (74% of respondents) while there are respondents who say that during this period their income is 5-fold. This shows that the presence of the tourist brings considerable income to the area, especially from foreign tourists. Given the fact that tourism is an important economic resource, tourism units consider it important to promote the cultural potential of the city and that relevant actors need to do more in this regard.

Also, the surveyed units have expressed that they provide basic and qualified services for tourists such as heating, room service, breakfast included in the hotel price, foreign exchange, etc., but few entertainment activities, excursions, guides in the area, practicing various sports, etc. However, from the point of view of tourists, the level of services provided is worth improving. For this reason, tourism units should invest more in improving the quality of service and carrying out activities to their requirements.

Based on these surveys it turns out that the development of cultural tourism is an important source of employment for the community of the area. In this regard, the cooperation of the public sector with the private sector in the field of investments, in the field of tourism infrastructure (an increase of accommodation capacities), soft loans for the category of the population that wants to invest in the field of tourism should be strengthened, and also the restoration of cultural monuments, in the promotion of vocational education in professions related to handicrafts and cultural traditions of the area, etc. These will promote the development of tourism and the entire socio-economic development of the county, providing opportunities to return residents to their country of origin and to invest in capacity-building accommodation or other tourism services.

On the one hand, tourists express the desire and curiosity to know the area and on the other hand, the local population and tourist units are very interested in the development of tourism in their area. Investments in the restoration of cultural monuments are seen as important for the preservation and improvement of the current situation, as well as for a dignified presentation of its values. They can also be considered as an opportunity for the employment of the community to increase its income and well-being.

7. CULTURAL AND HISTORICAL POTENTIALS OF THE CITY OF DURRES, IMPORTANT TOURIST DESTINATIONS TO VISIT

In addition to sunbathing tourism, the city of Durres is of great importance for cultural tourism-oriented towards all the historical and cultural wealth that this city offers.

Durres metropolis of Antiquity

Most of the cultural tourism in the city of Durres is occupied by the archeological one, although during the tourist season the various cultural activities are not left behind.

It is important to see this city in its complexity because that way you can enjoy what it really offers. The most important and numerous archeological discoveries in Albania are certainly located in Durres and it is probably worth using the city for archeological or cultural tourism rather than for its beach. You can spend a few days visiting the ruins, mosaics, churches, and mosques in this city. Some of the places to visit are:

Amphitheater

The Roman amphitheater and the Byzantine wall that surrounds the western part of the city of Durres are the best pieces of evidence that prove its antiquity.

It was built in the early 2nd century AD during the reign of Emperor Trajan. In size, it can be compared to the amphitheater of Pola or Pompeii. It has the shape of an ellipse and a capacity of 15-20 thousand spectators, a fact that proves the large population of ancient Dyrrah. The amphitheater has an elliptical shape with a diameter of 136 meters and a height of about 20 m, built with rows of bricks connected with mortar (Andrea Zh, 1971, 42).

This amphitheater has Roman architecture and was built in the center of the city, while 2/3 of its surface rests on the hill. The 2700-year-old amphitheater stands among the 30 discovered amphitheaters of the ancient world. During these years a series of projects aims to realize the

full discovery of the building and the collaboration with the University of Parma is expected to finally shape in the future the entire visible geography of the Amphitheater. Inside it are galleries, very interesting to visit especially for the mosaics and the special construction technique. It was declared a Cultural Monument in 1973.

City Water Supply

This work is thought to have been built during the same period in which the Amphitheater was built. The water supply was of great importance for the city because it made possible its water supply and for the time it was a very advanced project. This project was about 15 km long and enabled the collection of water from the river Erzen and its delivery to the city of Durres.

The beauty of Durres

The beauty of Durres is a mosaic that was discovered in the neighborhood “Varosh” in 1916 by the Austrian archaeologist Praschnicher and belongs to the IV century BC. The face in the mosaic of the Beauty of Durres is thought to represent one of the Auras, Eilethyan, the goddess who accompanied women in childbirth in a healthy way, a gift that both Aphrodite and Artemis had.

The surface of the mosaic has the shape of an ellipse in diameter; the largest 5.1 m and the smallest 3 m. In the center is a very special figure of a woman, with a monumental posture, yellow hair, small bangs sticking out like a crown, and above them is a spiral diadem in black color. The special and very delicate workmanship, especially the angelic face of the woman, has made this mosaic very famous, turning it into one of the symbols of the ancient city (Anamali, S; Adhami, S, 1974).

The contours of the nose, chin, eyes, and mouth are clearly visible through the black and gray lines. The mosaic has very special workmanship: it is built of small multicolored natural pebbles placed on a layer of mortar and is one of the oldest examples of this way of making art, discovered in our time. This mosaic is exhibited in the National Historical Museum in Tirana.

The Hippocampus Mosaic and the Orpheus Mosaic

This mosaic was discovered in 1947. It is made of black and white pebbles and consists of mythological scenes, where the main figures are the Hippocampus, Eros with the Dolphin, and Triton with open wings. It belongs to a luxurious building, of the Roman period, which dates back to the first century AD.

The Orpheus mosaic was discovered in 1988, with Orpheus at its center. It is thought that this mosaic belongs to the period of the 3rd century AD.

National Commercial Bank

The building is located on one of the main streets of the city opposite the port. The building is evidenced not only by the workmanship and architecture but also by the decorations drawn on its front. Above the front of this building stands a sculpture of an Illyrian girl, thought to be Queen Teuta, a fact not confirmed by historians.

The mosques of Durres

The two most important are the Great Mosque and the Small Faith Mosque. The Great Mosque was built in 1932-1938, mainly by the city's merchants, and is the second-largest mosque in the Balkans. During the socialist cultural revolutions, this mosque was damaged but after the 90s it was reconstructed again, taking on its former appearance: today religious rites are performed here by many Albanian Muslims. Among other things, a mosque is a place for learning about Muslim culture and religion. While the Small Mosque is much older, it was built about 500 years ago by Sultan Fatih II. Old documents show that the mosque was built on an old Byzantine church and is one of the most important historical and cultural monuments of the city (Anamali, S; Adhami, S, 1974).

City Churches

The Catholic Church "St. Lucia", belongs to the year 1907. It is a church of Romanesque type, restored and functional.

The Orthodox Church "St. George", belongs to the late nineteenth century, restored and functional. The Orthodox Church "St. Asti and St. Paul", built-in 2001, functional. These churches, in addition to the Durres believers, are also visited by foreign tourists during different periods of the year.

Archaeological Museum and Ethnographic Museum

With the opening of the new Archaeological Museum in Durres, another place with time parameters is offered for the visits of many tourists interested in getting to know the city better.

The Archaeological Museum and the Ethnographic Museum are very interesting to visit. The first is a modern building and holds within 18000 archeological objects of the basic fund exhibited, objects belonging to different historical periods. This museum has in its interior: the exhibition hall, the library, the archive, the study sector, and the lecture hall.

The Ethnographic Museum has a completely different look: the building is made of stone and the feeling of familiarity when entering is immediate. This museum consists of two floors, where the first serves as a warehouse while the second exhibits relics and historical objects (Hoti Afrim, 2006).

The traditional Albanian courtyard and decorations make you feel like you are in an old Albanian house, often the Museum staff sit in the shade of the stairs and look like the brides of the house. The atmosphere is created by the works of tradition located very naturally in the 5 rooms on the second floor of the museum.

The holy tomb and the mosaic above (Discovery of Salih Hidri)

One of the most important underground discoveries of the ancient city of Durres is the mosaic in the basilica of St. Michael, a discovery by archaeologist Salih Hidri. The work is a decorative plastic sculpture, measuring 66x29 - and is a very fine work of art. According to Hydri, the mosaic has a Christian religious theme: at its center are the figures of two shepherds, one with a

stick in his hand and the other with a rope, who symbolize the church and its care for the faithful. Figures of dogs and cattle are placed next to them.

The three horses (white, black, and gray) symbolize the three horses of the apocalypse. The mosaic has not only a decorative function for the Basilica, as a tomb has been discovered beneath it; the bones found to show that a woman and a man are buried there. It is thought that the tomb belonged to people very well-known and respected, by the inhabitants and the church.

Therefore, this place was considered sacred. The oldest walls of the Basilica belong to the period of Justinian (6th century) and from that time until today, the hills of St. Michael, are considered a holy place.

Tombs have also been found there, which means that even during the Ottoman occupation this place functioned as a shrine, while today in the narrow window of the old tomb the people of the area light candles. This aspect highlights the fact that in no other country has religious heritage ever disappeared but simply been transformed.

Byzantine fortifications

These walls were built in the time of Emperor Anastasius I (491-518), originating from the senatorial families of Dyrrah. The fortifications which would serve to protect the city were built with brick and mortar, a characteristic construction of this period, where on bricks and seals of this empire, as well as state workshops, are parasites. The siege was made with a triple crown, a linear length of 3.5 km, a wall height of 12 m, and a width, as noted by the Byzantine historian A. Komnena. The other emperor of Illyrian origin, Justinian (527-565) also undertook works of a defensive character, as it is known, Porteza, or Porto Romano, north of the city.

Venetian Tower

Torra is located at the end of the trade route opposite the entrance of the port, in a very favorable position to be identified and visited by tourists. The characteristic construction of the 15th century is a round tower, built with limestone blocks, which include architectural parts of earlier periods, such as the limestone block with the figure of Hermes, in the function of protectors of traders. The Upper Castle is also from this period, here too around tower. In addition to its cultural values, a very pleasant bar has been built inside it, where antiquity and modernity meet, a place highly sought after by foreign tourists who, with the Venetian tower, have the first contact with the tourist facilities that the city of Durres offers.

Byzantine Forum (Macellum)

The forum is located behind the Palace of Culture "A. Moisiu". This work belongs to the last period of the 5th century AD and is known by the citizens of Durrës as Rotonda. Together with the Public Terms of the Roman period, under the foundations of the Palace of Culture, he created an ensemble, an "archaeological island", in the center of the city. All this archeological ensemble has invaluable value for the city of Durres both in terms of history and culture and in terms of tourism.

Turkish wall

Built by the Turkish invaders, turning the city, after 1501, into a military garrison. Along this wall, the Clock Tower is built, and inside the “Kala Neighborhood”, the Medieval Hammam is built, and outside it, in the “Varosh Neighborhood”, the Tophane Well.

Karl Topia Tower

Such is the residence of Prince Karl Topia, who gave political autonomy to the city of Durrës. He called himself “Prince of Arberia”, Venice called him “Lord of Arberia in the coastal areas of Durres”, and the Pope, in 1374, recognized the title, “Great Count of Arberia”. This tower is closely associated with important historical sites, where the fate of the Albanian State has sometimes depended.

“Aleksandër Moisiu” Museum House

It was inaugurated in September 1982. The actor of Albanian origin A. Moisiu spent his childhood here, in the years 1884-1889, where he completed his primary school years. In two rooms his family and artistic biography based on authentic documents are displayed on stands; while in the second room are presented works of art by local creators for the figure of the great actor.

War Relics Hall - It was first inaugurated in 1969. It is located on the second floor above the Funeral Complex of Martyrs of the former District of Durres, martyrs of the Second World War (1939-1944); next to them have buried the remains of the martyrs of the Movement Patriotic of the beginning of the twentieth century. The trophy weapons of the Second World War, and personal objects of the martyrs are exhibited in the Hall of Relics.

8. CURRENT SITUATION OF TOURISM IN DURRES

The development of tourism in the district of Durres is a priority and at the same time a necessity for the economic, cultural, and social development of the district. However, the development of traditional beach tourism alone is not enough for sustainable, effective, and promising development of the district. This is since it extends mainly during the summer season and the tourist is simply a spender of infrastructure and services offered in the beach area and generates income that for the most part serves to repay the basic and correct investments in the beach area. While the beach area is functional and preferred, it requires many other investments in infrastructure, services and facilities, and entertainment activities.

Based on this general comparison of expenditures with revenues from the beach area, it is clear that more needs to be done to increase the level of revenue generation and consequently investments that will increase the attractiveness of the beach area in Durres. This vicious circle does not seem to leave much room for substantial changes in the current state of tourism development on the beach of Durres.

Meanwhile, the combination of ordinary tourism with cultural and historical tourism in Durres opens perspectives for economic and social development through the extension of tourism throughout the year, development of services, and other support activities such as handicrafts, transport, agriculture, construction, museology, etc. Moreover, from the studies that have been

done, it is accepted that the cultural tourist spends more than the ordinary tourist. On the other hand, this combination draws attention to the existence of historical and cultural values by helping to create a different image of the city of Durres, the protection of cultural and historical monuments, and their maintenance. Such a combination is not something new, as in 1976 the Charter for Cultural Tourism was adopted by ICOMOS and in Europe, it has begun to become popular in recent decades. It remains to take advantage of the best experience of other countries and adapt it to the conditions of Durres.

There is a lot of talk about making cultural tourism a priority for the development of tourism in Albania in general and in Durres in particular, but it is important to create a clear idea of where we are in its development. From an organized survey it results that in practice we are very far from the development of cultural tourism in the district of Durres, due to many reasons which were identified.

Surveying is a two-pronged approach. On the one hand, he simultaneously tests the desire of the local tourist for a combination of beach tourism with the historical and cultural one and the knowledge and information he has about the existence of cultural and historical values in the district of Durres. These two pieces of information are important in assessing the existence of the initial premise for combining types of tourism. On the other hand, the survey highlights the preparation of hotels or tourist agencies in the city of Durres to provide various information and services in support of the development of cultural and historical tourism.

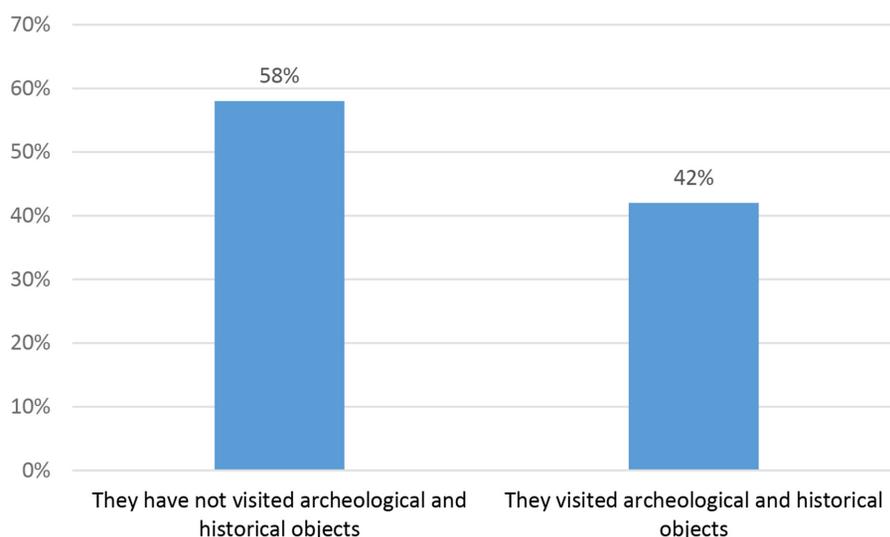
Questionnaires were prepared for the survey that indirectly collects information on the interest of vacationers in cultural and historical tourism as well as on the tourist offer of hotels and tourist agencies.

In the first approach, a sample of 150 random citizens in the cities of Durres and Tirana interviewed 70 foreign tourists. As for the second approach, 80 hotels and tourist agencies in the area of the city of Durres and the Beach have been contacted directly. For the study, a list of the most important archeological, historical objects and museums in the city of Durres has been extracted from the online archeological guide of the city of Durres and publications prepared in the city of Durres in cooperation with specialized institutions inside and outside the country.

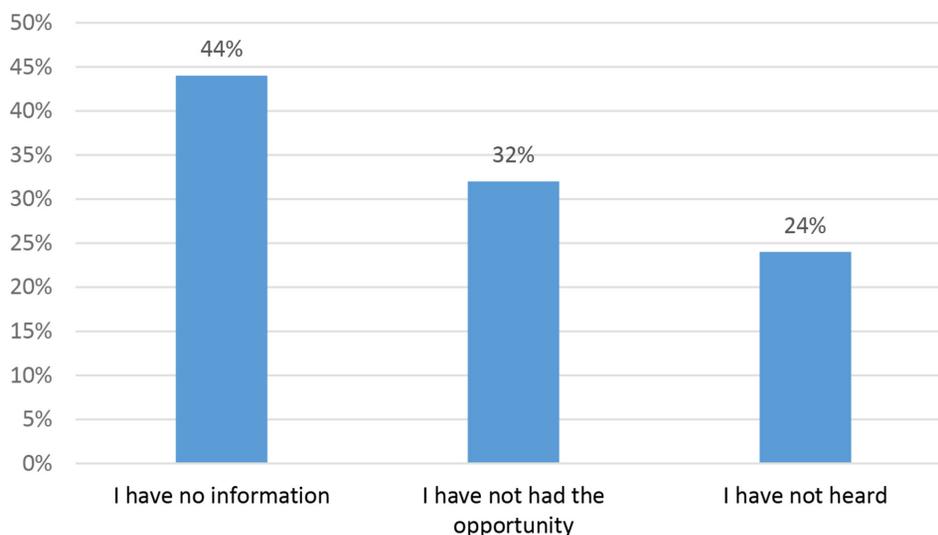
A list of cultural activities that usually take place in the city of Durres throughout the year, has been developed with reference to data from the Municipality of Durres and district NGOs. After conducting surveys, another important element is the statistical processing of data and the extraction of important indicators that have an impact on the development of cultural and historical tourism. Based on the size of the survey, it is clear that the study aims to present in general terms the level of the problems of cultural and historical tourism development in Durres and the calculation of analytical economic indicators. Of course, after identification of the situation, it would be interesting to organize a more detailed and analytical study for each element of the tourist activity in the district of Durres, but the work remains modest in its objectives. Graphic and interpreted survey data are presented below.

The survey shows that of the local tourists who have been to the beach of Durres, many of the tourists have not visited archeological, historical, or museum objects. Thus, 58 percent of tourists have not made any visit to archaeological, historical, or museum sites in the district of Durres. While 42 percent have visited various archaeological, historical, and cultural sites. Among the visited

facilities are the Roman Amphitheater, the Villa of King Zog, the Archaeological Museum, the Church of St. Anthony, and the Catholic one, the remains of Skanderbeg Castle, the great mosque, etc. While some visitors have extensive knowledge of the mosaic riches, objects of Roman and Byzantine heritage with which Durrës is very rich and which are also valued internationally.



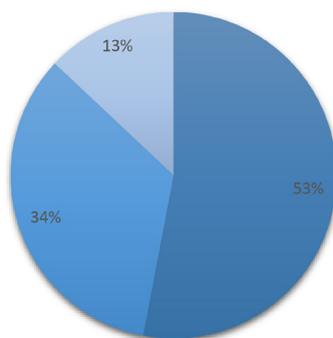
Graph 1. An overview of archeological and historical sites that tourists have visited (or not)
Source: Own research



Graph 2. Information on historical, archaeological sites and cultural activities
Source: Own research

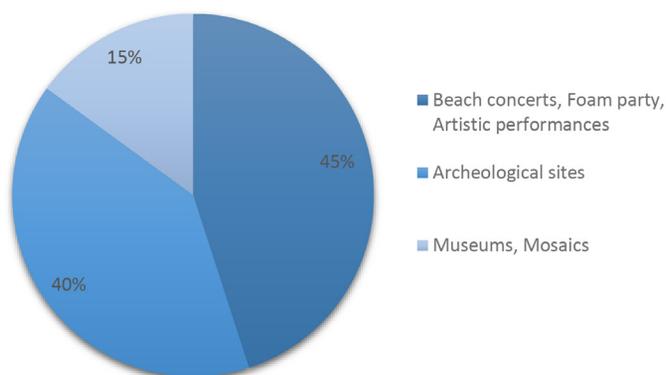
The reason for such a situation of ignorance and visits to these facilities is attributed to the lack of information in 44 percent of cases and ignorance in 32 percent of cases, while 24 percent of respondents have not heard about these facilities.

Graphs 1 and 2 provide a very general overview of the level of development of archaeological and historical tourism in the district of Durrës. Graph 3 shows that the interest of domestic tourists to combine beach holidays with cultural activities is desired by 53 percent of tourists, while 34 percent of them want visits to archeological sites.



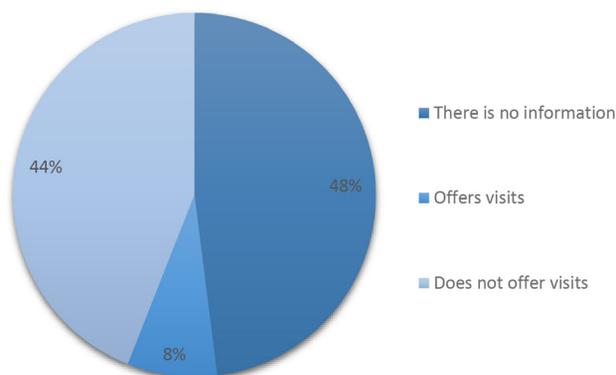
Graph 3. Potential of activities associated with the beach

Source: Own research



Graph 4. Preferences for attending cultural activities

Source: Own research



Graph 5. Hotel offers to visits the archeological and historical sites

Source: Own research

Certainly, the preference of tourists to pursue cultural activities while on vacation in Durres or not are different for different activities.

Graph 4 gives an overview of these preferences. Preferences for attending cultural activities are more in favor of Sea Concerts, party foam, artistic performances, etc. While the desire of local tourists is not lacking to take part in cultural activities and visits to historical areas, while spending holidays by the sea, it remains to be seen what are the alternatives offered to fulfill these desires by direct operators such as hotels and travel agencies, and information offices near the municipality and other public institutions in the district and beyond.

From the conversations with some of the hotels and agencies that operate in the city and on the beach of Durres, it results that for the most part those of medium size do not offer packages for tourist visits to the historical areas of the city while providing non-specialized information. Small units do not have even the slightest information about the historical and cultural areas of the district.

Exceptions are large hotels with more than 100 beds, such as the Adriatic which offers information, although not specialized, and the opportunity to visit these areas.

Graph 5 gives a more concise overview of the situation. The results are almost the same for hotels offering cultural activities.

While hotels offer few other services besides those of hotel and restaurant bars, tourists' demand for information on cultural and historical sites in the city and district of Durres is sensitive. Thus, the survey data show that 48 percent of respondents do not have information about archaeological and historical sites, while 44 percent of them have requested information, and only 8 percent of respondents have no interest in the information. Hotel interviews highlight many problems related to the reasons for the missing offer for packages of visits to cultural activities or archeological sites. We can mention the lack of information and specialized guides and maps of Durres district, souvenirs that refer to cultural, historical, and archeological heritage, specialized public transport services that facilitate free access to these objects or activities, and information on the schedule of activities cultural or visits to archaeological sites. On the other hand, it remains to be seen how available, attractive, and easily visitable are the historical and archeological sites as well as what are the services offered on-site. From personal observation, the situation leaves much to be desired. However, another more specialized survey should be done to identify in more detail the situation and problems that hinder the development of cultural and historical tourism in the district of Durres.

9. CONCLUSION

Based on the evidence of cultural and historical heritages, we conclude that the district of Durres has significant potentials for material and spiritual cultural heritage, to integrate them into its socio-economic development. Monuments of material culture are represented by prehistoric settlements, mounds, castles, dwellings, Christian and Muslim religious sites, etc., along with rich elements of spiritual culture (folklore, crafts, traditions, customs, festivals, way of life, etc.), in addition to values in preserving national, regional and local identity, constitute an important potential for the development of cultural tourism in this district. Through diverse attractions, celebrations, and traditional gastronomy, Durres can provide significant economic, social, and cultural benefits from attracting tourists to the destination.

Although the development of tourism is in its infancy, the integration of cultural heritage into socio-economic development can be considered a very good opportunity for the sustainable development of the area. The diversity of cultural, urban, and rural tourism has led to an increase in the number of visitors, especially foreign ones, from year to year, which has led to the increase and improvement of the supporting infrastructure of tourist accommodation and food services, as well as other complementary services.

The impact and positive expectation of the development of tourism-related to cultural heritage have been expressed during surveys conducted with the community of the area, according to

which it is an important source of income for their families. The surveyed business units that provide tourism services also expressed the same.

While on the one hand, the interest of foreign tourists in the potentials of cultural heritage is growing, on the other hand, these objects are facing many problems, such as damage caused by the natural time factor and the human one.

The presence of different categories of cultural objects that have resisted time, evidence of a civilized development of the whole district, already raises the need for preservation, while the tendency to replace it with new constructions is quite threatening.

The management of cultural heritage sites today, in addition to the purpose of preservation and conservation should also aim to increase its quality as a tourist product.

From the results of the study, we conclude that there is still much to do; the growing demands for the development of cultural, archaeological, and historical tourism match in quantity and quality with the tourist attraction. Some recommendations can be made that would lead to a quick improvement of the situation.

There is a need to register and create an easily accessible electronic database, regularly updated, which should be made available to hotels, tour operators, tourists to historical sites, Theme Parks and Clubs, Coastal Ecosystems, Virgin Nature, Cultural Activities, etc.

For such an enterprise to be successful, in addition to an action combined with the division of tasks and responsibilities between public and private institutions in the local and wider framework, a thorough study is needed with the participation of all stakeholders.

It is also necessary to create the Albanian “Brand”, which includes the city of Durres with its features. Durres must choose what kind of tourism it will develop, the mass or the elite, based on the orientation to adapt and the necessary infrastructure.

For this city is very important and necessary the construction of the electric train and the connection of this network with neighboring countries, thus ensuring a faster and safer transport, which would affect the growth of tourists throughout the year.

There is a need in the future for more effective cooperation of all factors involved in the tourism sector, which, although growing, requires more effort in the future.

Cultural tourism should not be based simply on the promotion of various objects of antiquity but also on the conduct of as many cultural activities with the participation of all regional countries, in order to integrate even more their cultural cooperation.

It is necessary to establish offices for tourist services since there is a need for further development of tourism. In this regard, adequate tourism infrastructure is required, both in the public and private sectors.

From what we presented above, the district of Durres with its constituent areas can be considered as a developing tourist destination. In this perspective, the image of the destination, as a

result of the promotion of tourism products, is generally positive, but this image needs to be further strengthened, through the preservation of cultural heritage, coordination of the public and private sector, and real promotion of tourism products.

Cultural tourism, considered as a concrete alternative for development, can be studied more widely and in-depth, coordinating with such development experiences from neighboring countries or beyond.

REFERENCES

- Anamali, S., & Adhami, S. (1974). *Mosaics of Albania*, November 8, Tirana.
- Andrea, Zh. (1971). *Results of 1970 archaeological excavations; Iliria I*, Tirana.
- Anrolovic, J. (1999). "Immovable Cultural Monuments and Tourism." In *Cultural Tourism Session Notes XII Assembly ICOMOS*. Mexico, pp. 103-118
- Cernea, M. (2008). "The Developmental Potential of Cultural Heritage Environments," in *Cultural Heritage in the Arab World*, edited by Fekri Hassan, Aloisia de Trafford & Mohsen Youssef, Alexandria, Egypt 2011, pp.111-144.
- Doja, A. (2007). "Leading and Building Research Capability in the Field of Critical Tourism Studies". Open lecture at the Centre for Tourism and Cultural Change, Leeds Metropolitan University, UK.
- Doka, Dh. (2005). *Socio-economic and regional developments of Albania after 1990*, Potsdam.
- Doko. Dh., & Draçi. B. (2019). "Geography of tourism", Media Print, Tirana.
- Dollma M., & Pazari, F. (2012). *The contribution of geographers in the identification, promotion and protection of natural and cultural heritage*, Albanological Studies, Tirana.
- Dollma, M. (2011). *Albanian Territories, "Dajti 2000"*, Tirana.
- Guxholli, S., & Karapici, V. (2011). *Potential for the development of agriculture and assessment of the socio-economic and environmental situation*, "Albanian Social Economic Magazine", Tirana.
- Hoti, A. (2006). *Durrës: Epidamnos - Dyrrhachion; Guide*, Publisher, "Cestis", Tirana.
- McKercher, B., & Du Cros, H. (2002) "Cultural Tourism. The partnership between Tourism and Cultural Heritage Management", New York: The Haworth Hospitality Press
- Qiriazi, P. (2001). "Physical Geography of Albania", Aferdita, Tirana.
- Tase, M., & Xhaferri, M. (2019). "The potentials and challenges of developing sustainable and safe tourism: the case of Albania", *Shaping the Future Through Dialogue, Quality and Education*, Kodolányi nos University, Budapest, Hungary.
- Tase, M., & Xhaferri, M. (2021). *Challenges and prospects for the future in the tourism industry. Case Study Albania, Tourman 2021*, Published by: School of Economics & Business, Thessaloniki: Greece.
- Xhaferri, M. (2018). "Tirana in the course of the centuries" *Ethnographic overview*, Monograph Publishing House "LUIS PRINT" Durres.
- Xhaferri, M. (2018). "Continuing Challenges of Women in Albania for Putting Gender Equality at Work, Case Study in Kruja" *European Journal of Social Sciences*, Volume 1, Issue 3. 148-164.
- Xhaferri, M., & Tase, M. (2019). "What is new in the Field of Education?" *Monograph*, Publishing House of The Maria Grzegorzewska University 40 Szczęśliwicka str., 02-353 Warsaw, Poland.
- Xhaferri, M., & Tase, M. (2020). "Important aspects of traditional culture during the twentieth century, in Tirana", *Monograph*, LAP LAMBERT Academic Publishing, Berlin.



Performance of the Slovenian Hotel Companies in Times of COVID-19

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Abstract: *The chapter aims to analyse the performance of the Slovenian hotel companies in the times of Covid-19 compared to the performance before the pandemic. As the number of tourist arrivals and overnight stays significantly decreased during the pandemic, the Slovenian government has taken various measures to support the tourism industry. The research question of the article is: Is the performance of Slovenian hotel companies significantly different in times of Covid-19 than in times before Covid-19? The analysis is based on a sample of the 100 largest Slovenian companies operating in the hotel industry. The data covers the period 2018-2020. The results show that the performance of Slovenian hotels was significantly worse during the Covid-19 period. Without state aid, many hotels would most likely cease operations. The analysed industry faces major challenges. Suggestions for improvement and opportunities for further research are given.*

1. INTRODUCTION

The year 2020 was marked by the Covid-19 pandemic. According to the World Tourism Organization (UNWTO), the tourism industry was the sector most affected by the pandemic (UNWTO, 2021a). As reported by the World Travel & Tourism Council, tourism had a 10.4% impact on global GDP in 2019. With the emergence of Covid-19, this impact dropped significantly to 5.5% in 2020, representing a 49.1% decline over this period. The estimated number of tourism job losses in 2020 was 62 million, a decline of 18.5% (WTTC, 2021a; WTTC, 2021b). In 2020, international tourist arrivals at the global level declined by 73% compared to 2019, after a decade of steady growth. Between 2009 and 2019, tourist arrivals increased by an average of 5% per year and 63% overall (UNWTO, 2021a). In Slovenia, the decline in the contribution of tourism to GDP was slightly lower compared to the decline at the European level. In Slovenia, the impact of tourism on GDP in 2019 was 10.6%, and in 2020 6.5%, which represents a decrease of 42.3% (WTTC, 2021c). On the European level, the drop was 51.4% (WTTC, 2021d).

The year 2019 was the sixth consecutive record year for Slovenian tourism (in terms of tourist arrivals and overnight stays). At that time, expectations for future tourism growth were favourable. In the structure of all tourist arrivals, the share of foreign tourists in Slovenia in 2019 was 75.48% and in the number of overnight stays 72.08%. (SORS, 2021). This structure has changed significantly since the occurrence of Covid-19. Due to the outbreak of the epidemic, international travel decreased significantly, which resulted in the share of domestic visitors increased to 60% in 2020 (in 2019 it was 24.52%) (SORS, 2021). According to Eurostat (2021), Slovenia, Malta, and Cyprus were the only EU countries where the number of nights spent by domestic guests in tourism accommodation establishments increased in 2020 compared with the previous year. For the same period, Eurostat (2021) estimated an

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average decrease in overnight stays by domestic tourists to 34% at the EU level. On the other hand, the number of overnight stays by international tourists decreased in all EU countries covered by the study.

In 2020, there were 41.7% fewer overnight stays and 50.8% fewer arrivals in Slovenia compared to 2019 (STO, 2021a). The data show that the decline in overnight stays by type of accommodation establishments in 2020 compared to 2019 was greatest in hotels and other accommodation establishments (-49%), while it was smaller in campsites (-30%) and other accommodation establishments (-34%) (STO, 2021a). First measures to mitigate the impact of the Covid-19 virus were adopted in Slovenia in mid-March 2020. At that time, a decree banning direct sales of goods and services to consumers came into force, except for a few activities. Hotels reopened in the second half of May. Many measures were abandoned in the summer of 2020, followed by a second wave of infections in the fall.

Since the most important industry within the Slovenian tourism sector is hotels and similar establishments, both in terms of total revenues and number of employees (AJ PES, 2019), we will focus our analysis on this industry. Considering that the pandemic had a remarkable impact on the tourism industry, the paper aims to compare the performance of the Slovenian hotel companies in times of Covid-19 with times before the pandemic. Our research question is: Is the performance of Slovenian hotel companies significantly different in times of Covid-19 than in times before Covid-19? To achieve the aim of the analysis, we will analyse the financial data of the 100 largest hotel companies from 2018 to 2020. Data for 2021 was not available at the time of the analysis. Statistical analysis will be performed using non-parametric tests (Friedman's two-way analysis of variance by ranks and Wilcoxon signed-rank test). Our analysis is based on the most important categories from publicly available financial statements.

The paper is structured as follows. After the introduction, the theoretical background of the study is presented, explaining the impact of Covid-19 on the tourism industry and the measures taken by individual countries to mitigate the impact of Covid-19. The description of the data and the methodology used is provided in the fourth chapter. The obtained results of the analysis and the discussion form the fifth part. The sixth part concludes the paper.

2. TOURISM INDUSTRY AND COVID-19

One of the peculiarities of hotel companies is that their services cannot be stocked; they cannot be sold in the future. All unsold rooms and other related services are permanently lost. The tourism industry was extremely affected by the lockdowns, required social distances, health measures, restrictions on international travel, and destination-specific restrictions. Because of the impact of the pandemic on tourism, many countries have helped the tourism sector with various economic stimulus initiatives (e.g., job security programmes, "bonuses" for vacations, etc.).

According to the literature, between December 2019 and March 2021, numerous articles were published on the topic of Covid's impact on the tourism industry (Zopiatis et al., 2021). In the initial phase, the studies were more conceptual, as many numerical data were not available for empirical analysis at that time. Analyses in the early stages focused on changes (transformation and operations) and opportunities for the industry. Later studies were increasingly supported by empirical analyses. These studies examined tourist behaviour, designed models, and provided guidelines for the hospitality industry and tourism destinations (Zopiatis et al., 2021).

Previous studies on the impact of various epidemics on the tourism industry are not comparable to the impact of the Covid-19 epidemic, as the latter has much broader implications. Zhang et al. (2021) pointed out that traditional statistical models used for forecasting have limitations because they do not account for the unprecedented factors of the Covid-19 pandemic. Among the first studies to examine the impact of the Covid-19 epidemic on tourism is an analysis by Škare et al. (2021). The impact was analysed using a sample of 185 countries. The shock caused by the epidemic has a significant negative impact not only on employment levels in tourism but also on other industries. The authors note that the impact varies from country to country, so it is important that countries take appropriate economic measures. The authors further note that given the magnitude of the shock to the tourism industry, the number of people employed in the industry is not expected to return to pre-crisis levels very quickly (Škare et al., 2021). Studies forecasting a recovery in tourism show that the industry will recover gradually (Zhang et al., 2021).

As indicated by Huang et al. (2021), the hospitality labour market was more affected compared to other major industries. Their analysis of U.S. data shows that there was a decline in employment and job postings for hospitality workers. Recent research from Serbia also shows that younger workers and those without families are more motivated to seek employment in other industries (Demirović Bajrami et al., 2021). A recent World Travel & Tourism Council survey (WTTC, 2021b) of samples in Spain, United Kingdom, United States, France, Italy, and Portugal found that during periods when travel restrictions were reduced and the number of tourists increased, the supply of labour was less than the demand for it. As a result, companies in the tourism industry have had difficulty finding suitable workers. According to WTTC (2021b), the reason is that many workers shifted from the tourism sector to other sectors, while some workers have left the labour market entirely. Baum et al. (2020) note that some workers in the hospitality sector are particularly vulnerable during times of pandemics. Very often, workers with precarious status, non-residents, migrants, students, and some others were excluded from governments' emergency incentives.

Crespí-Cladera et al. (2021) pointed out that in a situation of significantly lower revenues for hotel companies, crucial factors that should be considered by hotel managers are liquidity, solvency, and operating leverage (companies with a lower share of fixed costs in total costs will have less difficulty adjusting to a decline in revenues). Since hotel companies have a high proportion of fixed costs relative to variable costs (Crespí-Cladera et al., 2021), they will have more difficulty surviving the crisis compared to some other industries where variable costs represent a higher proportion of total costs. Companies that have the ability to reduce operating leverage will have less difficulty adjusting to a lower volume of their operations due to Covid-19. In addition to the cost and liquidity aspects, Garrido-Moreno et al. (2021) also suggest the postponement of investments and flexible staff allocation as effective control measures to overcome the crisis in the hotel industry.

Assaf and Scuderi (2020) pointed out that prices in the industry will increase due to a decrease in demand. As the industry faces additional costs due to hygiene measures and, in some countries, restrictions on the maximum possible capacity utilization (e.g., for hotels and restaurants), the profitability of these companies is consequently lower. This may have an additional impact on price increases.

Due to the sharp decline in international tourists, Arbulú et al. (2021) suggest stimulating domestic tourism. In particular, countries where the importance of foreign visitors was high, showed a comprehensive crisis in tourism. European countries with a high share of domestic guests are,

for example (2018 data): Finland (90%), Romania (85%), Sweden (84%), and Germany (80%) (UNWTO, 2021b). These countries did not feel the impact of the income loss from foreign tourists as much as countries where the importance of foreign guests was significantly higher.

Slovenia is a country where the proportion of foreign guests was very large in the period before the appearance of Covid-19. In 2019, when the effects of Covid-19 were not yet felt in Slovenia, the share of foreign tourist arrivals was 75% and the share of domestic arrivals was 25%. The share of foreign tourist arrivals has increased over time (in 2008, for example, it was 64%). In 2020, the share of foreign tourists decreased to 40%. Compared to 2019, the number of arrivals of foreign guests in 2020 decreased by 74%. At the same time, the number of domestic guests increased by 21% (data retrieved from SORS, 2021). Preliminary data for 2021 show that the number of domestic guests increased by 25% compared to 2019 (period from January to September) (STO, 2021b). The data show that the number of arrivals by domestic guests has increased, but this increase has not come close to offsetting the decline in arrivals by foreign guests. Tourist vouchers introduced by the Slovenian government in both 2020 and 2021 have stimulated domestic tourism. According to Eurostat (2021), Slovenia ranked first in Europe in terms of growth in the average number of nights spent in tourist accommodation by domestic guests in 2020 compared to 2019 (Eurostat, 2021). However, domestic guests in Slovenia traditionally spend less on average than foreign guests. Arbulú et al. (2021) point out that governments prefer international visitors because of their higher spending.

The appearance of Covid-19 is already changing the habits of tourists. The Croatian example shows that before the pandemic there was a high concentration of tourists on the coast and in coastal regions. In 2019, seven coastal counties recorded 90% of overnight stays in all of Croatia. In 2020, there was a significant decrease in all regions. This was greater for continental Croatia than for Adriatic Croatia. In 2020, the less populated areas performed better than the densely populated areas and the destinations to which tourists frequently travel by air. In hilly areas, the decrease in tourist visits was also lower (Šulc and Fuerst-Bjeliš, 2021). The results of their analysis show that tourists preferred to stay in less crowded areas because they are more likely to feel safer there. The consequences of the epidemic are likely to be reflected in socioeconomic changes that affect tourism, such as changes in mobility and consumption habits (Romagosa, 2020; Gössling et al., 2020). Romagosa (2020) also notes that tourists will more likely travel to nearby destinations in the post-crisis period. Breier et al. (2021) see the expansion of marketing to domestic guests as a good opportunity to increase hospitality companies' revenues.

To date, studies in the hospitality industry have not focused on how companies are prepared for the crisis (Giousmpasoglou et al., 2021), and at the same time, research on sustainability has been underdeveloped (Jones and Comfort, 2020). Authors (Jones and Comfort, 2020; Romagosa, 2020; Abbas et al., 2021) believe that now is the time to shift tourism toward more sustainable development. Romagosa (2020) states that it is time to consider structural changes in tourism, starting with a reflection on sustainability (ensuring a balance between environment, society, and economy).

Hotel managers must address the impact of the Covid-19 crisis on tourism. To this end, strategic actions must be taken. Garrido-Moreno et al. (2021) identify six areas found in the literature as essential for the implementation of recovery strategies. Hotels must intensify digitalization and various other technological solutions to minimize human contact. In addition, hotels should adopt organizational and human resources strategy measures, such as special training programs

and additional internal communication channels. As suggested by Garrido-Moreno et al. (2021), hotel managers should also implement marketing measures (specific offers for the local market; development and promotion of new products and services), service provision measures (improved facilities and customer service), healthcare measures, and cancellation management (offering greater flexibility, e.g., free cancellation, flexible re-scheduling).

3. HOSPITALITY INDUSTRY AND PUBLIC MEASURES

A survey conducted by the American Hotel and Lodging Association (2020) in November 2020 of a sample of 1,200 members of its association found that nearly 50% of the hotels in the sample would close without further government assistance.

European Union countries have taken various measures in parallel with those taken by the EU to mitigate the impact of Covid-19 in the tourism sector. Countries have introduced their own measures, as the importance of tourism varies from country to country. Sanabria-Díaz et al. (2021) examined public strategies in the EU to recover the hospitality industry due to Covid-19. Countries have helped the tourism industry by offering refunds for postponed vacations, covering wages and social security contributions, temporary work programmes to secure jobs, providing unemployment benefits, and measures to solve liquidity problems. Some countries have reduced VAT on certain products and services, and some have issued holiday vouchers to encourage domestic tourists to travel in their own countries. Collins-Kreiner and Ram (2021) analyzed national tourism strategies during the Covid-19 pandemic. Their sample includes seven countries, namely Australia, Austria, Brazil, China, Israel, Italy, and Japan. The analysis considered the policies implemented by the countries until July 2020. They found that the most common action was to preserve jobs, support the self-employed, and help businesses provide liquidity. Strategies for the future were developed by only one country, while talent development and sustainable development were not addressed.

In addition to the general measures taken for the economy as a whole, some countries have also taken specific measures in the area of tourism. Many of these measures have been taken to promote domestic tourism (Arbulú et al., 2021)). Not only because the importance of domestic tourism is high in some countries, but also because domestic tourism is expected to recover faster than international tourism. Arbulú et al. (2021) argue that incentives such as marketing campaigns to promote domestic tourism and financial incentives are particularly important in countries where the share of foreign tourists was very high before Covid-19 occurred.

A survey of European data was conducted in April 2020 among 488 respondents working in the hospitality industry in England (Ntounis et al., 2021). 72.9% of respondents reported that they could continue their business for up to four months without further government support. Thus, the government measures were important support for the companies. 97.4% of respondents had already applied for assistance at the time of the survey. If countries did not take measures to help the tourism sector, several businesses would be declared bankrupt. Giousmpasoglou et al. (2021) emphasise that the economic recovery of the hotel industry is likely to be gradual. It takes time for tourists to return to their old mobility after the end of the pandemic (Uğur and Akbıyık, 2020).

Škare et al. (2021) predict that the tourism industry will recover slowly in the first five years, depending on the size of the shock to the economy as a whole. In the past, the tourism industry

has proven to be relatively resilient to shocks. The industry's recovery time dropped from 26 months to 10 months during the 2001-2018 period. This time is expected to be different. If tourism business management and the government do not respond with appropriate measures, the consequences of Covid-19 could lead a country into a deep recession (Škare et al., 2021).

4. DATA USED AND METHODOLOGY

4.1. Data used

In the continuation of the chapter, we present an analysis aimed at answering the research question: whether the performance of Slovenian hotel companies during the Covid-19 period is statistically significantly different from the performance before the occurrence of Covid-19. To achieve the aim of the analysis, we collected financial data from Slovenian hotel companies (standard classification of activities I55.100) for the period 2018-2020. The years 2018 and 2019 are treated as the period before the occurrence of Covid-19, while 2020 is treated as the year of the pandemic due to Covid-19. Data for 2021 were not available at the time of analysis. Data were collected for the 100 largest hotel companies from the GVIN financial database. The size of the companies was defined based on the value of total assets as of the balance sheet date. In 2020, there were a total of 702 Slovenian hotel companies (standard classification of activities – hotels and similar accommodation).

We included in our analysis only companies that are still active, those that have more than 1 employee and generate more than zero revenues. From the initial list of companies sorted by size, 14 companies were excluded because they had no employees or did not generate revenues in all years included in our analysis. These companies were replaced with companies that met the conditions for selection in the sample.

For our study, the following data were collected from the financial statements: total assets, owners' equity, revenues from sales, EBIT (earnings before interest and taxes), net income for the financial year, ROE (return on equity), ROA (return on assets) and number of employees. These categories were collected for fiscal years 2018-2020.

The author would like to point out that the presented study is based on publicly available data from financial statements, internal data were not available, which represents a limitation of the study. Since the International Standards for the Hotel Industry (USALI) are not used in Slovenia for the purposes of external financial reporting (for more details see Ivankovič, 2005), the analysis is based on data from companies that reflect not only the operation of a single hotel but the entire business of the company.

4.2. Methodology

First, we used the Shapiro-Wilk test, which checks whether the variables are normally distributed. We use it when a sample is not large. In cases where the test is not statistically significant (sig. > 0.05), the null hypothesis is not rejected, but we conclude that the distribution of the variable does not deviate from the normal distribution. The variable is not normally distributed if the test results show sig. < 0.05. Since we found that our variables are not normally distributed, we used non-parametric tests in the following steps of the analysis. To examine whether there are differences in the selected variables between fiscal years 2018, 2019, and 2020, we

performed a sample Friedman's two-way analysis of variance by ranks. The variables used are total assets, owners' equity, revenues from sales, EBIT, net income, ROE, ROA, and the number of employees. With this test, we check whether there are differences between the years covered by the analysis and thus determine whether further analysis is meaningful.

Since the results (presented in chapter five) show that there are statistically significant differences between the years of analysis, we will examine the differences in more detail in our further research. We test for the presence of possible statistical differences between pairs (years) using the nonparametric Wilcoxon signed-rank test. At this point, we analyse whether there are statistically significant differences in the values of total assets, owners' equity, revenues from sales, EBIT, net income, ROE, ROA, and the number of employees in the periods before Covid-19 occurred and in the Covid-19 period. We compare selected variables for 2018 with 2020 (1st pair) and 2019 with 2020 (2nd pair).

5. RESULTS OF THE ANALYSIS

First, descriptive statistics of selected categories from the financial statements (balance sheet and income statement) of the analysed companies are presented. Table 1 shows the average value, standard deviation, a minimum and maximum value of total assets, total owners' equity, and revenues from sales. The sample includes the 100 largest Slovenian hotel companies.

Table 1. Descriptive statistics of the sample for the period 2018–2020

	Year/category	Total assets (in €)	Total owners' equity (in €)	Revenues from sales (in €)
2018	Average value	13,617,446	7,101,518	5,162,978
	Standard deviation	25,458,288	15,026,484	9,623,817
	Minimum	350,558	-2,452,524	16,200
	Maximum	172,176,000	106,206,000	72,126,000
2019	Average value	15,286,618	8,442,230	5,549,844
	Standard deviation	32,536,818	20,543,846	11,223,051
	Minimum	1,121,925	-204,083	3,689
	Maximum	255,926,000	167,659,000	91,630,000
2020	Average value	15,388,323	7,944,263	3,101,193
	Standard deviation	33,612,739	19,879,491	7,069,125
	Minimum	1,988,902	-997,016	11,077
	Maximum	270,194,000	160,424,000	55,165,000

Source: own calculations based on data retrieved from the financial database GVIN, 2021

Table 1 shows that the average value of total assets increased from 2018 to 2020. Contrary to our expectations, there has been no decrease between 2019 and 2020. The standard deviation value shows that the companies in the sample differ in size. The largest company in the sample (the value of total assets in 2020 is 270,194,000€) is much larger than the smallest company in the sample (the value of total assets in 2020 is 1,988,902€).

The average value of owners' equity increased in 2018-2020, but there is a decrease in 2019-2020. In 2020, the average value of owners' equity was 7,994,263€, while in 2019 it was 8,442,230€. This decrease is a result of the negative net income (more details in Table 4 and Figure 2), which led to a lower value of owners' capital (-5.9%). The average value of revenues from sales in 2018-2020 decreased significantly (-39.9%) from an average value of 5,162,978€ in 2018 to an average value of 3,101,193€ in 2020. Although average revenues from sales decreased significantly, the

impact on owners' equity was not as dramatic. Government measures to preserve jobs, cover some of the fixed costs, and other forms of government aid most likely helped hotel companies significantly.

The data show that revenues from sales increased from 2018 to 2019 (by 7.5%), while there was an extremely sharp decline from 2019 to 2020 (by -44.1%). This event is a result of the appearance of Covid-19. 2019 was the sixth consecutive record year for Slovenian tourism (in terms of tourist arrivals and overnight stays), while in 2020 there was a significant decrease in international arrivals. This is clearly reflected in the amount of revenues generated for the sample of Slovenian hotels. If the state did not introduce tourist vouchers for residents in 2020, the decrease in revenues from sales would be even greater. According to Eurostat data (2021), Slovenia recorded the highest increase in overnight stays by domestic guests among EU countries, which shows that the measures have had an overall positive impact on the growth of domestic tourism. Figure 1 shows more clearly the changes in the average values of total assets, total owners' equity, and revenues from sales for the analysed period.

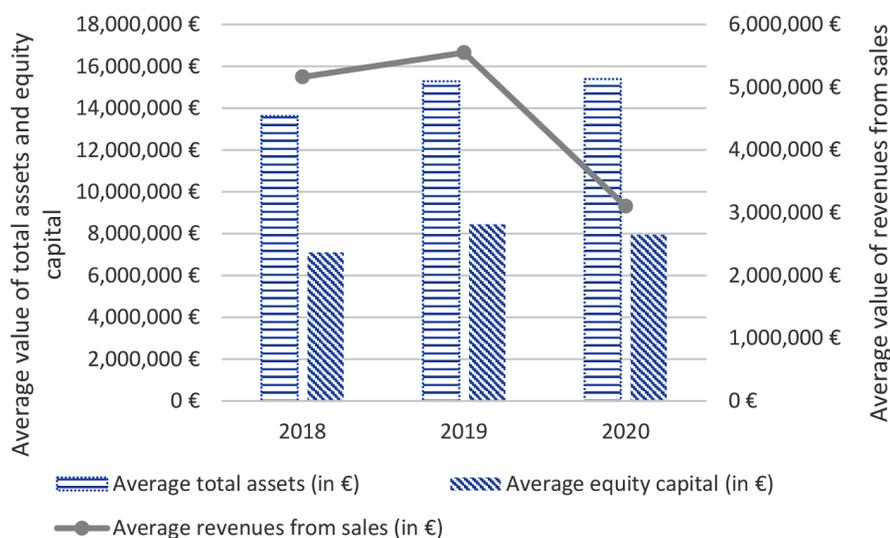


Figure 1. Average values of total assets, owners' equity, and revenues from sales in the period 2018-2020 (in €)

Source: own calculations based on data retrieved from the financial database GVIN, 2021

Table 2. Test of normality distribution

Variables	Shapiro-Wilk test		
	Statistic	df	Sig.
Total assets	0.426	300	0,000
Owners' equity	0.414	300	0,000
Revenues from sales	0.464	300	0,000
EBIT	0.607	300	0,000
Net income	0.579	300	0,000
ROE	0.446	300	0,000
ROA	0.701	300	0,000
Number of employees	0.491	300	0,000

Source: own calculations based on data retrieved from the financial database GVIN, 2021

To achieve the aim of our analysis, we examined the distribution of the selected variables that we will use in our further statistical analysis. Table 2 shows the results of the Shapiro-Wilk test.

Using this test, we found that the distribution of the data deviated from the normal distribution, as the significance was less than 0.05. This violates one of the requirements that must be met if we are to use the paired samples t-test. Therefore, we will base our empirical analysis on non-parametric tests.

In the next step, we performed Friedman's two-way analysis of variance by ranks. We used this test to analyse whether there are statistically significant differences between the years of analysis. The variables considered at this point are total assets (sig. = 0.085), owners' equity (sig. = 0.00), revenues from sales (sig. = 0.00), EBIT (sig. = 0.00), net income (sig. = 0.00), ROE (sig. = 0.00), ROA (sig. = 0.00), and number of employees (sig. = 0.00). The results show that, except for total assets, the test is statistically significant for all other variables considered. This means that our further (more detailed) analysis is meaningful.

We then tested whether there are statistically significant differences when comparing variables for 2018 with 2020 and 2019 with 2020. For this purpose, the nonparametric Wilcoxon signed-rank test is used. The results of this test can be found in Table 3. At this point, we tested variables that have already been tested in the case of Friedman's two-way analysis of variance by rank.

Table 3. Results of nonparametric Wilcoxon signed-rank test

Pairs		Sig.
Total assets 2018	Total assets 2020	0.169
Total assets 2019	Total assets 2020	0.388
Owners' equity 2018	Owners' equity 2020	0.255
Owners' equity 2019	Owners' equity 2020	0.000
Revenues from sales 2018	Revenues from sales 2020	0.000
Revenues from sales 2019	Revenues from sales 2020	0.000
EBIT 2018	EBIT 2020	0.000
EBIT 2019	EBIT 2020	0.000
Net income 2018	Net income 2020	0.000
Net income 2019	Net income 2020	0.000
ROE 2018	ROE 2020	0.000
ROE 2019	ROE 2020	0.000
ROA 2018	ROA 2020	0.000
ROA 2019	ROA 2020	0.000
Number of employees in 2018	Number of employees in 2020	0.001
Number of employees in 2019	Number of employees in 2020	0.000

Source: own calculations based on data retrieved from the financial database GVIN, 2021

The results in Table 3 show that, with a few exceptions, there are statistically significant differences for most variables (sig. < 0.05). Only total assets proved to be not significant (2018 compared to 2020 and 2019 compared to 2020), while there were no statistically significant differences between the value of owners' equity in 2018 compared to 2020. The results show that the value of owners' equity changed significantly between 2019 and 2020 (Table 1 shows that the average value decreased). Significant differences between 2018 compared to 2020 and 2019 compared to 2020 were found in revenues from sales, EBIT, net income, ROE, ROA and number of employees. To understand the changes in the analysed variables in detail, Table 4 provides descriptive statistics for EBIT, net income, and the number of employees.

Table 4 shows that the average EBIT was positive in 2018 and 2019, while there was a significant decrease in 2020 when the average EBIT was negative. This means that in 2020, on average, the

analysed hotel companies did not generate profit from their core business (negative result from operating activities). The data suggest that hotel companies were not able to reduce operating costs as much as revenues from sales decreased due to the occurrence of Covid-19. This was most likely the case since a large portion of total costs in hotels are fixed costs. In addition, the average net income for 2020 was also negative. Both EBIT and net income increased in 2018-2019, while there was a significant decrease in 2020 (on average). This means that the negative net income had a negative impact on owners' equity. Based on this data, it is not surprising that the average number of employees decreased in 2020 compared to 2019. There was a significant increase in 2018 compared to 2019 (average of 3.31 employees per company), but this was followed by a significant decrease in 2020 (average of 8.82 employees per company). The data shows that 2020 was a difficult year for the analysed companies.

Table 4. EBIT, net income, and number of employees for the period 2018–2020 (in €)

Year	EBIT (in €)	Net income (in €)*	Number of employees
2018	Average value	360,301	70.21
	Standard deviation*	1,328,717	123.63
	Minimum	-5,122,586	0.07
	Maximum	8,163,000	738.13
2019	Average value	541,935	73.52
	Standard deviation	1,605,123	149.16
	Minimum	-2,941,459	0.17
	Maximum	12,745,000	1,178.60
2020	Average value	-404,319	64.70
	Standard deviation	1,131,723	141.30
	Minimum	-6,660,250	1.00
	Maximum	2,008,571	1,162.86

* In 2018, 22 out of 100 companies recorded losses, in 2019 the number decreased to 16, while in 2020 the number increased significantly and was 68 (68% of companies in the sample).

Source: own calculations based on data retrieved from the financial database GVIN, 2021

Figure 2 shows the average values of the variables presented in Table 4 in graphical form. All three variables show a significant decrease in 2020 compared to 2019.

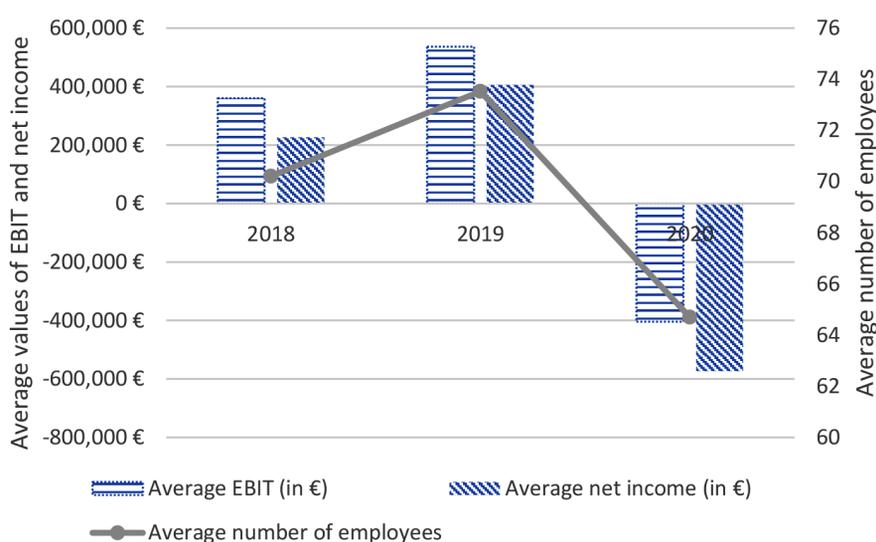


Figure 2. Average values of EBIT, net income, and number of employees in the period 2018-2020

Source: own calculations based on data retrieved from the financial database GVIN, 2021

With our further analysis, we show that the owners of selected companies did not generate profit on their invested equity in 2020. In 2018 and 2019, the average ROE was positive, while in 2020 it decreased significantly and became negative (Figure 3). Previous research has already shown that the Slovenian hotel industry did not generate value for its owners (Stubelj & Jerman, 2019). The analysis was based on data from 2009 to 2018, which showed that the industry was not successful even before the pandemic. Since the epidemic has only worsened the results, the question is how many hotel companies will cease operations. Even though 2019 was the sixth consecutive record year for Slovenian tourism in terms of tourist arrivals and overnight stays, the performance of hotel companies in Slovenia does not reflect this.

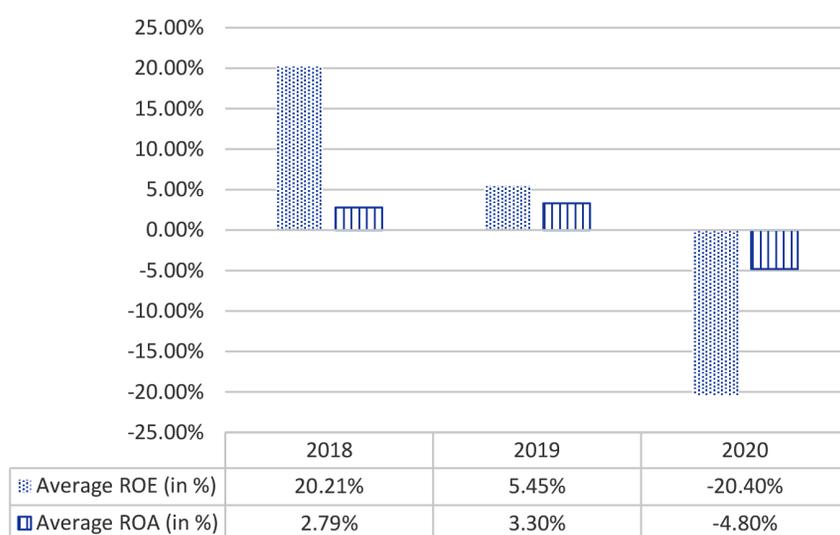


Figure 3. Average ROE and ROA for the period 2018–2020 (in %)

Source: own calculations based on data retrieved from the financial database GVIN, 2021

According to the data of the Slovenian Tourism Organisation for 2020, the greatest decrease in overnight stays among Slovenian accommodation establishments was recorded in the capital (Ljubljana). The decrease amounted to 76%. Urban tourism in Ljubljana was the most affected, while accommodation establishments on the coast were the least affected (STO, 2021a).²

In the last part of our analysis, we divided the companies into two groups - those located in Ljubljana and those located outside Ljubljana. Using the non-parametric Mann-Whitney U-test for independent samples, we tested whether there is a statistically significant difference in ROE and ROA from 2020 between the two groups (hotel companies located in the capital and outside the capital). The results showed that the differences are significant (sig. for ROE = 0.013 and sig. for ROA = 0.031; in both cases sig. < 0.05). The average ROA and ROE for the two groups for 2020 show that the results for the capital are worse compared to all other hotel companies. A more detailed analysis of the data for hotel companies located in the capital also shows that in 2020, 80% of them recorded losses. In 2019, this share amounted to 12%.

The Slovenian government has taken several measures to support the Slovenian economy during Covid-19. In April 2020, the main measures implemented were (Government of the Republic of Slovenia, 2021): the state fully assumed compensation payments for workers waiting for work (for workers who could not work due to force majeure); in certain situations, employers

² Research of Spanish data has already shown that the consequences in terms of the number of tourists due to the occurrence of Covid-19 are not the same for all Spanish regions (Arbulú et al., 2021).

were exempted from paying social contributions for employees; subsidization of part-time work by the state; deferred payment of liabilities, state guarantees for business liquidity loans, and others. For the tourism industry, one of the most important measures implemented in 2020 was the issuance of tourist vouchers. Each adult citizen of Slovenia received 200€ and minors 50€. The state wanted to encourage citizens to travel within the country and not abroad. If the government would not take various measures to support the economy, the business results of hotel companies would be much worse. Given the very strong impact that Covid-19 had on the Slovenian hotel industry, the government could take additional measures to specifically help the tourism sector. Additional incentives would be needed for hotels characterized by urban tourism. These hotels experienced a significant decline in the number of foreign guests, which, however, could not be sufficiently replaced by domestic guests.

6. CONCLUSION

The crisis caused by the Covid-19 virus outbreak has far-reaching consequences for the tourism industry. In modern history, it has not yet happened that the number of tourists in all countries decreased so much at the same time, almost simultaneously. The review of the theory has shown that hotel companies are facing great challenges. Hotels and similar establishments recorded the sharpest decline in the number of overnight stays, while the decline in other lodging establishments was smaller. Countries, where the share of foreign guests was significant before the appearance of Covid-19, are under additional pressure, Slovenia is one of them.

With our analysis, we found that there is a statistically significant difference in the performance of the largest Slovenian hotels between 2019 and 2020. The value of assets of hotel companies in the sample has not decreased on average, but the value of owners' equity has decreased significantly, and the amount of revenues has decreased sharply. Net income was negative on average, as were ROE and ROA. The number of employees decreased significantly on average. We also found that performance was significantly worse at hotels in the capital, which are characterized by urban and congress tourism.

Hotel companies face many challenges. They must adapt to the new realities - the rules of social distancing, comply with all the safety requirements, and at the same time face major challenges in retaining workers and focusing more on domestic guests, at least until international tourist arrivals return to pre-crisis levels. One of the challenges for Slovenian hotel companies is certainly to retain employees. Numerous employees have many years of experience in this industry and if they leave, it will be difficult to bring them back. So far, data shows that the average number of employees per company has already decreased in 2020 compared to 2019. Since many companies are currently still receiving government support, we wonder what will happen once the government incentives are eliminated.

The next challenge for Slovenian hotels in the short term is to focus on domestic guests. As the number of international tourists has decreased significantly, this shift could help hotels increase their revenues. Based on the data presented for Slovenia, we claim that the Slovenian government has introduced good measures to promote domestic tourism. In the future, further measures (such as marketing campaigns and financial incentives) should be taken to attract new segments of domestic tourists. Promotional campaigns (using modern technology) should be coordinated at both the national (national authorities) and local (municipalities) levels. In this way, part of the loss of income from foreign tourists would be compensated by domestic tourists.

Given the many challenges facing the tourism industry, there are many opportunities for future research. Research can focus on the analysis of government policies in the field of tourism (job preservation measures, the impact of tourist vouchers), the impact of the epidemic on tourism workers, the changes in tourists' travel habits (travellers' expectations, changes in preferences for destinations, tourists' consumption) and, consequently, the need to change tourism companies' advertising and promotional activities at the national and local levels, and, last but not least, opportunities for more sustainable tourism.

REFERENCES

- Abbas, J., Mubeen, R., Iorember, P. T., Raza, S., & Mamirkulova, G. (2021). Exploring the impact of COVID-19 on tourism: Transformational potential and implications for a sustainable recovery of the travel and leisure industry. *Current Research in Behavioral Sciences*, 2, 100033. <https://doi.org/10.1016/j.crbeha.2021.100033>
- American Hotel & Lodging Association. (2020). *Survey of hotels on financial crisis*. Retrieved from <https://www.ahla.com/>
- Arbulú, I., Razumova, M., Rey-Maqueira, J., & Sastre, F. (2021). Can domestic tourism relieve the COVID-19 tourist industry crisis? The case of Spain. *Journal of Destination Marketing & Management*, 20, 100568. <https://doi.org/10.1016/j.jdmm.2021.100568>
- Assaf, A., & Scuderi, R. (2020). COVID-19 and the recovery of the tourism industry. *Tourism Economics*, 26(5), 731–733. <https://doi.org/10.1177/1354816620933712>
- Baum, T., Mooney, S., Robinson, R., & Solnet, D. (2020). COVID-19's impact on the hospitality workforce – new crisis or amplification of the norm? *International Journal of Contemporary Hospitality Management*, 32(9), 2813–2829. <https://doi.org/10.1108/IJCHM-04-2020-0314>
- Breier, M., Kallmuenzer, A., Clauss, T., Gast, J., Kraus, S., & Tiberius, V. (2021). The role of business model innovation in the hospitality industry during the COVID-19 crisis. *International Journal of Hospitality Management*, 92, 102723. <https://doi.org/10.1016/j.ijhm.2020.102723>
- Collins-Kreiner, N., & Ram, Y. (2021). National tourism strategies during the Covid-19 pandemic. *Annals of tourism research*, 89, 103076. doi: 10.1016/j.annals.2020.103076
- Crespí-Cladera, R., Martín-Oliver, A., & Pascual-Fuster, B. (2021). Financial distress in the hospitality industry during the Covid-19 disaster. *Tourism Management*, 85, 104301. <https://doi.org/10.1016/j.tourman.2021.104301>
- Demirović Bajrami, D., Terzić, A., Petrović, M., Radovanović, M., Tretiakova, T., & Hadoud, A. (2021). Will we have the same employees in hospitality after all? The impact of COVID-19 on employees' work attitudes and turnover intentions. *International Journal of Hospitality Management*, 94, 102754. <https://doi.org/10.1016/j.ijhm.2020.102754>
- Eurostat. (2021). *Tourism statistics - nights spent at tourist accommodation establishments*. Retrieved from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Tourism_statistics_-_nights_spent_at_tourist_accommodation_establishments
- Garrido-Moreno, A., García-Morales, V. J., & Martín-Rojas, R. (2021). Going beyond the curve: Strategic measures to recover hotel activity in times of COVID-19. *International Journal of Hospitality Management*, 96, 102928. <https://doi.org/10.1016/j.ijhm.2021.102928>
- Giousmpasoglou, C., Marinakou, E., & Zopiatis, A. (2021). Hospitality managers in turbulent times: the COVID-19 crisis. *International Journal of Contemporary Hospitality Management*, 33(4), 1297–1318. <https://doi.org/10.1108/IJCHM-07-2020-0741>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20. <https://doi.org/10.1080/09669582.2020.1758708>

- Government of the Republic of Slovenia. (2021). *Tackling the effects of the epidemic*. Retrieved from <https://www.gov.si/teme/koronavirus-sars-cov-2/odpravljanje-posledic-epidemije/>
- GVIN. (2021). *Financial data*. Retrieved from: <https://www.dnb.com/sl-si/produkti/bisnode-gvin/>
- Huang, A., De la Mora Velasco, E., Marsh, J., & Workman, H. (2021). COVID-19 and the future of work in the hospitality industry. *International Journal of Hospitality Management*, 97, 102986. <https://doi.org/10.1016/j.ijhm.2021.102986>
- Ivankovič, G. (2005). The need for international comparability in the hotel industry requires the use of uniform financial reporting. *Organizacija*, 38(5), 246–252.
- Jones, P., & Comfort, D. (2020). The COVID-19 crisis and sustainability in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 32(10), 3037–3050. <https://doi.org/10.1108/IJCHM-04-2020-0357>
- Ntounis, N., Parker, C., Skinner, H., Steadman, C., & Warnaby, G. (2021). Tourism and Hospitality industry resilience during the Covid-19 pandemic: Evidence from England. *Current Issues in Tourism*, 25, 46–59. <https://doi.org/10.1080/13683500.2021.1883556>
- Romagosa, F. (2020). The COVID-19 crisis: Opportunities for sustainable and proximity tourism. *Tourism Geographies*, 22(3), 690–694. <https://doi.org/10.1080/14616688.2020.1763447>
- Sanabria-Díaz, J., Aguiar-Quintana, T., & Araujo-Cabrera, Y. (2021). Public strategies to rescue the hospitality industry following the impact of COVID-19: A case study of the European Union. *International journal of hospitality management*, 97, 102988. <https://doi.org/10.1016/j.ijhm.2021.102988>
- Škare, M., Soriano, D., & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and tourism industry. *Technological Forecasting and Social Change*, 163, 120469. <https://doi.org/10.1016/j.techfore.2020.120469>
- SORS - Statistical Office of the Slovenian Republic. (2021). Retrieved from <https://www.stat.si/StatWeb/en>
- STO - Slovenian Tourism Board. (2021b). *Tourism in numbers*. Retrieved from <https://www.slovenia.info/sl/poslovne-strani/raziskave-in-analize/turizem-v-stevilkah>
- STO - Slovenian Tourist Board. (2021a). *Tourism in numbers*. Retrieved from https://www.slovenia.info/uploads/dokumenti/tvs/2020/2021_03_STO_TVS_2020_SLO.pdf
- Stubelj, I., & Jerman, M. (2019). Empirical analysis of Slovenian hotel industry performance with the relative residual income approach. In V. Bevanda, & S. Štetić (Eds.), *4th International Thematic Monograph, Modern Management Tools and Economy of Tourism Sector in Present Era* (pp. 397–412). Association of Economists and Managers of the Balkans. <https://doi.org/10.31410/tmt.2019>
- Šulc, I., & Fuerst-Bjeliš, B. (2021). Changes of tourism trajectories in (post)covidian world: Croatian perspectives. *Research in Globalization*, 3, 100052. <https://doi.org/10.1016/j.resglo.2021.100052>
- Uğur, N., & Akbıyık, A. (2020). Impacts of COVID-19 on global tourism industry: A cross-regional comparison. *Tourism Management Perspectives*, 36, 100744. <https://doi.org/10.1016/j.tmp.2020.100744>
- UNWTO - World Tourism Organisation. (2021a). *The Economic Contribution of Tourism and the Impact of Covid-19*. Retrieved from <https://www.e-unwto.org/doi/epdf/10.18111/9789284423200>
- UNWTO - World Tourism Organization. (2021b). *Understanding domestic tourism and seizing its opportunities*. Retrieved from <https://www.e-unwto.org/doi/pdf/10.18111/9789284422111>
- WTTC - World Travel & Tourism Council. (2021a). *Travel & tourism: economic impact 2021*. Retrieved from <https://wttc.org/Portals/0/Documents/EIR/EIR2021%20Global%20Infographic.pdf?ver=2021-04-06-170951-897>

- WTTC - World Travel & Tourism Council. (2021b). *Staff shortages*. Retrieved from <https://wttc.org/Portals/0/Documents/Reports/2021/WTTC-Staff-Shortages.pdf>
- WTTC - World Travel & Tourism Council. (2021c). *Economic impact report - Slovenia*. Retrieved from <https://wttc.org/Research/Economic-Impact>
- WTTC - World Travel & Tourism Council. (2021d). *Economic impact report - Europe*. Retrieved from <https://wttc.org/Research/Economic-Impact>
- Zhang, H., Song, H., Wen, L., & Liu, C. (2021). Forecasting tourism recovery amid COVID-19. *Annals of Tourism Research*, 87, 103149. <https://doi.org/10.1016/j.annals.2021.103149>
- Zopiatis, A., Pericleous, K., & Theofanous, Y. (2021). COVID-19 and hospitality and tourism research: An integrative review. *Journal of Hospitality and Tourism Management*, 48, 275–279. <https://doi.org/10.1016/j.jhtm.2021.07.002>



Tourism Infrastructure in the Function of Sustainable Tourism Development: The Case Study of the City of Kruševac, Republic of Serbia

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Abstract: *The sights of the City of Kruševac are numerous and they enable the realization of various aspects of tourism: cultural-historical, religious, sport, mountainous, spa, rural, and event tourism. This paper contains an analysis of the existing and planned tourism infrastructure, as well as the potential and limitations it is facing on the territory of the City of Kruševac. The subject of the research is tourism destinations in the vicinity of Kruševac – Jastrebac mountain and Ribarska Banja spa, as well as the most important sites in the tourism offer of the City of Kruševac. Tourism offer has significantly been improved by the investment into the development of secondary tourism centers – Jastrebac and Ribarska Banja. For quite a short period Jastrebac has become a favorite tourism destination of the citizens of Kruševac and the tourists from other settlements of Serbia and the neighboring countries. For its health-care purposes, Ribarska Banja has long been popular among the older population, and recently among younger generations as well, thanks to recreational tourism and natural beauties.*

1. INTRODUCTION

Sustainable development is one of the most present concepts in science, media and society today, and yet it often remains unknown how to apply sustainability in reality. It is necessary for all spheres of human activity, and thus in the tourism industry (Sunara et al., 2013). It implies economic and social growth harmonized with the ecosystems in which it takes place, so as such it is sustainable in the long run (Črnjar, 2002). It involves the management of resources in order to meet economic, social and environmental needs, and preserve cultural, ecological and biological diversity (Kušen, 2002). The basic principles of sustainable tourism are summarized in the conceptual definition of UNWTO and UNEP (2005), which emphasizes that it is

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“tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry the environment and host communities“ (UNEP, 2005).

Sustainable tourism planning must reflect local specificities in order to avoid generalization and inappropriate development. Community profiling helps tourism planners to integrate tourism development into the socio-economic and environmental environment of the community (Liburd & Edwards, 2010). The object, goal and methodological framework of this research are defined in that manner.

With its uniqueness and important natural, cultural, and historic values, the City of Kruševac represents an important tourist potential of the Rasina District, as well as of the wider area, whose significance will grow with the connection with the potential of the regional and national level. Kruševac is situated in the central part of Serbia, at the crossroads of communications that run across and connect the Balkans. It is located in the valley of two rivers: the Rasina and the Zapadna Morava (Veljković, Jovanović & Tošić 1995; Punišić, 2007). Around Kruševac, there are natural reserves and places for relaxation and recreation, as well as the nearby spa health resorts. In the wider surroundings of the city, there is the most wooded mountain of the Balkans, Jastrebac, with its lake and the excursion site at 650 m a.s.l., where the conditions are optimal for the preparations of athletes and the landscapes are attractive for nature lovers, mountaineers, scouts, cyclists, hunters, and hikers.

Around thirty kilometers away from the city, there is one of the oldest spas in the southeastern Balkans – Ribarska Banja. On the northern slopes of Jastrebac, at 540 m a.s.l., with six thermal-mineral springs in the forest, it has the characteristics of a climate health resort. When the “City below Bagdala”⁸ is mentioned, it is clear that we refer to Kruševac, with its most beautiful architectural structure from the beginning of the 20th century, “Mosaic Hall” in the building of the City Hall, a unique decorative entirety dedicated to Morava Serbia, the work by the artist Mladen Srbinović. Kruševac is surrounded by the monasteries Naupara, Saint Roman, Intercession of the Theotokos, Ljubostinja, Drenča, churches and holy places in the Mojsinje mountains, known as “Small Athos”, which are the unique example of the medieval sacral architectures and traditions of this part of Serbia. Kruševac is an urban center of various tourist values and potential for the development and attraction of tourists (Savić, 1969).

The research aims to analyze the current state and development of the tourist economy of the City of Kruševac, with a focus on existing and planned tourist infrastructure, as well as the potentials and limitations of its development, in order to review and supplement the existing tourism development guidelines.

2. METHODOLOGY

According to the object and aim of the research, the methodological procedure consists of the following steps:

- Analysis of natural and socio-economic characteristics of the City of Kruševac, in order to form a broader context in which the tourism economy is developing. Secondary data sources were used in this phase (existing literature; the latest data from the Statistical Office of the Republic of Serbia (2011 and 2018); Spatial Plan of the City of Kruševac (2011)).

⁸ “Bagdala” – in the free translation from Turkish, means “divine view”.

- Analysis of the current state of the tourist infrastructure capacity and attractiveness, i.e. tourist arrivals to the City of Kruševac, in order to perceive the current processes and trends. In addition to the existing literature and official internet presentations, the Tourism development program of the City of Kruševac 2017–2030 was consulted, and various publications of the Statistical Office of the Republic of Serbia (Tourism turnover, June 2019; Municipalities and regions in the Republic of Serbia in 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018) were used as the sources of quantitative data.
- Perception of the planned tourist infrastructure of the City of Kruševac was performed as a basic precondition for the final step of the research, i.e. identification of priority projects and their connection to previously systematized development goals. This part of the research relies both on primary (collected by conducted field and survey research) and secondary data sources (Tourism development program of the City of Kruševac 2019-2024; Sustainable Urban Mobility Plan of the City of Kruševac 2017-2030; Spatial plan of the City of Kruševac).

Support in all phases of the research and cartographic attachment preparation is provided by contemporary GIS software capabilities (QGIS 3.16.11 software).

3. CASE STUDY AREA

The City of Kruševac is located in the central part of the Republic of Serbia and it covers the most southern part of Peripannonian Serbia (Figure 1), within the boundaries between 43°22'21" and 43°42'17" of northern latitude and between 21°9' and 21°34'8" of eastern longitude and covers the part of the Rasina River basin, the lower course of the Zapadna Morava River, between the mountains of Kopaonik, Željina and Jastrebac, and spreads from Šumadija to Southern Serbia ("Official Gazette of the City of Kruševac", No. 4/11). The dominant morphological form is the mountainous ridge of Veliki Jastrebac, with an east-west stretching direction, from which the largest ravine in the valley of the Zapadna Morava River stretches, the Neogene ravine of Kruševac. The low mountainous region is made up of the hills of Jastrebac, Juhor, and the Mojsinje mountains, and the lowland area is in the valleys of the larger water courses (Figure 2) (Punišić, 2007).

Transport infrastructure, as many studies show (Taotao, 2013; Đukićin Vučković et al., 2018; Gajić, Krunić & Protić, 2018; Gajić, Krunić & Protić, 2021) can enhance the overall economic performance of an area by reducing transport costs and increasing accessibility, which would directly lower the cost of input factors, increase private investment and stimulate the development of tourism. In the study area, the relief influenced the development of the road network. Traffic corridors of regional and wider significance intersect on the studied territory. The main road corridor is E-75, which runs through the subregion of Kruševac from the northeast and connects with the national arterial highway M-5 (Pojate–Kruševac–Kraljevo) near Pojate, 25 km from Kruševac, where it connects with the network of European highways. The railway line Stalać–Kraljevo–Požega is connected with the railway line Belgrade–Niš–Stalać from the northeast, and with the railway line Stalać–Kruševac–Kraljevo–Užice–Bar port from the west (Figure 7) ("Official Gazette of the City of Kruševac", No. 4/11).

3.1. Natural characteristics

The geological structure has greatly influenced the creation of lowland, mountainous, and high-mountain regions. The lowest point is at 140 m, at the confluence of the Rasina into the Zapadna Morava, and the highest one is at 1,492 m, Velika Đulica mountain peak on

Jastrebac, so the height difference is 1,352 m. The territory of Kruševac is mainly in the ravine and it has a significant level of continentality, so it is characterized by a moderate continental climate with the specific elements of microclimate (“župa”). The average annual air temperature is 10.8 °C, and the annual precipitation is 647.5 mm. Hydro-geographic network is developed and it is formed by the basins of the rivers Zapadna Morava, Rasina and Ribarska Reka, where the dominant one is the Rasina river. The territory of the City also includes the springs of mineral, thermal-mineral, and thermal waters, with the possibility for their usage. The most important is Ribarska Banja with the following springs: Trebotin, Buci, Majdevo, Sezemča, Slatina, Lomnica, Mrmoš, Dvorane, Čitluk, and Bela Voda. The hilly terrains of Jastrebac and the mountains of Gledić enable the existence of a variety of habitats in terms of orography and climate, as well as the presence of various plant communities, especially forest ones, with various fauna, which represent the basis for the development of tourism and hunting. The observed territory includes forests and wood-covered land of 27,349.50 ha, where the mountain of Jastrebac is one of the most wooded mountains in the Balkans (Ilić, 1971; Stošić, 1999).

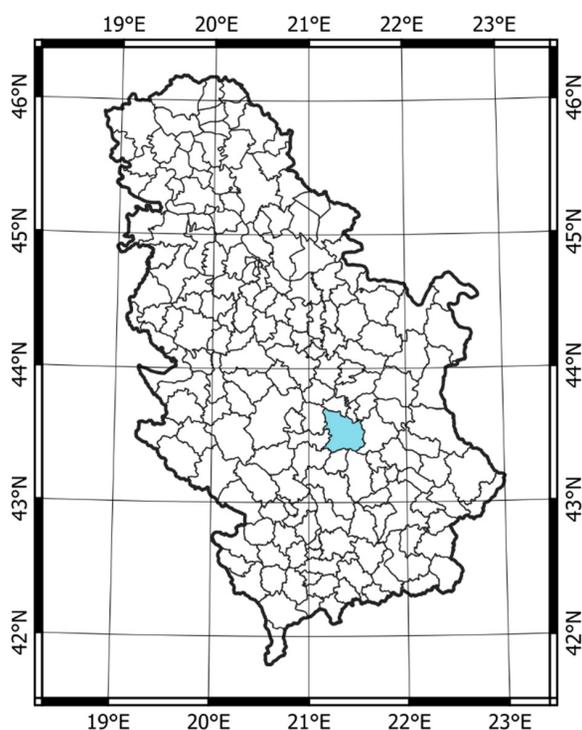


Figure 1. Geographical position of the City of Kruševac within the national territory

Source: elaboration of the authors

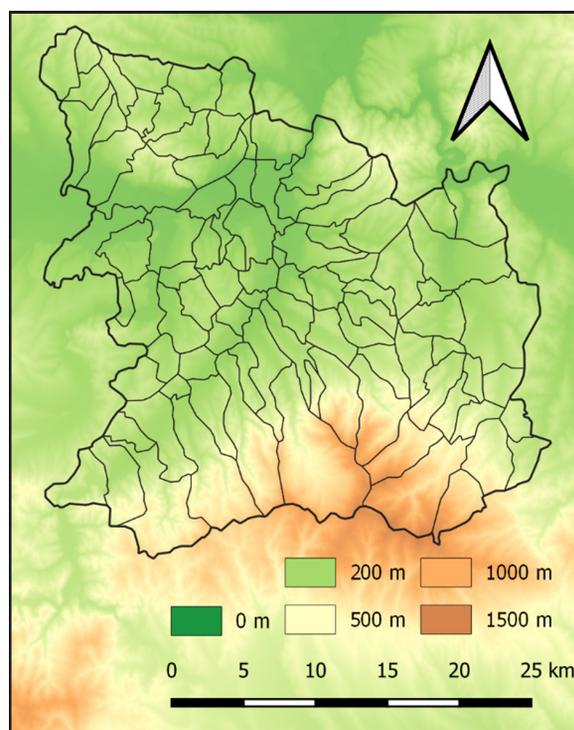


Figure 2. Spatial extent of the examined territory

Source: elaboration of the authors

3.2. Demographic characteristics

On the studied territory, with an area of 854 km², in 101 settlements (settlements borders on Figure 2), 121,293 inhabitants lived in 2018 according to the relevant statistical data (Statistical Office of the Republic of Serbia, 2013). The analysis of the trend of changes in the number of the inhabitants in the urban area, of the city of Kruševac and 11 suburban and rural settlements shows that the urban area records an increase in the number of inhabitants (Statistical Office of the Republic of Serbia, 2011 and 2018).

3.3. Economic characteristics

The most important economic branches are chemical, metalwork, food, woodwork, and textile industries, and civil engineering. Kruševac has a long experience and tradition in agricultural production and development of animal husbandry, cereal farming, vegetable farming, fruit farming, fruit and vine planting material of grapevine and the plants of roses, flowers, and decorative plants, which represents a good basis for development (Stošić, 1999). About a half of the population lives in a village, so the development of villages and agricultural production is important for opening new jobs and the staying of young people in the village.

The surroundings of Kruševac are comprised of the Kruševac wine region, the largest of the nine wine regions on the territory of the “Three Moravas” (“Tri Morave”). Viticulture is the main activity for 2,528 family-run farms, on a total territory of 1,900.66 ha (Ivanišević et al., 2015). Commercial wineries are mainly concentrated in the surroundings of Kruševac itself (Jovanović-Tončev, Jovanović, Malićanin & Dimitrijević, 2016). The same authors point out that the “Three Moravas” sub-region has significant natural and anthropological resources for the development of wine tourism.

3.4. Natural and cultural values

The natural beauty of the mountains, the existence of infrastructure and natural resources, the localities for the development of tourism, and cultural-historical structures, are the basis for the development of various types of tourism. In the observed territory, there is a medium-high mountain of Jastrebac and Ribarska Banja with proven healing characteristics and certain tourism potentials (Consulting tourism development, 2019). The City of Kruševac represents a destination with great potentials for the visit and stay of tourists. The mountain of Jastrebac, as the most wooded and watered mountain in the Balkans with the preserved nature, Ribarska Banja and Čelije Lake (a landscape with outstanding features) are the natural resources attractive to tourists. Jastrebac is not rich in snow cover, and there are no terraces where recreation activities could be done throughout the year, but it is densely wooded, covered with beech woods with the groups of other broadleaf and needleleaf woods, which makes it attractive for trips and excursions.

On the territory of the City of Kruševac, there are 13 springs of thermal-mineral water, where the dominating one is Ribarska Banja with its 6 springs of mineral water with a temperature of 38–42 °C, which is also a climate health center with developed spa tourism thanks to its dense forests and clean air. The locations of other important mineral springs could be valorized as tourism spots with great potential: Lomnica (Kisela voda), Bela Voda, Veliki Kupci, and Žabare. The Office for the Protection of Nature has made the Study for the Protection of the Landscapes with Outstanding Features of “Čelije” reservoir. The named natural resources contribute to establishing the balance in ecosystems, the attractiveness of the regions, the improvement of the quality of life, with the respect to conventions and strategies of a wider spatial entirety, and the implementation of principles, measures, and requirements for the protection of the nature.

The area of the City of Kruševac is characterized by various cultural-historical heritage. The categorized immovable cultural properties are the following: The Church of Sveti Stefan – Lazarica, Greek šor with Beg’s house, Simića kuća (House of the Simić Family), the Hall of the District Government, Memorial complex “Slobodište”, the building of the Art Gallery, and Kosovo Heroes Monument. Ethnographic and ethno-architectural sites are the Naupara

monastery, Monument and complex of Bela Voda. The cultural properties include the following monasteries: Naupara, Sveti Roman, Intercession of the Theotokos, Ljubostinja, Drenča, etc. The building heritage of Kruševac can be grouped according to chronology, typology, and monument values, as well as according to the cultural state of some of today's facilities and buildings ("Official Gazette of the City of Kruševac", No. 4/11).

Terzić, Bjeljic & Lović (2010) point out that events are a very important segment of the tourist offer of Kruševac. A large number of events of tourist character (very different in content, scope and range) are held in Kruševac. Very few tourist events in Kruševac can be considered as the main motive of tourists' arrivals, which are primarily cultural and sports events, trade shows, and professional and scientific events, as well as several major festivals, including the most important St. Vitus' Celebrations and Golden Helmet, the International Festival of Humor and Satire. It is important to mention the Wine Day, as a festival of Serbian wines of relatively recent date, which started in 2008 and is traditionally held in Kruševac every year on the eve of St. Vitus Day and brings together the best Serbian winemakers (Jovanović-Tončev et al., 2016).

3.5. Land use and technical infrastructure

The use of land is conditioned by the natural characteristics of the region: lowland and hilly zones, moderate climate, and pedological features of the land. This is a region of crops culture farming, growing vegetables, and viticulture in plains and hilly-mountainous regions, and the region of forests and pastures in the mountainous part ("Official Gazette of the City of Kruševac", No. 4/11).

The area of the City of Kruševac is mainly covered with road-traffic communications and all the settlements are connected by the network of 68 municipal roads, which are spatially divided into the regions of Zapadna Morava, Župa, Rasina, Veliki Šiljegovac, and Jastrebac. The Railway network comprises Stalać–Požega and Stalać–Niš railways. The existing sports airport on the territory of the greater city center is in the phase of moving to a new location – Rosulje.

All the settlements (101) are connected to a unique system for electric energy supply. Telecommunication infrastructure, network group MG-o37, is organized via commutation operational centers, multi-service accessing hubs, and wireless access to landline and mobile phone networks and telecommunication services.

Water supply infrastructure has been improved by the construction of "Ćelije" reservoir on the Rasina river, which established a reliable supply of water for the territory of the city itself, the peri-urban zone, and the rural settlements around the city. The development and urbanization of Kruševac has also been accompanied by the development of the utility infrastructure.

3.6. Potentials and limitations

The territory of the City of Kruševac represents a complex structure of natural (morphological, hydrographic, hydro-geological, pedological, climatic, floristic, landscape, etc.) characteristics and anthropogenic impacts in the built urban and rural areas and zones, infrastructural zones and borders, as well as the agricultural, forest, and water bodies, and the zones of erosive processes of different level and intensity.

Tourist attractiveness of the City of Kruševac is enabled by the convenient geographic position, favorable climatic conditions, agro-pedological characteristics, tradition in agriculture, agricultural products processing, the mountain of Jastrebac as an area with outstanding landscape features and important natural values, game habitats, and good conditions for hunting tourism and the richness in forest fruits, Čelije reservoir, with its main role as a defense against flood, holding deposits, supplying the settlements with water, irrigation, as well as its tourism purpose – it is well-known for “Pista” (‘runway’), a partly-arranged beach and a favorite spot of fishing-lovers, the springs of mineral and geo-thermal waters (Ribarska Banja, Bela Voda, Lomnica, Žabare, Čitluk), natural motifs, protected natural and cultural properties, rural settlements, and ethno-complexes.

During the analysis, the following limitations were noticed: insufficiently explored springs of thermal-mineral waters, unregulated watercourses, floods, ecological awareness at a low level, and unsolved treatment of wastewaters, underground waters not explored, illegal construction, legalization of the structures in the zones of the sanitary protection of the springs and the zones planned for water-supply facilities, bad technical-exploitation condition of the road network, delays in the relocation of the sport airport to the new location – Rosulje, insufficient use of funds, depopulation and aging of the population in all the settlements and rural areas, lack of tourist accommodation capacities with high-quality services in the rural areas, etc.

4. TOURISM INFRASTRUCTURE OF THE CITY OF KRUŠEVAC

The development of tourist offers is concentrated in spatial-functional areas of mountainous, water, transit, city, and spa tourism, which also comprises cultural, hunting, rural, and other types of tourism. The preserved natural ambience of spatial units, forests, hilly-mountainous relief, valley climate, numerous archeological and cultural-historical monuments, as well as the thermal-mineral springs, point to the possibility for the development of eco-ethno tourism, and the accompanying economic branches. Within the organization of the tourism offer, it is necessary to present the tourist activities and amenities, via thematic sightseeing tours and visits to attractive locations. The priority in the tourism industry is the development of spa and health-care center of Ribarska Banja and Jastrebac mountain, which is also confirmed by making the Suggestion for Defining the Area of Banja (Official Gazette of Republic of Serbia, No. 100/20). In this study, it has been highlighted that the advantages in terms of the basic climatic features, i.e. air temperature, insolation, precipitation, humidity, and air flow represent the key factors for the further development of health-recreational tourism in Ribarska Banja.

Tourism values and tourism offered on the territory of the City of Kruševac are enabled by the natural and cultural values, both on the territory of the city and in its surroundings. The most significant natural values are Bagdala Park and Pioneer Park, and the natural-cultural property - “Slobodište” Memorial Park, and Jastrebac mountain, Ribarska Banja, and Bela Voda situated in its vicinity.

Bagdala Park, a hill above the city, the synonym of Kruševac, represents a green ambience with the space arranged for hiking, recreation, and sports. Bagdala, in the free translation from the Turkish language, means “divine view”, so it is also a kind of a unique lookout. Bagdala offers a modern hospitality facility, children’s playground, a church dedicated to St John the Baptist, and “Miniature Park”.

Jastrebac is the highest mountain, 20 km away from Kruševac, which is reached through the villages of Golovode, Lomnica, and Buci. A spacious plateau with an artificial lake lies at about 650 m a.s.l., and the highest peaks “Đulica” (1,941 m a.s.l.) and “Pogled” (1,481 m a.s.l.) create the natural border between Toplica and Pomoravlje districts. Jastrebac has favorable climatic conditions, insolation throughout the whole year, fresh air currents, and an unspoiled environment, and thanks to its mild climate and diversity of flora and fauna, it offers extraordinary possibilities for relaxation and mountaineering. The landscapes of the most wooded mountain in this part of the Balkans are attractive for nature-lovers – mountaineers, scouts, mountain bikers, etc. The mountain of unique habitats of white birches offers valuable forest fruits and medicinal herbs, so it is also attractive for forest-fruit collectors. On the other hand, Punišić (2007) points out that it is necessary to pay special attention to the further tourist activation of Jastrebac, taking into consideration the negative demographic trends that characterize it, as well as the fact that there is a certain number of people in this area who need to have more stable sources of income.

Ribarska Banja is one of the oldest spas on the territory of the southeastern Balkans. It belongs to the six first Serbian spas renovated back in 1833, and the warm and healing waters of Ribarska Banja have been used since ancient times. In its location, in Roman times there was a fortress of Roman colonists. The first chemical analysis of the water of the Ribarska river was done in 1834, at the time of Prince Miloš, in the laboratory of the Faculty of Medicine in Vienna. Within the spa center, there is Special Hospital for Orthopedic, Osteoarticular, and Degenerative Diseases (Belij, 2007).

In the close vicinity of Kruševac, on the way to Ribarska Banja, ethno-village Srndalje is situated. **Ethno-village Srndalje** and watermill-restaurant Srndalje are situated 2 km from Ribarska Banja. The village is characterized by beautiful and pure nature, a clear river rich with trout. All the households produce food for the visitors of Ribarska Banja and their village. Besides the watermill restaurant which is run by Ribarska Banja, there are also smaller restaurants in the village where organic products are served. During the summer months, tourists on the relation Ribarska Banja – Srndalje are driven by a tourist train “Trucko”. Also, the destinations are connected with the hiking trail which goes through the untouched nature⁹.

The village of Bela Voda (English: *White water*) is situated between the slopes of the Gledić Mountains and the Zapadna Morava river, 14 km far from Kruševac. The village got its name after the spring which sprang up from the underground in white bubbling jets in the area of today’s Sculpture Park. Bela Voda is famous for its sandstone of Bela Voda – the stone that has been exploited for six centuries, and the springs of mineral waters. Thanks to the numerous quarries rich in good stone, Bela Voda has been the capital of sculpture art and craft in Morava’s Serbia for centuries. There was an industrial railway to the quarries of Bela Voda built in 1954.

Lazarev Grad archeological park – presents the remains of a medieval town, built by Duke Lazar in 1371, as his capital and fortress (Đidić, 2008). It was built in the typical Serbian-Byzantium style and had the basic functional and strategic value rather than the aesthetic value. On the other hand, “Lazarica” church has an immense artistic value, so it is regarded as a cultural heritage of exceptional importance (Ristić, 2001). There are numerous historical facts about this site, as well as many legends and epic poems. The stories are usually considered as very interesting for the visitors (Stanojlović et al., 2010). Significant knowledge about the appearance of Medieval Kruševac and a more detailed view of the life in it was provided by the archeological

⁹ Ribarska Banja - ethno-village Srndalje more info on <https://www.ribarskabanja.net/info/etno-selo-srndalje>

research of the complex carried out between 1961 and 1971 (Stošić, 1999). The complex “Lazar’s town” is a significant cultural-historical site, well renowned, not only in the local area but also on the national level (Stanojlović et al., 2010). In the previous period, the medieval structures which were well-known were Lazarica church, the remains of the central tower with a part of the protection wall toward the north and the traces of the walls inside the complex. As one of the few city centers, and an important political and economic center of Morava’s Serbia, Kruševac had a great contribution to the development of culture and art in Serbia, since the building of the parts of the city with clearly defined urban concepts started in the 14th century. Such a type of city represents the Medieval Kruševac, which will become a pattern for the further construction of fortified cities in Morava’s Serbia, thanks to its defense solutions and how military and civil functions were united.

Kosovo Heroes Monument – represents a symbol of Kruševac and the most monumental work of the national sculpture from the beginning of the 20th century, designed in the spirit of French academism. It is a work by the Serbian sculptor Đorđe Jovanović, and in 1900 he was awarded the Gold Medal of 1st Degree at the World Exhibition in Paris, where the elements of the monument were created and exhibited.

4.1. Accommodation capacities

In the studied area, around 14,000 m² of hospitality – accommodation space in a large number of facilities have been built, with 650 beds, excluding private accommodation and the accommodation in the Special Hospital in Ribarska Banja. The accommodation capacities are located on the territory of the city of Kruševac, on Jastrebac mountain, and in Ribarska Banja – Special Hospital Ribarska Banja (Table 1). The Special Hospital Ribarska Banja has 510 beds and accommodation in 9 residential facilities, built at the end of the 19th century and the beginning of the 20th century. On the foundations of the old Turkish bath from the 17th century, a modern spa center has been built (<https://www.ribarskabanja.rs/index.php/kapaciteti/smestaj>).

Table 1. Accommodation capacities in the City of Kruševac

Destination	Number of rooms	Number of beds
The Rubin Hotel	113	211
The Novi Palas Hotel	18	44
The Golf Hotel	44	90
The Dabi Hotel	48	88
Villa Biser Lodging	15	42
Konak Lodging	10	28
The Trajal Hotel (Jastrebac)	17	35
Mountain Lodge (Jastrebac)	-	55
Villa Idila (Jastrebac)	19	55
Private accommodation	-	366
Ribarska Banja	-	510
The “Pane Đukić Limar” Hotel	29	
“City” Hotel Garni	11	30
“Nicolo& Spa” Hotel Garni	20	26
“Verige” restaurant – lodging	-	-
“Barbiko EX” Lodging	12	-
“Saradis” restaurant and lodging	-	44+10
“Lukas” rooms for rent	10	30
“Stanković Jelica” rooms for rent	7	20

Rural tourist household of Slavoljub Milićević	6	6
Villa Zorica	8	14
“Mali raj” villa	2	4
“Pastrmka” ethno-restaurant	1	4
Zeleni dvor	15	30
“Di Lusso” villa	25	60
“Janus” villa	21	52
“Marija” villa	8	24
“Žarko Žarić” Mountain Lodge		60

Source: Tourism development program of the City of Kruševac 2017–2030.

Table 2. Overview of the number of tourists’ check-ins in 2019 by June 30, 2019.

Check-ins											
Total				Domestic				Foreign			
June 2019	Jan–Jun 2019	indices		June 2019	Jan–Jun 2019	indices		June 2019	Jan–Jun 2019	indices	
		June 2019/2018	Jan–Jun 2019/2018			June 2019/2018	Jan–Jun 2019/2018			June 2019/2018	Jan–Jun 2019/2018
Kruševac											
3,363	11,753	124.1	102.6	2,860	9,497	128.1	106.6	503	2,256	105.5	88.7
Ribarska Banja											
1,333	3,801	92.1	96.7	1,302	3,635	91.8	96.6	31	166	106.9	99.4

Source: Tourism turnover, June 2019, Statistical Office of the Republic of Serbia

From the table (Table 2), it can be seen that the total number of tourists in Kruševac in the period between January and June 2019 increased by 102.6% in comparison with the same period in 2018. An increase of 96.7% was also recorded in Ribarska Banja. In Kruševac, in the first half of 2019, the number of nights increased by 104.3% and in Ribarska Banja by 98.7%, compared to the first half of 2018.

A comparative overview of the number of tourists’ visits and the number of nights in the period between 2010 and 2017 shows a significant rise in the number of nights when compared with the number of visits, which points to the fact that visitors stay on the territory of the city for several days (Table 3).

Table 3. Comparative overview of the number of tourists’ check-ins and the number of nights in the period 2010–2017.

	Tourists			Tourists’ nights			Average number of tourists’ nights	
	total	domestic	foreign	total	domestic	foreign	domestic	foreign
2017	25,443	19,216	6,227	96,465	82,601	13,864	4.3	2.2
2016	20,919	15,731	5,188	84,394	73,407	10,987	4.7	2.1
2015	21,828	15,244	6,584	82,127	69,128	12,999	4.5	2.0
2014	21,962	14,560	7,402	85,699	70,202	15,497	4.8	2.1
2013	26,199	17,387	8,812	93,137	75,539	17,598	4.3	2.0
2012	27,295	19,037	8,258	100,657	85,551	15,106	4.5	1.8
2011	27,618	20,772	6,846	174,908	163,142	11,766	7.9	1.7
2010	27,663	22,641	5,022	190,327	179,062	11,265	7.9	2.2

Source: Municipalities and regions in the Republic of Serbia in 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018, Statistical Office of the Republic of Serbia.

4.2. Tourist points

In the Tourist Information Center of the Tourist Organization of the City of Kruševac, tourists get information about the tourist offer of Kruševac and its surroundings. Next to it, there is an interactive TOT board that enables tourists to access information about the city and its surroundings, in the Serbian and the English language. On the 23 locations in the city and along the main roads, information direction boards are put up, as well as 300 hiking and tourism signs, where 35 cultural-historical sites of the city and its surroundings are presented (City of Kruševac, 2018).

4.3. Facilities and zones for sports and recreation purposes

On the territory of the city of Kruševac, there are sports facilities that meet the standards for the organization of top-level sports competitions. “Sports Center Kruševac” has the following outdoor and indoor facilities:

- Indoor facilities: sports hall, sports rooms, a complex of indoor swimming pools, gyms, bowling alleys, and rooms for table tennis.
- Outdoor facilities: city stadium and athletics and football block, a complex of outdoor swimming pools, running track, tennis courts, courts for mini sports, skate-park, beach volleyball court.

Near the “Sports Center” there is an excursion site Bagdala which has courts for mini sports, an outdoor gym, and a jogging track. Private sports facilities are also available for athletes and those who do recreational activities. The abovementioned sports infrastructure in the city of Kruševac meets the national and international criteria for the preparation of athletes and sports teams. In the village of Globare there is “*Gajić*” *moto-race track*, equipped according to world standards with a length of over 1,700 m, so Kruševac was the host of the European Championship in moto-cross in 2016.

Within *Jastrebac Lake Resort* there is Adventure Park, the most naturally fitted into the environment in this part of the Balkans, which is made up of four parts: a children’s adventure park; a zip-line over the lake; the rock for the training of the mountaineers and alpine climbers and the international competitions in free climbing; and two-level adventure tracks for passionate “adventurers”.

Sports – recreational center with an equestrian club in Lomnica near Kruševac was founded in 2000 and it gathers all the lovers of sport and recreational horse riding. The center has grass and sand courts and a stable with about 20 horses.

The recently opened *sports – recreational center “Samar”* in Ribarska Banja contains mini waterpark, surrounded by century-old forests and offers refreshment and adrenaline fun. The amenities of the Center are three swimming pools with slides, beach volleyball, tennis courts and courts for mini sports, and the possibility of bicycle renting (<https://www.jastrebaclakeresort.com/avantura-park>).

4.4. Tourist hiking and cycling trails

The organization of the 240-minute-long hiking tour organized by the Tourist Organization of Kruševac as a trip titled “Beautiful city of Kruševac” (“Lepa varoš Kruševac”) enables the visitors to get to know the most important cultural sites. The route is the following: starting from

outside the “Rubin” Hotel – “Lazarev grad” archeological park – the Gallery of Milić of Mačva – Mosaic Hall – Kosovo Heroes Monument – the house of the Simić family (“Simića kuća”) – Warriors’ Monument – “Mother Serbia and Mother Greece” Sculpture – “Slobodište” Memorial Park – return to the “Rubin” Hotel. The jogging tracks are within the Sports Center and the parks: Bagdala, Pioneer Park, and Slobodište.

Although there are morphological conditions, there is no developed cycling infrastructure in the city. Only two cycling paths have been formed, and they are not interconnected, so the primary task is the development of the integrated cycling network in the city by forming the main cycling trail in the north-south direction, as well as the secondary network.

The mountain of Jastrebac has hiking trails to the peaks “Stena” (1,257 m), ”Stracimir” (1,390 m), “Maznica” (1,140 m), “Majorova česma”, as well the trails to the water spring, to the old St Petka church and Gradac medieval fortress (<https://www.jastrebaclakeresort.com/avantura-park>). The system of mountaineering trails of Veliki Jastrebac is formed of the two main trails:

- Trail No. 1 connects Grebenac pass in the east and the village of Ravni in the west, going over the most important peaks of Jastrebac.
- Trail No. 2 connects the historical places of Slatina in the north and Ajdanovac in the south, as well as the peaks Crni Vrh (1,040 m a.s.l.), Bela Stena (1,256 m a.s.l.), and Zmajevac (1,381 m a.s.l.).

The configuration of the terrain of Jastrebac mountain enables the formation of one of the best destinations for mountain cycling in Europe. The favorable conditions that contribute to it are numerous springs that are active throughout the whole year and the fact that cycling takes place in the shades, which makes the activity even more pleasant. According to the difficulty level of the paths, Jastrebac has amenities for mountain cycling because of the existence of short paths, only several km long, which are ideal for familiarizing with mountain cycling, and long paths, which are over 80 km long.

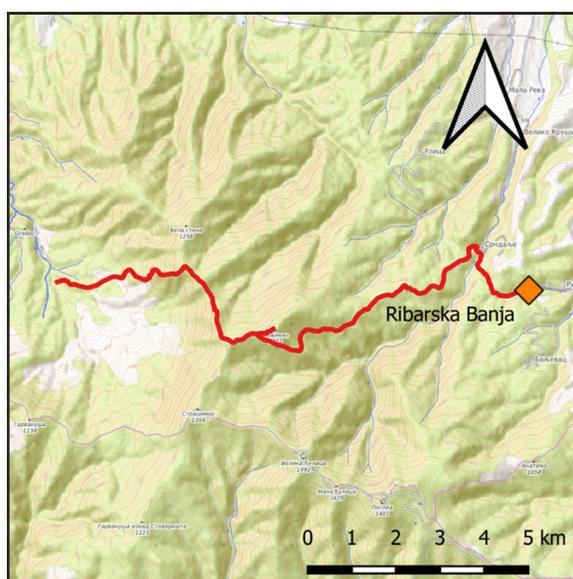


Figure 3. Hiking trail Ribarska Banja – Mountain Lodge (“the first trail”)

Source: Soleks, 2013

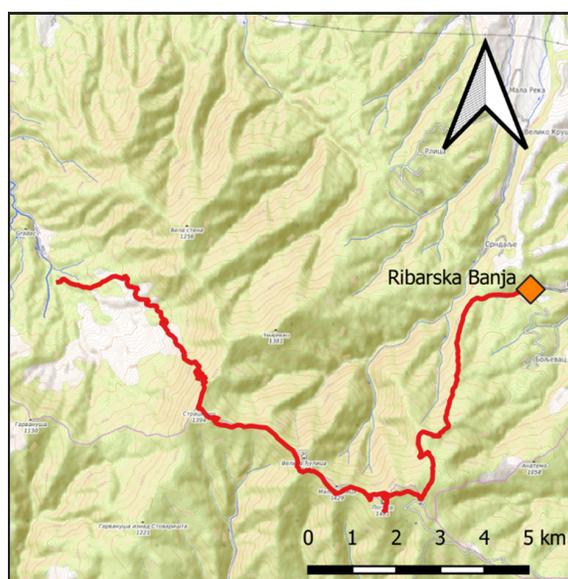


Figure 4. Hiking trail Ribarska Banja – Mountain Lodge (“the second trail”)

Source: Soleks, 2013

Hiking trail *Mountain lodge – Bela Stena* has the following characteristics: trail length – 10 km; total ascent – 818 m; total descent – 804 m; the lowest point – 522 m a.s.l.; the highest point – 1,282 m a.s.l.; fitness difficulty level – 3/10; technical difficulty – 1/10; springs of drinking water – 3 known; average ascent inclination – 17.8%; average descent inclination – 17.7%; maximum ascent inclination – 27.6%; maximum descent inclination – 34%.

Hiking trail *Gornja Jošanica – Ajdanovac – Majorova česma – Mountain Lodge* has the following characteristics: trail length – 20 km; total ascent – 723 m; total descent – 640 m; the lowest point – 460 m a.s.l.; the highest point – 1,167 m a.s.l.; fitness difficulty level – 4/10; technical difficulty – 2/10; springs of drinking water – 4 known; average ascent inclination – 8%; average descent inclination – 8%; maximum ascent inclination – 17%; maximum descent inclination – 21%.

Cycling trail *Jastrebac Circle* has the following characteristics: trail length – 52.5 km; total ascent – 664 m; the lowest point – 184 m a.s.l.; the highest point – 848 m a.s.l.; fitness difficulty level – 5/10; technical difficulty – 2/10; springs of drinking water – 7. Jastrebac is connected with Ribarska Banja by the two main hiking trails (Figures 3 and 4).

5. RESULTS AND DISCUSSION

5.1. The planned tourism infrastructure of the City of Kruševac

Improvement and increase in the number of accommodation capacities, renovation of the existing, decrepit facilities, and investment into rural tourism, are the preconditions for the increase in tourist turnover. The surroundings of Ribarska Banja and Jastrebac mountain have potentials for the development of rural tourism. The building of “Samar” sports center in Ribarska Banja has contributed significantly to the development of this type of tourism. On Jastrebac mountain, the construction of the adventure park and the renovation of the hotels Idila and Trajal have had a great impact on the fulfilment of the tourism offer of the City of Kruševac. Connecting Jastrebac and Ribarska Banja into an integral tourism center will enable the optimal usage of tourism potentials, the development of other types of tourism, and the activation of hiking and cycling trails.

The development of sport-recreational tourism in the city itself will enable an increase in the number of tourists and revenue. The planned sport-recreational center “Rasina”, by the river Rasina, will offer various types of sports and recreational tourism, the walking area, developed swimming area, mini-reservoirs, tennis courts, football pitches, and beach volleyball courts, as well as children’s playground equipment. The construction of the new pedestrian bridge will ensure the safe crossing of the pedestrians over the watercourse, from one side of the city to the other.

The construction of pedestrian and cycling trails will enable the development of these types of tourism which will represent the tourist offer of the City of Kruševac. In the part of the city, in the area of the previous “Airport” (Aerodrom), the construction of “Šarengrad” amusement park is planned, with the amenities meant for sports and recreation. With its position and amenities, the hill of Bagdala above Kruševac is great potential for the development of tourism.

5.2. Accommodation capacities

The development of tourism and planning of the amenities in the tourism zones is reflected in the following: raising the level of hospitality services, planning and equipment of accommodation

capacities and the accompanying tourist capacities and health-care and treatment complexes, activation of tourist-recreational amenities, and rural tourism.

It is possible to construct and expand the existing accommodation capacities in Ribarska Banja, which was initiated by the activation of “Samar” sports center, visited by a large number of tourists.

“Rasina” sports-recreational center, within the city park, includes the formation of a unique sports-recreational complex by introducing sports-recreational amenities and commercial activities for mass usage, recreation, and relaxation of the users. As a parameter for the organization of the purposes and amenities, the maximum number of 26,000 users in a single-use during the summer season is taken. It is also planned to build hospitality and accommodation facilities (motels) for 2,000 users.

“Bagdala” restaurant is situated in a beautiful location, in a forest oasis, on the hill above the city, and it is used for various types of celebrations. At their disposal, the visitors and citizens have sports-recreational amenities in the immediate surroundings of the facility. This location is the venue for the famous event, “Kruševac through the clouds” (Kruševac kroz oblake) hot-air balloon festival. There are possibilities for the expansion of the accommodation capacities and a wide range of services.

5.3. Tourist points

The development point of spa (spa and health center) tourism in Ribarska Banja represents the potential for further development of the tourism industry. According to the research, the mineral water springs are insufficiently used, even though localities such as Lomnica (Kisela voda), Bela Voda, Veliki Kupci, and Žabare, with certain investments, could become significant tourism points (“Official Gazette of the City of Kruševac”, No. 4/11). With the construction of the “Adventure Park” on Jastrebac and the renovation of the hotels Trajal and Idila, the conditions for forming a modern tourist point have been created.

The vicinity of tourist centers, Ribarska Banja and Jastrebac, as was mentioned before, provides the conditions for their connection into a unique functional unit – a multi-functional tourist point. The precondition is the modernization and construction of the traffic and technical infrastructure. The development and investment in rural tourism could be intensified by the creation of tourist points in the villages near Ribarska Banja and Jastrebac. The good examples are ethno-village Srndalje and “Eldorado” ranch in Lomnica, which initiated the expansion of their accommodation and service capacities, and the quality of services by forming the tourist points.

5.4. Facilities and zones in the function of sports and recreation

The area by the river Rasina, with its functional and ambient characteristics, represents an attractive zone for the development and improvement of all the types of sport-recreational and tourist amenities and is used as a multi-functional city park. Within the city park, in Kruševac, it is possible to form a unique sports-recreational complex by introducing sport-recreational amenities, which can be of mass use along with additional tourist and commercial amenities. The observed area is organized as a green area with the accent on the river Rasina and the two micro-reservoirs as the target points of the visitors’ itinerary. Besides its recreational character, the future amenities and capacities will be used for the preparation of athletes and for organizing

various educational and specialized sport-recreational programs. Besides the abovementioned indoor facilities, it is planned that new outdoor sports amenities should be offered. A significant area of the sport-recreational complex will be covered by the arranged green areas that fit into the natural environment. The park along the river Rasina will be arranged for the needs of the water sports-recreational activities during summer: beaches, swimming areas formed by the system of dams, as well as swimming pools, etc. (City of Kruševac, 2019).

In the part of the city near the airport, “Šarengrad” amusement park will be constructed, with an area of 1.5 ha, and with about 20 replicas of dinosaurs, numerous amenities for fun and recreation, children’s playing equipment, a restaurant with children’s playing area, and a souvenir shop (RTK, 2019).

Rural tourism, as a type of active tourism, is in the function of sports and recreation. The tourists’ motives for coming to rural areas are the autochthonous nature, clean air and drinking water, traditional gastronomic specialties and hospitality, which is why an intensive and abrupt development of rural tourism has been recorded, with the tendency of accelerated development in the future. These villages offer active vacation through numerous activities: hiking, fishing, horse-riding, hunting, mountaineering, cycling, as well as doing everyday agricultural activities in a rural household (City of Kruševac, 2016). Rural households around Ribarska Banja and Jastrebac have recognized the opportunity to make their income from tourism, and one of the good examples is the already mentioned ethno-village Srndalje. The good practice provides a chance for involving other rural settlements in these processes through the “Tourism development program” by investing in the road infrastructure, education of the population, renovation and construction of residential buildings, spatial arrangement, and the construction of technical infrastructure.

5.5. Tourist trails

Hiking trails. In October 2009, the European Ramblers’ Association (ERA) approved two European hiking corridors which are going across the territory of the Republic of Serbia, where corridor E4 goes through the eastern, and E7 through western Serbia (Figure 5). It was planned that the corridors be used by tourists and mountaineers, and certain sections could be taken in continuity or with breaks at different times. The hiking trails through Serbia start at the border with Hungary and finish at the border with Bulgaria. The hiking corridor E7, which starts on the Canary Islands in the Atlantic, and stretches over the Mediterranean, Andora, and France, along the Italian Lake of Garda and southern Hungary, has one of its sections that go over Jastrebac, on the territory of the city of Kruševac. There are five million hiking tourists in Europe, and Serbia has about 17,000 mountaineers, although hiking as an activity is not taken up only by mountaineers, but also by the tourists interested in culture, art, and getting to know new places, which is the opportunity for Kruševac to join the new tourist trends. Hiking tourists are reputed to have a high awareness of the protection of the environment.

Cycling paths. The city of Kruševac has both natural and created predispositions for the development of cycling traffic for everyday needs, taking into account that the majority of services and the main points in the city are accessible by a 10–15-minute bike ride. In order to improve the level of services in the cycling traffic, additional amenities are necessary: public bike renting, e-bikes, repairing services, etc. In the network of European cycling routes (EuroVelo) which comprises 15 routes, the route “EuroVelo 11 – Eastern Europe Route”, which connects North Cape in Norway in the north and Athens in the south of Greece, goes through Finland, Estonia,

Latvia, Poland, Slovakia, Hungary, Serbia, and Macedonia. On this route, there are 6 capitals (Helsinki, Vilnius, Warsaw, Belgrade, Skopje, and Athens), and the section through Serbia goes through Kruševac (Figure 6). This cycling route connects the places between Trstenik, Kruševac, Blace, Prokuplje, and Niš, so it can be used by tourists and the local population (Sustainable Urban Mobility Plan 2017-2030).



Figure 5. European hiking corridors E4 and E7 in the Republic of Serbia

Source: Sustainable Urban Mobility Plan 2017-2030.

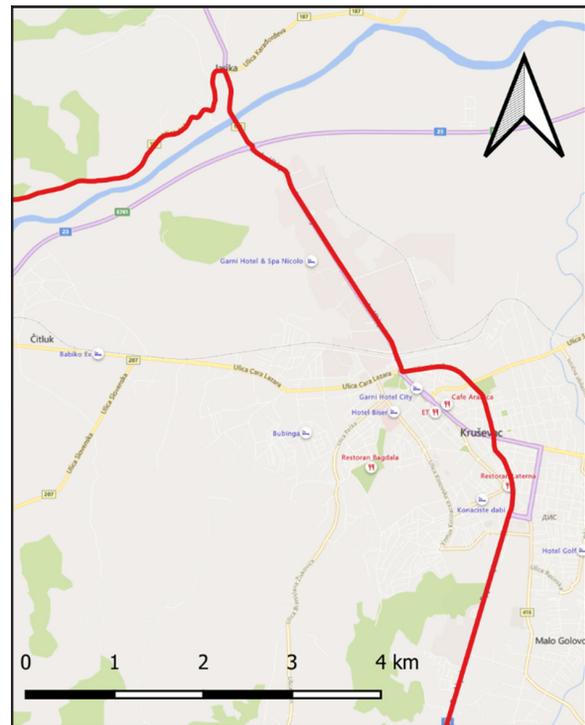


Figure 6. “EuroVelo 11 – Eastern Europe Route”, the section through Kruševac

Source: Sustainable Urban Mobility Plan 2017-2030.

Ski-slopes on Jastrebac. The tourism offer of Jastrebac mountain mainly refers to summer and warmer months of the year, so it is focused on summer tourism. There are potentials for the development of winter tourism which will be realized by the renovation and repair of the existing ski-lift, the construction of the ski-track, and the system for artificial snow covering. It is possible to form the ski tracks in the length of 500 m, along the ski-lift, for the capacity of 800 to 1,000 skiers.

From the abovementioned, the tourism infrastructure of the City of Kruševac contains the facilities for information, rest, supply, recreation, education, and amusement of the tourists (Law on Tourism, 2019), which directly and/or indirectly affects the development of tourism and tourism offer in the studied area of the three tourist destination (Table 4).

5.6. Development goals and priorities

After the performed research, the goals, high-priority projects, and actions for their realization in the function of the tourism development on the territory of the City of Kruševac can be grouped into the three categories: accommodation capacities, tourist trails, and tourist facilities and points. The tourism offer of the City of Kruševac and the maximum use of the potential that this space has, can be improved by the design and implementation of the primary and high-priority projects, shown in Tables 5, 6, and 7.

Table 4. Types of tourism infrastructure of the City of Kruševac

Tourism infrastructure	Tourist zone		
	City of Kruševac	Jastrebac mountain	Ribarska Banja
Tourist information centers	● + ○	○	● + ○
Centers for the reception of tourists and visitors	● + ○	○	● + ○
Traffic terminals 1. garages and 2. parking lots	● _{1,2} + ○ _{1,2}	○ ₂	● ₂ + ○ ₂
Rest areas by the roads	● + ○	○	○
Structures for observing the natural rarities		● + ○	● + ○
Lookouts and panoramic paths	● + ○	● + ○	● + ○
Structures for tourists' rest and short stays	● + ○	● + ○	● + ○
Structures for adventurous activities		● + ○	
Developed watersides: 1. rivers and 2. lakes	● ₁ + ○ _{1,2}	● ₂ + ○ ₂	
1. swimming areas and 2. beaches	● _{1,2} + ○ _{1,2}	● ₂ + ○ _{1,2}	
Swimming pools	● + ○		●
Congress centers	● + ○		○
Concert and film halls	● + ○		
Theme and amusement parks	○	● + ○	○
Sports-recreation centers: 1. outdoor and 2. indoor facilities for sports and recreation	● _{1,2} + ○ _{1,2}	○ ₁	● ₁
Playgrounds/courts: 1. football pitches, 2. basketball courts, 3. children's playgrounds	● _{1,2,3} + ○ _{2,3}	● _{2,3} + ○ _{2,3}	● _{2,3} + ○ ₃
Golf courses	● + ○		
Tennis courts	● + ○	○	●
Wellness facilities	● + ○		● + ○
Ski-centers (ski-lifts, cable car, ski slopes, devices for ski slopes maintenance and operation)		○	
Excursions spots	● + ○	● + ○	● + ○
Hiking areas	● + ○	● + ○	● + ○
Mountaineering trails		● + ○	● + ○
Hiking trails	● + ○	● + ○	● + ○
Jogging tracks	● + ○	● + ○	○
Health paths	○	○	● + ○
Cycling paths	● + ○	○	○
Motor sleigh tracks		○	
Wine, equestrian, historical, and cultural trails	● + ○		○

● – the existing structures of the tourism infrastructure

○ – the planned structures of the tourism infrastructure

Source: Tourism development program of the City of Kruševac 2019–2024, 2018; Spatial Plan of the City of Kruševac, 2011; authors' survey and research

Table 5. Accommodation capacities – goals and high-priority projects

<i>Goals</i>	<i>High-priority projects</i>
Improvement of accommodation capacities in the city of Kruševac	Starting the initiative for giving tax incentives for building and usage of accommodation capacities in tourism
	Informing the potential private investors
	Renovation of the existing hospitality and hotel facilities
	Building a larger number of high-quality accommodation facilities
	Building of tourist facilities in the zone of the planned sport-recreational center “Rasina”
	Building of the new traffic infrastructure and the replacement of the existing decrepit one
Increasing the accommodation capacities on Jastrebac	Solving the legal ownership status of the economic subjects
	Obtaining the compliance from Srbijašume utility company for using the land for the building of new accommodation capacities
	Preparation of the project technical documents for the reconstruction of the existing and the building of the new accommodation capacities
	Connecting with the tourism offer of Ribarska Banja
	Integrate the built vacation homes into the tourist offer
	Building of the new and the renovation of the decrepit technical infrastructure
Increase the accommodation capacities in Ribarska Banja	Making of the General Regulation Plan for Ribarska Banja
	Renovation of the existing hospitality and hotel capacities
	Expanding the tourism offer
	Increasing the capacities of the private accommodation in Banja itself and its surroundings
	Connecting with the tourism offer of Jastrebac
	Education of the local rural population on the importance of tourism and the development of rural tourism, as well as of the accommodation capacities that the nearby villages and households can offer

Source: Authors

Table 6. Tourist trails – goals and high-priority projects

<i>Goals</i>	<i>High-priority projects</i>
improvement of the hiking part in the overall distribution of travel and the construction of hiking trails	Raising the awareness about the significance of hiking and the change of habits of the traffic participants
	Removing the barriers to moving the people with disabilities
	Improvement of hiking tourism and the positioning of Kruševac on the map of the international hiking route E7 (marking the trail of the international hiking route with signalization, project design, and the construction of infrastructure)
	Inclusion of the citizens in the process of designing and implementing of infrastructural projects
	Arrangement of the city squares and areas
	Improvement of the state of the existing infrastructure and the construction of the new one
Increasing the share of cycling traffic in the overall distribution of travels	Making projects for the infrastructure of cycling traffic and the construction of infrastructure for cycling traffic in the rural areas
	Making a project and the construction of the infrastructure and marking the section of “EuroVelo11” route (enabling cycling tourists the accessibility to destinations and connecting the settlements along the trail)
	Formation of the cycling information center (informing the citizens and tourists about a bicycle as a means of transport, about cycling routes, organizing cycling tours, and providing other services)
	Improvement of knowledge and spreading the awareness about a bicycle as a means of transport, as well as the popularization of cycling
	Construction of the new and the improvement of the existing infrastructure
	Introduction of the service of public bicycles
Construction of the ski trail on Jastrebac mountain	Formation of the information center on Jastrebac
	Preparation of the documents and finding the assets for the planning and realization of this project
	Inclusion of this tourism potential of Kruševac into the tourist offer of the Republic of Serbia
	Connecting Jastrebac with Ribarska Banja and the improvement and uniting of the offer of these two tourist centers (winter tourism and spa and wellness tourism)
	Improvement of the quality of the existing and the construction of the new traffic and technical infrastructure
	Construction of commercial and tourist facilities in the function of ski centers and the system for covering with artificial snow

Source: Authors

Table 7. Tourism facilities and points – goals and high-priority projects

<i>Goals</i>	<i>High-priority projects</i>	
Lazarev Grad – the modernization of the offer of tourist products and the promotion of improvement	Deciding on the status of Kruševac within the tourist region of Kopaonik	
	Inclusion of the most important events in the calendar of the tourism offer of the Republic of Serbia	
	Posting the tourist signs on highway E-75 and the regional roads	
	Creation of the unique offer of tourist attraction in the city	
	Provision of software and equipment for the realization of “Real time” project in Lazarev Grad (the virtual presentation of the Middle Ages)	
	Construction of the parking space for tourist buses	
	Increase and diversification of the tourist products offer	
	Reconstruction of the existing and the construction of the new parking space	
	Greater engagement in solving the problems of the change in the ownership over the land	
	Improvement of the tourism infrastructure in Bagdala	Construction of a tower (lookout)
Reconstruction of the jogging trail		
Construction of sports fields		
Building of the city church with the accompanying facilities		
Construction of hotel capacities		
Solving the problems of the change in the ownership over the land		
Increase in the capacities of drinking water and solving the problem of wastewater treatment		
Provision of health and commercial services		
Connection of excursion spots on Jastrebac with the neighboring tourist locations (Ribarska Banja)		
Increase the attractiveness of the excursions spots on Jastrebac		Making profit based on hunting tourism and sales of planting materials
	Efficiency of tourism offer by using the built capacities of the tourism infrastructure: adventure park, swimming pools, mini-golf courses, jogging trails, etc.	
	Increase of accommodation capacities and the offer of sports-recreational and accompanying service-providing facilities (the construction of mini-golf courses, trails for the bare-footed, jogging trails, skating rinks and multi-functional fields, ski trails with artificial snow cover and bob trails; reconstruction and expansion of the cycling trails and the trails for quad- and moto-races; marking and arrangement of the mountain paths)	
	Improved coordination of activities between the Tourist Organization of Kruševac and tourist agencies in Ribarska Banja	
	Formation of the tourist information center in Ribarska Banja	
	Enrichment of the tourism offer of Ribarska Banja	Improvement in the promotion of Ribarska Banja
		Solving the problems of taking away the waste by Kruševac Utility Company, as well as the problems of water supply and wastewater treatment
		Increasing the accommodation capacities
		Improvement of the offer of cultural, sports-recreational and the accompanying service-providing facilities

Source: Authors

5.7. Accommodation capacities

Based on the analysis, the accommodation capacities are grouped into three zones: the City of Kruševac, Jastrebac, and Ribarska Banja. The main task is to continue the positive trend of the equipment and development of these zones, improvement of the quality of the existing and expand by building new accommodation capacities (Table 5).

5.8. Tourist routes

The existing and future hiking, cycling, and ski trails will impact the increase in the number of visits to the attractive spaces of Jastrebac mountain, Ribarska Banja, City of Kruševac, Čelije

Lake, and other natural landscapes and cultural values. Hiking and cycling will be the way of coming and going, as well as moving through the natural and cultural values of the city of Kruševac. It is real to expect a permanent increase and interest in this type of recreation, tourism moving, and amenities (Table 6).

5.9. Tourism facilities and points

When tourist facilities and points are analyzed, besides the projects of tourism infrastructure, it is necessary to take a broader view of the activities and needs. The city of Kruševac is traditionally well-known for its cultural and sports events, where “Lazarev Grad” is the leader, with its amenities and activities. The creation of the tourism brand starts with it, as well as the promotion of the tourism products, with an array of cultural events, from the organization of theater and film festivals, an exhibition of galleries and museums, preservice of old crafts and tradition, as well as the arrangement of amusement-educational parks for children and young people. It has the capacity to accept a great number of visitors without the risk of damaging the objects, provided that the tourists are educated and aware of the proper norms of behavior during the visit to the cultural property. It is suitable for occasional adaptation for special purposes (Stanojlović, Ćurčić & Pavlović, 2010). In this tourist zone, it is necessary to do the reconstruction of “Lazarev Grad”, arrange the space around Kosovo Heroes Monument and the modernization of the tourism infrastructure on “Slobodište”. A parking lot and a stop for tourist buses should also be constructed, as well as purchase the vehicles for the organized sightseeing tours of the city within the tourism attractions offer. A similar situation is on Bagdala hill (Table 7).

For the excursion spot on Jastrebac mountain and Ribarska Banja, the precondition of sustainable tourism development is the accessibility by line transport and the provision of the necessary parking space. The increase in attractiveness of the excursion spots on Jastrebac requires the improvement of the quality of the main road which connects Kruševac with the mountain, the development of health and commercial services and the increase of the accommodation capacities. The increase in the revenue from the tourism offer is expected by the use of the adventure park, swimming pools, mini-golf courses, jogging trails, etc. (Table 7).

The abovementioned goals, high-quality projects and actions which are in the function of the development of all the types of tourism on the territory of the City of Kruševac are territorially connected, i.e. focused on the city of Kruševac, Jastrebac, Ribarska Banja, and Bagdala, and functionally to the promotion and development of cycling and hiking traffic, and winter activities. Their analysis can show that certain priorities and actions appear in every tourist destination, and in a wider sense in the dominantly rural and natural areas. The same and similar priorities are solving the numerous unsolved problems regarding the organization, law, and development, as the primary ones, while the others are directly connected with the development of the types of tourism in the City of Kruševac, i.e. to the planning, construction, and usage of the tourism infrastructure.

Here are the priorities which are a common denominator for all the tourist destinations and tourist activities:

- Solving ownership legal status of the economic subjects in the public/state ownership, the issue of ownership, and regulation of the change of ownership over the land;
- Making the plan and project technical documents, as the basis for the development and provision of the funds for planning and realization of the high-priority projects;

- Integration and connection of the tourist offer, potentials, and activities of the City of Kruševac with other areas of Serbia and beyond its borders;
- Integration and better coordination of tourist destinations at the City level, i.e. connecting and uniting the tourist offer and activities;
- Formation of the central tourist information center in the City of Kruševac, information centers on Jastrebac and in Ribarska Banja, as well as the formation of the network of information centers for certain types of tourism with the aim to improve the promotion, usage, and activation of the potentials;
- Education and inclusion of the citizens into the tourist activities and projects related to the tourist and technical infrastructure;
- Reconstruction, recovery, and modernization of the existing tourist hospitality, accommodation, and recreational facilities and capacities;
- Renovation of the decrepit technical infrastructure and the construction of the new one, within the utility services: water supply, wastewater treatment, taking away the waste, reconstruction of the existing and the construction of new parking lots, utility hygiene, and arrangement of the green and recreational areas;
- Improvement of the primary and secondary road infrastructure, the introduction of the line and tourist transport, construction and expansion of the cycling and hiking trails, etc.

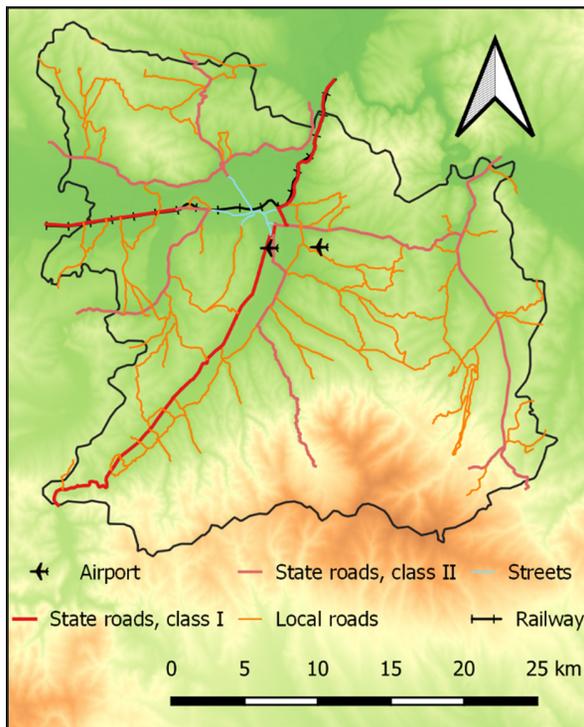


Figure 7.

Transport infrastructure

Source: elaboration of the authors

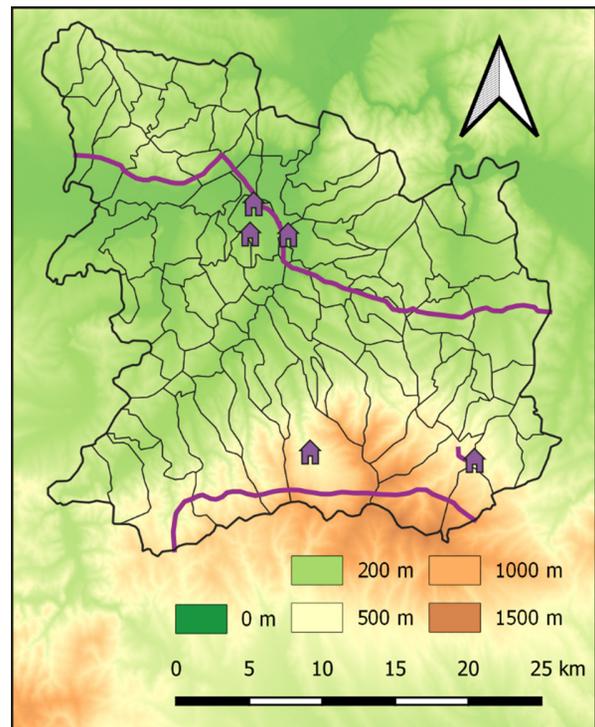


Figure 8. High-priority projects
(tourist trails and points)

Source: elaboration of the authors

6. FUTURE RESEARCH DIRECTIONS

The development of sustainable tourism requires a planning and management process that will unite the interests of different stakeholders sustainably and strategically (Jegdić et al., 2013). The same authors emphasize that special importance is given to the local community, which is required to be ready to understand the impacts of the tourism industry, as well as various

procedures for engaging in participatory planning, consensus building and conflict resolution among stakeholders. In support of this, Simpson (2001) sets out two key preconditions for a sustainable approach to tourism planning: first, the need for broad stakeholder participation in the planning process and second, the need for strategic and long-term orientation in tourism planning.

Planning implies a technique by which tourism will be integrated into the context of general economic and social development. Through this process, it is necessary to reduce the conflicts that may arise between this activity and other social entities. Tourism development must be guided by a carefully designed planning policy, which must not be exclusively a reflection of the desire for profit, but is based on the ideals and principles of human well-being and happiness (Stojanović, 2011). In that sense, it is necessary to operationalize certain scientific research in the direction of supporting decision-makers and other relevant stakeholders, i.e. to formulate specific models for the implementation of defined principles and guidelines for sustainable tourism development in practice and on the local level.

7. CONCLUSION

The City of Kruševac obviously has significant potentials which can be used in tourism if directed to the planned goals. Besides the potentials, there are certain limitations in the decrepit road infrastructure which should be reconstructed, unused spaces and insufficiently researched thermal-mineral waters, unsolved ownership-legal relations, insufficient financial assets, and lack of interest of both economic subjects and local population for the improvement of the tourist offer and the improvement of the living standard. Depopulation is a big problem, especially in the villages.

The analysis of the potentials and limitations determines and forms the high-priority projects and actions that should be taken in order to improve tourism and tourism infrastructure. The most significant are the investments in the perspective tourist centers: The City of Kruševac, Jastrebac, and Ribarska Banja. The actions are directed toward solving the problems and the lack of tourism development and thus to the overall development and improvement of the standard. It is necessary to invest in the road, telecommunication, and tourism infrastructure, into solving the ownership-legal relations, the connection of tourist sites, their renovation, improvement of the existing and activation of the new hiking, cycling (Figure 8), and ski trails, as well as of accommodation capacities. It is planned to build “Rasina” sports-recreational center and “Šarengrad” amusement park, which will additionally fulfil the tourism offer of Kruševac.

The development of integrated sports and mountaineering tourism is possible on Jastrebac mountain. With the construction of the adventure park, as well as the renovation of the hotel accommodation, the mountain has become a significant resource for the tourist offer of the City of Kruševac. Ribarska Banja is the representative of spa, sports-recreational and health tourism with its springs of warm, mineral waters. The realization of the plan for integration into a unique system of these two tourist localities will significantly improve the tourist offer and the overall development of the City, the rural settlements, and the living standard of the population. In the vicinity of Ribarska Banja, some villages can develop and improve their tourist offer by increasing their accommodation capacities. The promotion of rural tourism and the use and sales of homemade products can contribute to the development and increase of the revenue from tourism. Event tourism is the most represented in the urban area. However, with the

development of the tourism infrastructure on Jastrebac and in Ribarska Banja, the space is created for its expansion. With the connection of these three centers into a unique network, significant changes will be made in tourism development and in the development of the City of Kruševac itself.

The City of Kruševac is already a developed tourist, cultural, economic, and sports center. It has significant opportunities for improvement and provides its citizens and foreign and domestic tourists a rich tourism offers. By proper use and improvement of the existing tourism values and the realization of the planned projects of the tourism infrastructure, it will additionally improve the tourist offer and become a destination that should be visited when touring this area and Serbia. The development of tourism infrastructure and tourism offers will both, directly and indirectly, contribute to the overall development of the territory of the City and the improvement of the living standard of the urban and rural population.

REFERENCES

- Belij, M., & Đurđić, S. (2019). The role of tourism in the management of protected areas. In: D. Filipović, V. Šećerov, B. Lukić, U. Radosavljević & M. Marić (Eds.) *10th International Academic Symposium "PLANNED AND NORMATIVE PROTECTION OF SPACE AND ENVIRONMENT"* (331-337). Belgrade: University of Belgrade – Faculty of Geography with Serbian Spatial Planners Association, Belgrade, Serbia.
- City of Kruševac (2016). *Sustainable Urban Mobility Plan of the City of Kruševac 2017-2030*, Kruševac. Retrieved from: https://krusevac.ls.gov.rs/wp-content/uploads/2020/09/poum_krusevac.pdf
- City of Kruševac (2018). *Tourism development program of the City of Kruševac 2019–2024*, Kruševac.
- Consulting tourism development (2019). Predlog za definisanje područja Ribarske Banje. Belgrade.
- Črnjar, M. (2002). *Ekonomika i politika zaštite okoliša*. Rijeka: Ekonomski fakultet.
- Đidić, P. (2008). *Fortresses and remaining of fortified towns*. Belgrade: JP Beogradska tvrđava.
- Đukićin Vučković, S., Đorđević, J., Milanković Jovanov, J., Ivanović Bibić, Lj., Protić, B., Đorđević, T., & Ivkov M. (2017). The development of transport infrastructure and attitudes of the local population: a case study from the Republic of Serbia, *Geografisk Tidsskrift-Danish Journal of Geography*, 118:1, 101-113.
- Gajić, A., Krunić, N., & Protić, B. (2021). Classification of Rural Areas in Serbia: Framework and Implications for Spatial Planning. *Sustainability*, 13(4): 1596. <https://doi.org/10.3390/su13041596>
- Grad Kruševac i Javno preduzeće za urbanizam i projektovanje. (2019). Plan detaljne regulacije „Sportsko rekreativni centar Rasina”, Kruševac.
- Ilić, B. (1971). *Istorija Kruševca 1371-1941. godine*. Kruševac: Istorijski arhiv.
- Ivanišević, D., Jakšić, D., & Korać, N. (2015). *Vinogradarski atlas*. Beograd: Republički zavod za statistiku Republike Srbije.
- Jegdić, V., Škrbić, I., & Milošević, S. (2013). Specificities of sustainable tourism planning. *TIMS. Acta*, 7(2), 153-162. DOI: <https://doi.org/10.5937/timsact7-4561>
- Jovanović-Tončev, M., Jovanović, D., Malićanin, M., & Dimitrijević, B. (2016). Push and pull factors determining wine tourism development in the ‘Tri Morave’ sub-region. *Ekonomika poljoprivrede*, 63(3), 781-800.
- Kušen, E. (2002). Ekoturizam i održiv i razvoj turizma. *Okoliš*, 111, p. 9.

- Liburd, J.J., & Edwards, D. (2010). *Understanding the Sustainable Development of Tourism*, Oxford: Goodfellow Publishers Ltd, Woodeaton.
- Lim, C., Zhu, L., & Koo, T.T.R. (2018). Urban redevelopment and tourism growth: Relationship between tourism infrastructure and international visitor flows. *International Journal of Tourism Research*, 21(2), 1-10. DOI: 10.1002/jtr.2253
- Lukić, B., Đorđević, A., & Protić, B. (2021). Turistička infrastruktura. Beograd: Univerzitet u Beogradu – Geografski fakultet.
- Official Gazette of the City of Kruševac no. 4/11. (2011). *Spatial Plan of the City of Kruševac*. Kruševac.
- Official Gazette of the Republic of Serbia no. 100/20. (2020) *Uredba o utvrđivanju područja Ribarske Banje*.
- Official Gazette of the Republic of Serbia no. 17/2019. (2019). *Law on Tourism*.
- Panasiuk, A. (2007). Tourism Infrastructure as Determinant of Regional Development. Szczecin: University of Szczecin, Poland.
- Punišić, M. (2007). *Prostorno planerske postavke organizacije mreže centralnih naselja u Rasinskom okrugu*. Doktorska disertacija. Beograd: Univerzitet u Beogradu-Geografski fakultet.
- Republički geodetski zavod - RGZ (2021). Nacionalna infrastruktura geoprostornih podataka – Geosrbija - <https://a3.geosrbija.rs/> retrieved on 17.03.2021.
- Ristić, R. (2001). *Lazarica i Lazarev grad*. Kruševac: Narodni muzej Kruševac.
- RTK (2019). U Kruševcu i zabavni park „Šarengrad“ <https://www.rtk.rs/102242/u-krusevcu-i-zabavni-park-sarengrad/> retrieved on 03.04.2021.
- Savić, O. (1969). *Kruševac i njegova uticajna sfera*. Beograd: Geografski institut “Jovan Cvijić” SANU.
- Simpson, K. (2001). Strategic Planning and Community Involvement Contributors to Sustainable Tourism Development. *Current Issues in Tourism*, 4(1), 3-32.
- Soleks (2013). *JASTREBAC: Ribaraska banja - Srndalje - Zmajevac 1381 - Kota - Pl. dom*. Available online at: <https://sr.wikiloc.com/rute-pjesacenje-po-planinama/jastrebac-ribaraska-banja-srndalje-zmajevac-1381-kota-pl-dom-4243950> retrieved on 30.03.2021.
- Stanojlović, A., Ćurčić, N., & Pavlović, N. (2010). Tourism valorization of historic site “Lazar’s town” in Kruševac. *Journal of the Geographical Institute “Jovan Cvijić” SASA*, 60(2), 77-92.
- Statistical Office of the Republic of Serbia (2013). Census book No. 20 – Comparative review of the number of population 1948-2011. Census of population, households and dwellings in the Republic of Serbia 2011. Belgrade: Statistical Office of the Republic of Serbia
- Statistical Office of the Republic of Serbia. (2019) *Tourism turnover, June*. Belgrade.
- Statistical Office of the Republic of Serbia. *Municipalities and regions in the Republic of Serbia in 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018*. Belgrade.
- Stojanović, V. (2011). *Turizam i održivi razvoj*. Novi Sad: Prirodno-matematički fakultet, Univerzitet u Novom Sadu.
- Stošić, A. (1999). *Pod nebom Kruševca. Književno-istorijski zbornik kruševačkog kraja*, Drugo izdanje, Kruševac: Kruševački glasnik, Beograd: Prosveta.
- Sunara, Ž., Jeličić, S., & Petrović, M. (2013). Održivi turizam kao konkurentska prednost Republike Hrvatske. *Zbornik radova Međimurskog veleučilišta u Čakovcu*, 4(1), 83-88.
- Taotao, D. (2013). Impacts of transport infrastructure on productivity and economic growth: Recent advances and research challenges. *Transport Reviews*, 33, 686–699.

- Terzić, A., Bjeljac, Ž., & Lović, S. (2013). The possibilities of tourist affirmation of events in the Municipality of Kruševac. *Journal of the Geographical Institute "Jovan Cvijić" SASA*, 63(2), 53-65.
- Turistička organizacija Kruševac & Grad Kruševac (2016). *Vodič za sprovođenje kategorizacije u domaćoj radinosti*. Kruševac. retrieved from: <https://www.turizamkrusevac.com/dokumentacija-obraci/Vodi%C4%8D%20za%20sprovo%C4%91enje%20kategorizacije%20u%20doma%C4%87oj%20radinosti.pdf>
- UNWTO & UNEP (2005). *Making Tourism More Sustainable: A Guide for Policy Makers*, Madrid: UNWTO, Paris: UNEP.
- Veljković A., Jovanović R., & Tošić B. (1995). Gradovi Srbije centri razvoja u mreži naselja. Geografski institut "Jovan Cvijić" SANU, Beograd
<http://ranch-eldorado.eu/> Retrieved on April 29, 2021.
<http://www.lazarica.rs/> Retrieved on March 25, 2021.
http://www.visitserbia.org/srpski/srpski/blog_sr/3267-planina_jastrebac.html Retrieved on March 20, 2021.
<https://krusevac.ls.gov.rs/vazeci-prostorni-plan-grada-krusevca/>
<https://mapio.net/pic/p-110049967/> Retrieved on April 3, 2021.
<https://sr.wikiloc.com/rute-pjesacenje-po-planinama/jastrebac-ribarskabanja-planinarskidomp-kjastrebac-3652988#wp-3652991> Retrieved on April 30, 2021.
<https://www.jastrebaclakeresort.com/avantura-park> Retrieved on April 28, 2021.
<https://www.jastrebaclakeresort.com/o-jastrepku> Retrieved on April 15, 2021.
https://www.krusevac.rs/sr_cir/krusevac/licna-karta/geografija.html Retrieved on March 5, 2021.
<https://www.ribarskabanja.net/info/etno-selo-srndalje> Retrieved on March 21, 2021.
<https://www.ribarskabanja.rs/index.php/kapaciteti/smestaj> Retrieved on April 15, 2021.
<https://www.ribarskabanja.rs/index.php/turizam/src-samar> Retrieved on April 21, 2021.
<https://www.temnic.info/krusevac-dobio-trg-glumaca-na-bagdali-otvoren-park-srbija/> Retrieved on April 3, 2021.
<https://www.turizamkrusevac.com/sr/o-turistickoj-organizacija-grada-krusevca> Retrieved on April 18, 2021.
<https://www.ugradu.rs/kulturna-dobra/krusevac/spomenici-kulture/spomenik-kosovskim-ju-nacima/> Retrieved on March 25, 2021.
<https://www.ugradu.rs/kulturna-dobra/krusevac/znamenita-mesta/slobodiste/> Retrieved on March 15, 2021.



Corporate Restructuring in the Economy of the Tourism Sector: A Case Study of Air Serbia

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Abstract: *The main objective of this research is to analyze the effects of the implemented corporate restructuring process on the example of the Serbian national airline company. In addition, the purpose of this chapter is to discuss the management approaches, forms, specific goals, business performance and results, but also the benefits of the corporate restructuring of Air Serbia on national tourism and the economy. Since competitive national airline contributes to the development of the Serbian tourism sector, this chapter emphasizes the economic dimension and importance of the transformation process, creating new added value and employment, as well as multiple effects on overall local and regional development and complementary activities. Thematically, the content is focused on reviewing various forms of corporate restructuring, change of management model, ownership and organizational structure, application of new strategies, and achieved financial results, as indicators of the success of corporate restructuring, with special reference to the impact of COVID-19 on Air Serbia. The methodological framework includes desk research and a case study method based on data collection and analysis, synthesis of theoretical and empirical facts, and using available sources related to the research topic.*

1. INTRODUCTION

Restructuring is a very complex phenomenon and contains many individual activities that include: mergers, acquisitions and takeovers of other organizations, joint ventures, creation of strategic alliances, sale of organizational parts, abandonment, and disinvestment in certain activities or business segments, separation or splitting of the organization. portfolio, etc. (Erić, Stošić, 2013: 5). It is essentially a complex, multi-layered, heterogeneous phenomenon and therefore there is a high level of risk in the theoretical settings and objectives in this area (Njeguš, 2014: 39). Some theorists (Samaras, 2004: 9) point out three primary patterns of restructuring: overcoming poor financial performance in business, implementing a new company development strategy and increasing the value of company shares in financial markets. According to another view (Bradowski, 1991: 10-12), the most common, immediate reasons for the restructuring process are: aspirations to grow and improve financial performance, return to the company's core of competitiveness, poor business prospects, changes in markets or technologies, reduced profits and sales and production volume. In recent times, attention is increasingly focused on the impact of the economic environment, on restructuring processes (Wan & Yiu, 2009; Yawson, 2009). Sudden, large and unforeseen changes affect the deterioration of the company's business performance and require changes that exceed the "usual organizational" changes in terms of their scope and character. Consequently, many companies are forced into costly and painful restructuring processes. The basic motive of corporate restructuring is the company's effort to stop, warn, and reverse unsatisfactory performance in its business as soon as possible. For civil aviation, restructuring may

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involve a change of ownership, in administrative form, function, operations and staffing. For government-owned airlines, restructuring mostly affects ownership, while operations usually become more commercially focused (Craig, 1999).

Tourism, as one of the largest industries in the world, has a huge effect on the national economy and people's lives (Petrevska, 2017; Mirović et al. 2020: 39). The economic significance of tourism is an aspect that, as a rule, has a particularly important significance (Rogerson, Rogerson, 2014; Karampela et al. 2016). Tourism as a generator of economic trends through its direct, indirect and induced impacts can significantly affect the macroeconomic position and stability, thereby affecting economic growth (Mansury, Hara, 2007: 2013; Pjanić et al. 2018: 115). The development of tourism contributes to direct inflows into the regional economy, diversification of the economy, sustainability of the environment and the local community (Štefko et al. 2018), as well as the national economy (Pjanić, 2019: 292). However, despite the high development potential, Serbia has so far not achieved significant results in the field of tourism development (Počuča, Obradović-Matijašević, 2018: 370). Tourism is often seen as purposeful, planned and motivated behavior (Geoffrey & Alister, 2006: 45), where travelers' expectations play the most important role in travel decisions, where the needs, views and motives of tourists are decisive (Wall, Mathison, 2006: 45; Počuča, Obradović-Matijašević, 2019: 493). The basis of economic importance is tourists' consumption during their stay in tourist destinations, especially the foreign tourists' spending, which is rated as an export (Ignjatović et al. 2020) and has an even stronger positive effect on the macroeconomic situation. One of the basic tourism specificity is reflected in the multisectoral impact and the fact that tourism connects and extends through a large number of other branches (Beránek, 2013). In addition to the hotel and catering industry, traffic is a directly involved industry in tourism trends and is an activity that is of immeasurable importance for the development of tourism. Along with road, air traffic has the greatest importance for tourist movements. During the 20th century, air traffic has made great strides in terms of speed, safety, comfort, quality of service and airports, which has increased the number of users and encouraged tourist movements to destinations far removed from the main emitting markets. Today, modern tourism cannot be imagined without air transport, and in that sense, it can be considered an aggregate of the tourism sector. Millions of passengers are transported daily by numerous airlines from one part of the world to another. Thanks to such a market situation, airlines, passengers (Pešić, 2019), tourism and the national economy have benefits (Marjanović et al. 2019: 640). The national airline has much bigger importance for the economy of a country and cannot be assessed solely by the amount of business profit, loss, or as a company for air passenger traffic. This additional positive impact is reflected through the positive effects on national tourism; it is an indicator of the strength of that country, a representative of national culture, values and character that has multiple significance for the country. Also, the promotional function of a country and its openness to the world and the aspiration to establish good international relations are emphasized. In addition, the health crisis caused by the COVID-19 pandemic showed the even bigger importance of the national airline and confirmed its vital importance for the country, as the company performed most of the humanitarian and cargo flights realized so far. Air civil transport in Serbia has a long and respectable tradition, mostly achieved through the results of the national airline. According to Air Serbia (2021), *Aeropot* - the national airline of the Kingdom of Serbs, Croats and Slovenes was founded in 1927. The *Aeropot* was among the first civil airlines, the 10th in Europe and the 21st in the world. The tradition of the *Aeropot* was continued by the Yugoslav Air Transport (JAT). In the era of jet aviation and expansion, the golden age of JAT is tied to the period 1970-1990. year, when JAT was one of the largest airlines in Europe, which in record years directly connected Yugoslavia with 61 world destinations, with an annual transport of 5 million passengers and 46,000 tons of goods.

However, the most difficult period in the history of the former Yugoslavia began in 1990, after the Second World War. A turbulent transition period followed, where in 2003, after 56 years of operation, JAT was transformed into JAT Airways. It was only in 2006, for the first time in 15 years, that the national airline ended its business year with a positive result. However, in the following years, JAT Airways had to find a strategic partner to secure a successful future.

2. THE NEED FOR AIR SERBIA CORPORATE RESTRUCTURING

The air transport industry is characterized by a high degree of dependence on the state of the economy at the global and regional level, with sensitivity to cyclical and seasonal changes, and various shocks in the environment (Bajić et al. 2015: 298). The aviation industry in Europe in the 1990s was controlled by the governments of the countries that determined the routes and flight prices of the airlines. The liberalization of business, current in that period, is precisely the result of deregulation, which itself comes from the privatization of a large part of the market (Tatalović, 1990). Although airline restructuring has become a fairly common practice in order to achieve better business in the airline sector, the term restructuring usually refers to the failure of individual airlines. The success or failure of airline systemic restructuring depends to a large extent on the design of a comprehensive strategy that responds to all potential problems. The activity of merging two companies, i.e. merger, has become most often applicable for the systemic restructuring of airlines, which has often proven to be a successful mechanism. The need for corporate restructuring of the national airline JAT Airways was conditioned by many reasons. The war conflicts in the former Yugoslavia and the political environment in the 1990s had an extremely negative impact on the company, and then a national economic downturn that limited business. After 2000 and the beginning of the transition period, it became apparent that the national airline needed a complete overhaul to become a reliable and efficient operator again. After the transformation into JAT Airways in 2003 and several years of better results, external pressures from the environment, large losses in passenger and cargo traffic, consumers, and competition, together have made the business unsustainable. In particular, the need to restructure JAT Airways was caused by the following reasons for poor performance:

- Long-term loss of public finances due to losses, which reduced the share of the national airline in GDP;
- Old-fashioned organization with poor quality of service, inadequate promotion, poor position in the minds of consumers;
- Loss of competitive advantage, where passengers prefer to choose low-cost airlines;
- The global financial crisis in 2008 and poor business results in the post-crisis years;
- Finding ways to increase efficiency and create new competitive advantages.

Certain rationalization activities were carried out due to poor performance, such as minimal reduction in the number of employees, reduction of financial costs, etc. However, that did not give satisfactory results, so finally, Serbia opted for a strategic partnership model with Etihad Airways, the national airline of the United Arab Emirates (UAE). Under the new name, Air Serbia started operating in October 2013, presenting a new brand and a reconstructed version of JAT Airways (Air Serbia, 2021).

3. FORMS OF CORPORATE RESTRUCTURING IN AIR SERBIA

According to More (2015), corporate restructuring is the process of redesigning one or more aspects of a company, where the process of reorganizing may be implemented due to many different factors (positioning the company to be more competitive, to survive currently adverse

economic climate, or movement in an entirely new direction). Corporate restructuring is one of the most complicated problems in business (Vance, 2009: 3), because it includes a large number of areas, from management, product development, sales and marketing, financial analysis, organizational change, owners, employees, consumer relations and many strategic, organizational, technical, legal and other issues (Stošić, 2014: 11). The best way for quality restructuring is to implement a process when the company is doing well to make its business even more successful and efficient, but the most common case of restructuring decision is when the company encounters various difficulties and problems (Listeš, 2018: 13). The corporate restructuring also refers to a wide range of activities (DePamphilis, 2010), where in theory there are six forms: strategic, financial, organizational, ownership, market and production-technological. This was the case at Air Serbia, which in 2013 began corporate restructuring in all of the above forms.

3.1. Strategic restructuring

In order to change the business, achieve better business performance and market position, Air Serbia primarily needed a strategic restructuring, which completely changes the business strategy. Strategic restructuring implies changing the business portfolio, and management system, refocusing the marketing strategy, rescheduling costs and the like, i.e. destroying the existing key paradigms in the way of doing business and forming new ones (Erić, 2000; DeWit & Meyer, 2004: 243). In 2013, the strategic partnership undertook obligations related to strategic and operational management. A large number of activities were carried out in that domain, where the need for professional management was primarily mentioned. After the Government of Serbia and Etihad entered into a strategic partnership, according to which Etihad became a co-owner, it was agreed that in the period 2014-2019, Air Serbia will be managed by the Etihad. Since 2014, Air Serbia has introduced and implemented the principles of corporate governance that are considered optimal in its branch. The Company's shareholders agree that a good corporate governance system is necessary to achieve its goal and become a successful European airline. Accordingly, Air Serbia has adopted a "Code of Business Ethics" and a "Rulebook on Authorizations" setting out governance frameworks. The restructured strategy envisages changes from management to the fleet and sets clear profitability goals. Air Serbia has been given a new short-term, medium-term and long-term "roadmap" in which the new strategy involves difficult decisions and internal restructuring (Air Serbia, 2021):

- **Vision** - *Air Serbia should become the leading airline in the region and further develop, in order to regain its place among the best in the world. Air Serbia's priority is to provide a service of exceptional quality for passengers. The goal is to provide service users with maximum comfort while traveling, regardless of the class they fly.*
- **Mission** - *In a world where problems are the rule and customers have never had more choice, the guest remains at the center of everything. Despite the accelerated development of Air Serbia, the main goal will always be to provide the best possible service.*

As part of the strategic restructuring, a strategy of continuous improvement of service and comfort standards has been defined. One of the key segments of this strategy is a fleet renewal, because only in that way Air Serbia can operate successfully in a highly competitive aviation market. Also, one of the most important changes is the transition of Air Serbia to the IT platform and digitalization process. The modern platform has introduced the foundation for future business and is used to manage major processes such as sales, check-in and boarding. This system enabled Air Serbia to introduce additional services and a new concept of fares, but also the possibility for passengers to create a flight according to their own needs. Recognizing concern

for the future of the planet as one of the key topics for the entire society, environmental protection has become a strategic issue and an integral part of everyday business. Safety, security, environmental protection and sustainability in air transport (Abeyratne, 2012), are the four key strategic issues for the future stability and development of the Serbian National Airline. Numerous initiatives have been launched in this area with set goals, such as monitoring and reducing carbon dioxide emissions, reducing fuel consumption, active participation in the EU ETS process, etc. In addition, Air Serbia has become part of the SkyBreathe user community and has joined global airlines that use special software designed to preserve the environment (Air Serbia, 2021). In order to achieve the maximum effects of its operations and better control of business standards, Air Serbia has included several additional complementary activities, among which the most significant are Air Serbia Ground Services⁴, Air Serbia Catering⁵ and Amadeus⁶ (SBRA, 2021; Air Serbia, 2021). Today, airline companies have served the various air transport needs of people, and transportation has grown remarkably in line with the need for fast, safe, and convenient transportation (Akyuwen, 2011: 114). Thus, the rebranded airline Air Serbia, with majority state ownership, provides services of commercial air transport of passengers and goods in regular and charter traffic. In addition to its core business, Air Serbia is engaged in training flight and other aviation personnel, hiring various capacities and other activities. With a renewed fleet, a new tariff structure and an extensive transport network, Air Serbia is striving to become a leader in the Balkan region.

3.2. Ownership restructuring

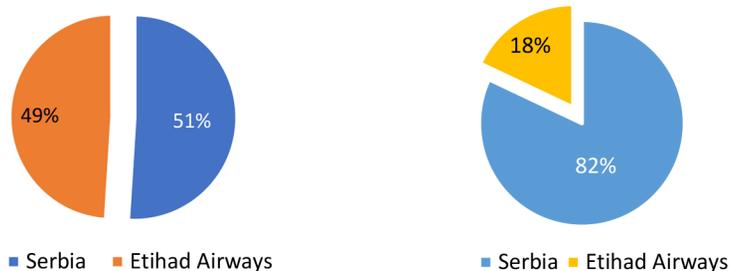
After several years of waiting for a strategic partner, the Government of Serbia 2013 announced a strategic partnership with Etihad Airways, with which JAT Airways became Air Serbia. With the strategic partnership, the national airline of the Republic of Serbia with 51% remains in the ownership of the Government of Serbia as the majority shareholder. Etihad Airways converted its 40 million USD loan to the newly created Air Serbia into capital and became the owner of 49% of the company (Graph 1). In 2008 the legal status of the Serbian national airline was changed into a joint-stock company, which has remained until today. The shareholder structure of Air Serbia is organized as a closed joint-stock company and owns only one class of shares. Etihad and the Serbian Government have committed to invest 40 million USD each, as well as to provide additional funds in the maximum amount of 60 million USD each until the end of the contract (Air Serbia, 2021). Due to large financial losses since 2017, Etihad withdrew from all its European acquisitions, except Air Serbia. In July 2018, Air Serbia and Etihad Airways agreed to continue the strategic partnership and to remain Etihad Airways owned by Air Serbia with the same share of 49%. In less than two years, the COVID-19 pandemic began, which especially endangered the business of airlines, where Air Serbia was no exception, which was the reason for a new change to the ownership structure in December 2020. Based on the new agreement the Serbian national airline was recapitalized, with the Republic of Serbia increasing its ownership share from 51% to 82%, while Etihad's share was reduced from 49% to 18% (Graph 1).

⁴ Services of supervision, reception and dispatch of aircraft, passengers, luggage, goods and mail at the Belgrade airport and forwarding services in air transport of goods.

⁵ Meal supply services - procurement, packaging and delivery of all consumables during the flight, textile washing used in the aircraft, servicing and delivery of all entertainment systems, food retail, production and delivery of food to seven other airlines.

⁶ One of the leading suppliers of IT solutions in the travel and tourism sector. The core business is marketing and promotion of all Amadeus products, expanding the customer network, researching and monitoring market needs, training users to work in the Amadeus system and providing technical and business support to end users.

Ownership structure, August 2013. Ownership structure, December 2020.



Graph 1. Ownership structure of Air Serbia (2013-2020)

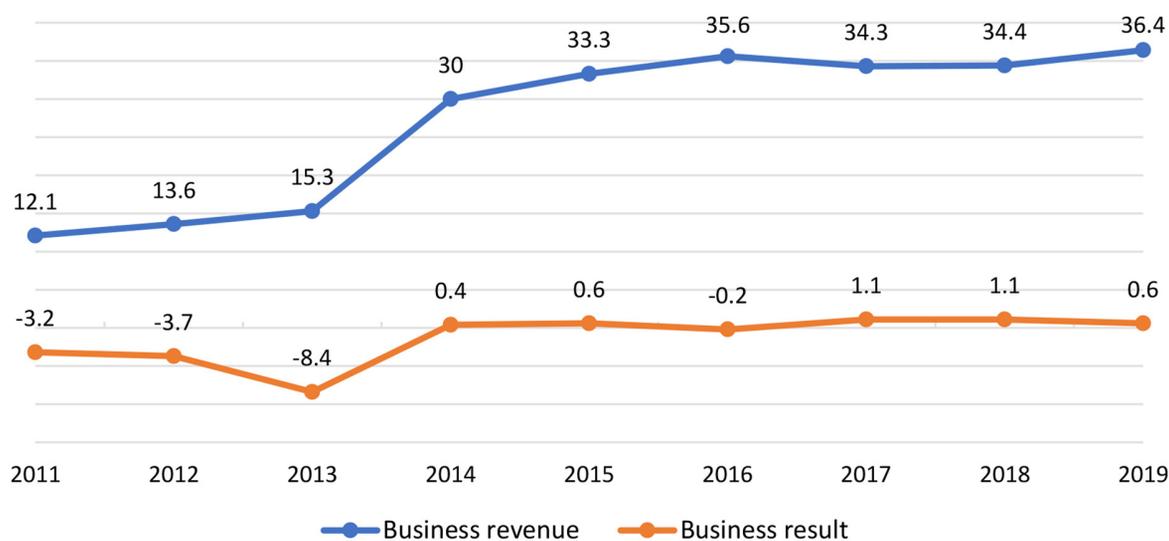
Source: Authors based on Air Serbia, 2021.

The increase of the share capital in Air Serbia was undertaken in order to eliminate the disturbances in the Serbian economy caused by the COVID-19 pandemic. The Serbian government has provided support to the national airline in overcoming business obstacles in the most difficult year of passenger air traffic in history. The recapitalization was undertaken at the request of Air Serbia, which provides for the measures for economic entities affected by the COVID-19 pandemic (Air Serbia, 2021). The regulation is fully in line with the European Commission's Provisional Legal Framework, which regulates state aid measures to support the economy during the current pandemic crisis. The goal is to create the basis for further smooth operations and that with measures to streamline operations, Air Serbia overcomes difficulties, strengthens its position as a leader in the region and continues to provide a direct and indirect contribution to the Serbian economy, especially transport and tourism.

3.3. Financial restructuring

Years before the strategic partnership, JAT Airways was operating at a loss. Since 1992, old loans for purchased aircraft have not been repaid, and it has been impossible to settle other accumulated liabilities from current operations. Also, business was affected by the effects of the global financial crisis, especially in the post-crisis period. Financial data for the period before the strategic partnership are almost unavailable, so it is not possible to do a reliable financial screening of the situation before 2013. However, there are certain data from which some conclusions can be drawn. According to the available financial indicators, after the last positive result in 2006, since 2009 Air Serbia has been returning to negative business results. With decreasing business revenues and a loss of about 3-4 billion RSD in the period 2011-2012, the situation was unsustainable. Then came the critical year of 2013 with a loss of almost 8.5 million EUR (Milojević, 2017). Until 2013, JAT Airways was an illiquid and over-indebted company that has been operating with a loss for years. The value of all investments decreased from year to year, while the value of business assets was lower than the value of liabilities. The total net operating result was a loss that increased from year to year, which also reduced the value of equity. It was only in 2014 that the recovery followed when a positive difference was achieved. Indebtedness in the period 2011-2013. was extremely high. Due to the strategic partnership and the sale of part of the ownership, the business assets were drastically reduced in 2013, but there was an increase in long-term liabilities, which led to higher indebtedness. Already in the first year of management change, indebtedness has tripled, but Air Serbia was still in the category of indebted companies. With negative net asset values, the value of current assets was far less than the liabilities due within one year, indicating that the company could not cover its short-term liabilities. The coverage of short-term liabilities with current assets was at an extremely low level. However,

the result improved in 2014, but still with little coverage of liabilities. Next period 2015-2019. is considered as a period of positive results in which the strategic partnership with Etihad Airways was strengthened. The only publicly available source about Air Serbia's financial results is the Serbian Business Registers Agency (SBRA), in whose registers the financial statements for the period 2015-2019 can be found. Although reports are not available since inception, this period is credible for assessing the business model of a company after restructuring. Given that Air Serbia carried 2.55 million passengers in 2015 and achieved an increase of 11% compared to 2014, the business situation began to improve (Graph 2).



Graph 2. Operating revenues and business results of Air Serbia, 2011-2019, in billion RSD
Source: Authors based on Milojević, 2017; SBRA, 2021.

According to the available financial statements from 2014 (SBRA, 2021), Air Serbia operated at a modest profit from 2014 to 2019. As can be concluded from the previous chart, the business revenues and results went uphill, which meant that the implemented restructuring model was successful and that the problem of the Serbian national airline was on the verge of a solution. According to data from 2019, Air Serbia carried 2.744 million passengers, which is twice as many as in 2013 (Aviatica, 2020), and that is also an indicator of good results. Nevertheless, the further analysis points to different conclusions. By analyzing the income statement in the period 2015-2019. year, Air Serbia reported an average annual profit before tax of about 1 billion RSD. However, the realized gross profit is of an accounting nature and is not a consequence of successful management and business success, but a consequence of large payments of government donations to reimburse costs (from 2.5 to 6 billion RSD), which were mostly set aside for repaying old JAT debts. They are recorded in the income statement as an item of operating income (item deferred income). How state aid affected the overall business result of Air Serbia is shown in the following Table 1.

If we exclude a part of the money subsidized by the state from the income, the conclusion is that in the observed period, Air Serbia recorded losses and that it is not self-sustainable on the market. The actual state of business is best evidenced by cash flow reports that show the liquidity position, i.e. the actual inflows and outflows of money during one year, based on all activities. Air Serbia in the period 2015-2019. failed to achieve a positive cash balance from operating activities, and the annual deficit for the payment of due liabilities averaged about 1.3 billion RSD (Table 2).

Table 1. Overview of the consolidated income statement of Air Serbia, in billion RSD

	2015.	2016.	2017.	2018.	2019.
Business revenue	33,3	35,6	34,3	34,4	36,4
Sales revenue	26,7	30,3	31,7	31,7	33,1
State aid	5,9	4,9	2,5	2,5	2,5
Business expenses	32,7	35,8	33,3	33,3	35,8
Business result	0,6	-0,2	1,1	1,1	0,6
<i>Without state aid</i>	-5,2	-5,4	-1,4	-1,4	-1,9
Financing result	-0,6	-0,5	0,2	-1,4	-1,9
Result from other business	0,5	0,9	0,7	1,7	2,8
Total pre-tax result	0,5	0,2	2	1,3	1,4
<i>Without state aid</i>	-5,4	-4,7	-0,5	-1,1	-1,1

Source: SBRA, 2021.

Table 2. Overview of consolidated cash flows, in billion RSD

	2015.	2016.	2017.	2018.	2019.
Business activity					
Cash inflows	33,1	35,4	38,5	39,2	37,8
Cash outflows	32,6	37,2	39,9	39,3	39,6
Net cash from business activities	0,6	-1,9	-1,5	-0,1	-1,8
Investment activity					
Cash inflows	0,04	0,1	0,2	0,2	0,1
Cash outflows	0,8	1,5	2,4	3,0	1,3
Net cash on investment activities	-0,8	-1,4	-2,2	-2,8	-1,2
Total business and investment deficit	-0,2	-3,3	-3,7	-2,9	-3,1
Financing activity					
Cash inflows	5,7	6,5	1,7	4,2	2,4
Cash outflows	0,003	0,005	0,010	0,046	4,2
Net cash from financing activities	5,7	6,5	1,7	4,1	-1,9
Total net cash	5,4	3,2	-2,0	1,2	-5,0
Cash at year end	7,6	10,5	7,8	9,0	4,0

Source: SBRA, 2021.

Air Serbia failed to finance due to liabilities from regular operations, and even less to achieve surplus and positive net cash inflows. As in the period 2015-2019, Air Serbia failed to service its due liabilities due to the inflow of regular operations, so it compensated for the lack of cash by borrowing. When debts fell due in 2019, the liquidity position further deteriorated. Namely, in the period 2015-2018 two loans were taken from Etihad Airways Partners (120 million USD in 2015-2016), a loan from the Development Fund (14 million EUR in 2017) and a loan from the Etihad (40 million USD in 2018). Total funds from these loans exceeded the total needs for servicing business obligations and covering investments. This is the reason why the structural liquidity problem and the inability to generate enough cash from regular operations to cover due liabilities was not initially visible, and the company did not lack the cash to perform activities until 2020. Thus, the first serious deterioration of the liquidity position occurs during 2019, when previously taken loans begin to fall due. Air Serbia ended 2019 with a significantly weakened liquidity position (half the cash balance of only 4 billion RSD, with which it reached 2020). In addition to all of the above, since its establishment, Air Serbia has been making a loss above the amount of capital, which means that assets (plants, machines, equipment, placements, cash,

etc.) are many times smaller than its liabilities. That makes her formally over-indebted, as it was before 2013. Simply put, accumulated liabilities “ate” capital, which is mainly a feature of public illiquid companies. At the end of 2019, Air Serbia’s total liabilities amounted to 41 billion RSD, while the total assets of the company were 26 billion RSD. This means that a loss was made above the amount of capital of as much as 15 billion RSD. Part of this loss indeed comes from the old debt of JAT, but even when the adjustment for that amount is made, the loss over the amount of capital is around 5 billion RSD (Fiscal council, 2020). Loss above the amount of capital, according to the current legislation of the Republic of Serbia, is a sufficient condition for initiating bankruptcy proceedings. This financial situation is certainly more than a sufficient reason for urgently initiating the procedure of another restructuring.

3.4. Organizational restructuring

The first changes in the organizational structure occurred before the strategic partnership. The change into a joint-stock company in itself conditioned the formation of certain organizational segment characteristics to this legal form. The company bodies have been formed, which include the General Meeting of Shareholders, the Supervisory Board and the Executive Board. Since 2013, as part of the overall restructuring process, Air Serbia has undertaken many activities in order to change the existing organizational structure and achieve better business performance. Completely new management has taken over the new national airline. As envisaged by the strategic partnership, the management set up Etihad, without the influence of the Government of Serbia, which was considered a more professional solution for running the company. The plan was the end of 2014 with a positive zero and that from the beginning of 2015 Air Serbia will be a profitable company. The governing bodies of Air Serbia are the General Meeting of Shareholders, consisting of two members, one appointed by the Government of the Republic of Serbia and the other by Etihad Airways, a 9-member supervisory board and an executive board consisting of six executive directors (Air Serbia, 2021a): Director, Executive Director for Finance, Executive Director for Transport, Executive Director for Relations with Government Bodies and Organizations, Executive Director for Human Resources and Executive Director for Commercial. The established new organizational structure was subject to changes even after 2013, mostly in the executive board. With the new organizational structure, the competencies of the general director have been increased, in line with professional management. To adequately respond to market demands, many specialized organizational units have been formed within each sector since 2013, for example, more recently E-Commerce, Guests Experience, and HR Business Partners. Following the Companies Act, the Air Serbia Supervisory Board has established an Ethics Committee and an Audit Committee to assist the work of the Executive and Supervisory Boards, in particular concerning the preparation of draft decisions and the provision of expert opinions. As a result of the restructuring, a new organizational unit was created as the Business Ethics and Compliance Service, i.e. an independent organizational unit that oversees the implementation and efficiency of the company’s ethics and compliance program. In 2014, Air Serbia also established its own sector for technical aircraft maintenance. The goal of this sector is to contribute to the faster development of Air Serbia, as well as better regularity and performance of aircraft. As part of the restructuring process, work was also done on streamlining the number of employees. When taking over the management function, the new management announced a surplus between 300-500 employees, while less than 100 employees applied for the social program that was announced in 2014. According to available data, in 2017 Air Serbia had a total of 2339 employees (SBRA, 2021). In the following year, a decrease in the number of employees was recorded, i.e. in 2018 there were 1758 employees, in 2019 there

were 1531 employees. In the conditions of a pandemic and an unprecedented crisis for airlines, Air Serbia suspended all new employment in March 2020. As a consequence of poor business due to the COVID-19 pandemic, the total number of employees in Air Serbia was reduced as at 31.12.2020. amounted to 1279 (SBRA, 2021).

3.5. Market restructuring

Marketing concepts, determining the scope and structure of market needs is one of the keys to business decision making. The strategic goal of the restructured marketing strategy is to increase the overall sales profit, good reputation, and improve and enhance marketing management. Air Serbia's marketing restructuring was certainly most visible to the public. In addition to the complete redefining and modernization of products, new names and designs, change and intensification of promotional activities, the impression is that most have been done in this segment. The number of products and services (Table 3) offered by Air Serbia has increased significantly, while quality and professionalism are gaining in importance, in line with the practice of leading airlines.

Table 3. Range of Air Serbia products and services

Services and products	Description
Flight services	Core products of Air Serbia
Additional products and services	Significantly changed and increased offer ⁷
<i>Aviolet</i>	Seasonal charter flights since 2014 ⁸
Air Serbia Services	Cargo, Catering, Ground Services
Type of classes	Economy and Business class
Air Serbia Premium Lounge	Exclusive lounge for passengers at Nikola Tesla Airport
Fleet	Priority modernization and fleet renewal

Source: Air Serbia, 2021.

As part of the restructuring, the development of a modern and economical Air Serbia fleet has been set as one of the priorities, so since 2013, the modernization and renewal of the fleet have been very dynamic. From October 2013 to 2016, a total of 9 Airbus aircraft arrived, and during 2020, Air Serbia will operate a fleet of 21 aircraft - 11 Airbus 319 aircraft, 1 A320 aircraft, 1 A330 aircraft, 5 ATR aircraft and 3 Boeing B737- 300 (SBRA, 2021). Furthermore, with the strategic changes from 2013, the goal was to strengthen the role of air traffic in the development and promotion of the tourist economy of Serbia. In 2020, Air Serbia performed direct traffic to 49 destinations from the home international airport "Nikola Tesla Belgrade", and at the same time connected Belgrade with Asia, Australia, as well as North and South America in cooperation with code-share partners and Etihad Airways. A new tariff concept was launched in January 2018 to try to compete with low-cost companies. The new system included Tariff 1 - Economy: Deal, Saver, Value, Freedom/ Business: Saver, Value, Freedom; and Tariff 2 - Economy: Standard, Comfort / Business: All-Inclusive (Air Serbia, 2021). The promotional policy is a segment of market restructuring to which great attention is paid. First of all, a complete rebranding and change of visual identity was carried out very successfully. A strong campaign made the new name, the new logo, the new brand was very quickly presented, accepted and recognizable.

⁷ Includes - special offer of meals and drinks on the flight, transport of sports equipment, travel with pets, escort for kids, gift vouchers, reservation seats in advance, XL luggage, package for special moments, championship check-in, priority boarding, luggage and passage at the passport control, assistance at the airport, package of additional services.

⁸ They are completely performed by Air Serbia. It was established precisely to meet the market's need for safe, reliable and quality service of this kind.

Air Serbia also recognized the importance of employer brand development as a key managerial and marketing tool for success (Vemić Đurković et al. 2018). The “Living Legends of Serbia” campaign was also conducted, by which the planes are named after famous people from Serbia. Various special promotional offers, as with most airlines, discounts for flights to further destinations, *Happy Friday* promotion, *Keep Boarding* are just some of the promotional activities that Air Serbia has introduced to attract more passengers. A completely new loyalty program has been created - *Air Serbia Guest Platinum, Gold and Silver club*, which gives service users plenty of options to earn various benefits. As part of the market restructuring, *Elevate* was established - a specialized magazine, which is the modern successor to the *Air Serbia Review*. The magazine has an important role in promoting and classifying Serbia as a “mandatory” destination in Europe. Then, in accordance with the new trends in marketing development, the *Air Serbia Affiliate* program was created as a program of cooperation between Air Serbia and influencers, people who work on the Internet and have their own website, portal, blog or forum. The mobile application Air Serbia has been developed, with all the usual features such as online ticket purchase, online check in, and the use of a mobile application that will further enhance the optimization process and is a new step towards a more sustainable future. A completely new look of branches in Serbia also has its marketing and promotional effect. The expansion of the sales network has been very intensive since 2014. The strategic partner Etihad played a big role, considering that it has points of sale all over the world. A large number of sales agents are involved in the domestic sales network. Increased number of direct lines, as well as further destinations with a transfer, thanks to the strategic ground floor and the new direct line Belgrade-Abu Dhabi. The previously mentioned direct line Belgrade - New York was re-established. Much has been done to reconnect the entire Balkan region and cities that have not been interconnected by air for more than twenty years.

4. IMPACT OF THE COVID-19 PANDEMIC ON AIR SERBIA

The COVID-19 pandemic caused a negative impact on the global tourism industry. Tourism needs open borders, a stable political and socio-economic environment and, above all, health and security conditions. The collapse of such stability on a global level has led, de facto, to the complete cessation of tourist movements. There is no doubt that this pandemic has devastated airlines. In 2020, total airline industry revenues were 328 billion USD, which is 40% of the previous year's and in nominal terms, it is the same as in 2000. The sector is expected to be smaller in the coming years, with the projection that air traffic won't return to 2019 levels before 2024 (Bouwer, J., et al. 2021). In line with that, the crises continued, which is confirmed by the fact that in April this year, about 27% of tourist destinations in the world completely or partially suspended international air flights (IATA, 2021). In light of the circumstances caused by the COVID-19 pandemic, the fact is that the air transport sector is one of the most affected, so Air Serbia could not avoid bad business results during 2020. In the first months of 2020, Air Serbia continued the growth trend from a record 2019 with an increase in the number of passengers in January and February to 30% compared to the same period last year (Air Serbia, 2021). However, the state of emergency, limitation of movements and business operations, paralyzed the traffic of goods and passengers in air traffic, which caused a sharp drop in the income of airlines around the world. According to the data (SORS, 2021), in air traffic, when it comes to the number of transported passengers and the realized volume of work, a decline is noticed. Compared to the previous year, the number of transported passengers decreased by 68.0%, and the realized volume of work was 63.2%. Increasing Serbia's ownership share in Air Serbia to 82% can be seen as state assistance in stabilizing the company, all in line with EU recommendations and commitments. Since the beginning of the

COVID-19, the market situation remains very unstable, as many travel restrictions and conditions drastically reduce demand. As a result, Air Serbia has halved the number of available routes. The company has reduced costs to mitigate the effects of the pandemic but is no longer able to cope with such high costs, which has resulted in voluntary redundancies and pay cuts. According to the report for 2020 (SBRA, 2021), in the year of the biggest crisis in the history of air traffic, Air Serbia realized 41.3% of traffic levels in 2019 and transported a total of 882 thousand passengers on scheduled and charter flights, which is a decrease of 68% compared to 2019, when it carried 2.744 million passengers. Cabin occupancy on Air Serbia flights was around 60%. In 2020, Air Serbia put all its human and material resources at the disposal of the Government of the Republic of Serbia, performing a large number of repatriation and evacuation flights as well as cargo flights that delivered hundreds of tons of medical equipment. According to the financial results, Air Serbia made a consolidated net loss of EUR 77.7 million in 2020. Consolidated net revenues reached only EUR 123 million, which is a 59% drop in revenues from the sale of goods and services. Proportionally, the number of realized flights has been reduced by the same percentage; in numbers, it is a decline from 16085 flights in 2019 to 6413 flights in 2020. In 2020, Air Serbia repaid a loan of 57.6 million dollars to the fund Etihad Airways Partners, which it took in 2015, and in June 2021, another 63 million dollars of the loan were repaid (Nova ekonomija, 2021). This ameliorates the situation, but still, the future is uncertain because the length of the epidemiological crisis, and economic and tourism recovery cannot be predicted (Kisin et al. 2021: 376). The Serbian government has adopted a budget proposal for 2022, which again envisages subsidies for Air Serbia, as one of over 60 companies of “special importance” that will be allocated more than 170 million euros. These subsidies should cover loans maturing in the coming years, as well as the loss that the company is expected to make as a result of the pandemic.

The question is often asked whether the COVID-19 pandemic is the cause of all problems in Air Serbia (Fiscal Council, 2020)? It is certainly an indisputable fact that the pandemic has particularly affected the air transport sector, but in the case of Air Serbia, it is definitely not the only cause of business difficulties. The presentation of business results in the period 2015-2019 shown in the section on financial restructuring unequivocally shows that Air Serbia had difficulties in doing business before the outbreak of the pandemic. Without state aid, which is at first sight hidden in revenue, Air Serbia would be operating with loss four years in a row. The new Tourism Development Strategy of Serbia envisages direct budget support for activities that contribute to the development of tourism. Air Serbia received 1.4 billion RSD from the Government for support of the transport network development and with the “goal of encouraging and developing tourism and general connectivity of Serbia, in accordance with the Tourism Development Strategy” (Government of the Republic of Serbia, 2021). The tourism development has been adopted for the period until 2025, so the question is whether the state will continue to subsidize Air Serbia on the same basis in the next four years?

5. NEW RESTRUCTURING PLANS FOR AIR SERBIA

The future of the Serbian national airline could be described as uncertain, if we consider the current operating costs, high indebtedness, business results during previous years, as well as the circumstances in the middle of COVID-19 with projections for the recovery of the aviation sector. The airline industry is a very dynamic and challenging sector, structurally difficult with numerous weaknesses continuing, so transformation processes are often, necessary and always difficult, also common, and frequently disappointing (Bouwer et al. 2019). Fundamental shifts that call for action have arisen from the pandemic and the airline sector is poised for

change in the post-COVID-19 period (Bouwer, J., et al. 2021). In the process of restructuring, playing the card of a strategic partnership with a stable company such as Etihad in 2013 seemed to be the optimal solution. However, in just a few years, the situation has changed drastically, so the big question is how much can be counted on Etihad in the future. It is hard to expect that Air Serbia will be able to eliminate the standard structural deficit that it has had for years. Secondly, the pandemic is not over and the question is when the real recovery of the airline industry will begin. Air traffic in 2021 is growing when it comes to passenger transport. The number of passengers in air traffic is higher by 6.3%, and the realized passenger kilometers are higher by 20.6% (SORS, 2021), but this is still far from returning to the pre-COVID-19 level. Forecasts show that a full recovery cannot be expected before 2024, which is why the estimation that Air Serbia could record a loss in 2021 as well is justified. In that sense, future research will be focused on the recovery dynamics of both - Air Serbia and the tourist sector of Serbia. There is a small chance that, even in good circumstances, Air Serbia will start operating profitably before 2025 and become self-sustaining. The second biggest problem of Air Serbia is the high indebtedness and maturity of loans by the end of 2022, which should be especially monitored in the coming period as a potential risk. The payment of JAT's "historical debt", which is still a big burden for Air Serbia, will last until 2023 (Nova ekonomija, 2021). In the post-pandemic period, research needs to be focused on ways that will finally enable Air Serbia to operate independently, which certainly implies a new process of fundamental restructuring in line with European practice. Without changing the business model, it is impossible to expect that Air Serbia will start operating profitably after the pandemic and the normalization of air traffic in Europe and the world. The new restructuring, which in the case of Air Serbia would certainly include a reduction in costs and increased productivity, requires a serious study to see with which dynamics Air Serbia can become a profitable business. If subsidizing Air Serbia is necessary, it should be in line with EU practice, for companies that had difficulties before the COVID-19, which means that the precondition for approving funds is the new restructuring process and change of business model. There is certainly a new restructuring plan under the direct control of the EU for state aid, but such a plan is not publicly available, nor was it obtained from the Ministry of Finance at the request for the purposes of this analysis.

6. CONCLUSION

With the establishment of Air Serbia and a strategic partnership with Etihad Airways, a new era of Serbian airline transport and tourism has begun. New brand, lines, fleet, various promotions, new IT platform, new branches, strong marketing, and digitalization are just some of the most significant changes that characterize the strong development of Air Serbia. In this regard, Air Serbia's corporate restructuring and strategic partnership were the right moves. Since the official start in October 2013, Air Serbia has moved in the direction of positioning itself as a regional leader, working on expanding its transport network and modernizing and renewing its fleet. In the first four years (2014-2017), Air Serbia carried over 10 million passengers, with a tendency to grow from year to year, while in the first six years it doubled the number of passengers annually. The goals of the shareholders, to create new opportunities for the company and a large number of destinations that make it considered one of the most successful companies in the region, have been achieved. It is a matter of fact that Air Serbia has made a big success concerning JAT's business, as an over-indebted company on the verge of bankruptcy. However, based on the research in this case study, we can conclude the success of corporate restructuring and point in another direction. The restructured strategy itself was good, with a lot of positive results and achieved goals. On the other hand, the analysis of financial restructuring indicators concludes that Air Serbia made a

profit according to the income statement, but it is necessary to point out that since 2014 Air Serbia has received state aid every year, which calls into question the real success of the business. Also, there is still a high indebtedness of the company, which can be a great obstacle to the realization of Air Serbia as a self-sustaining company. Air Serbia is still at the expense of the Serbian budget, and in that sense, it cannot be unequivocally concluded that this is a successful corporate restructuring. Given this fact, the question often arises as to whether Serbia needs such a national airline at all. Certainly, we should not ignore the fact that the economic influence of one airline has greatly exceeded the area of operational activities and that it is undoubtedly a strategic issue, an issue of wider social significance, an issue of reputation and strength of the state. The services it provides facilitate a whole range of economic activities in the local and global economy - from the beginning of business interactions, to enabling the arrival of foreign direct investment, all the way to encouraging the development of trade and tourism. This specific impact can be measured by the overall contribution to air connectivity as a key driver of economic growth and development, thus facilitating the country's participation in the global economy. All this becomes even more important when we add the current experience we have with the COVID-19 pandemic and how important the national airline is in emergencies. The fact is that in the current circumstances of the COVID-19 pandemic, airlines cannot do without state interventionism; however, assistance to Air Serbia exists and is in the years before the crisis. It is necessary to do business much better, make a plan for new restructuring, make a deep and transparent study and decision till when the state will give financial support, deadlines, contingency plans, professional staff, and dedicated work on building a stable and financially independent airline. Despite the existing problems in previous years, which were further multiplied by the COVID-19 pandemic, the national airline should be preserved. Namely, it should be given a chance to find an appropriate management model in the coming period, which will provide lasting security to the company and service users. With the necessary rationalization of the number of employees to the level of job optimization, the cost side of the budget would be significantly relieved and space would be created for investments and expansion of the capacity of supporting jobs in the tourist offer segment. A reform plan has to be supported with a detailed analysis of business results so far, to ensure that the entire process of business consolidation is a public and comprehensive program, which will ensure that Air Serbia after the implementation of that program does not fall again at the expense of taxpayers. Numerous contemporary challenges, crises such as the one we are currently witnessing and modest business results seven years after the strategic partnership and corporate restructuring, lead us to the need for a new strategic restructuring. If the Government of Serbia does not decide to take such a step in the coming period, the unsustainability of business will continue and Air Serbia will certainly be past tense.

REFERENCES

- Abeyratne, R. (2012). *Strategic Issues in Air Transport*. Heidelberg, Germany: Springer.
Retrieved on: September 15, 2021.
- Air Serbia. (2021a). *Naša priča*.
- Akywen, R. (2011). The impact of restructuring on the airline performance: The case of Garuda Indonesia. *Výskumné štúdie*, 112-132. <https://www.communicationtoday.sk/download/1/2011/Akyuwen%20-%20CT%201-2011.pdf> Retrieved on: September 06, 2021.
- Aviatica. (2020). Air Serbia objavila rekordne rezultate u 2019. godini. October 10.
- Bajić, J., Tatalović, M., Kučko, K. (2015). Aviokompanije i sustavno upravljanje poslovnim rizicima-izazovi Croatia Airlinesa. *Časopis za ekonomiju i tržišne komunikacije*, 5(2): 297-314. DOI: 10.7251/EMC1502297B

- Beránek, J., (2013). *Ekonomika cestovného ruchu*. 1. vyd. Praha: mag Consulting. ISBN 978-808-6724-461.
- Bouwer, J., Hahn, S., Maxwell, D. and Rüden J. (2019). *How to transform your airline?* McKinsey & Company, 2019. <https://www.mckinsey.com/>
- Bouwer, J., Saxon, S and Wittkamp, N. (2021) *Back to the future? Airline sector poised for change post-COVID-19*, McKinsey & Company, 2021. <https://www.mckinsey.com/>
- Bradowski, J. (1991) Restructuring is a continuous process. *Long Range Planning*, 24 (1): 10-14.
- Craig, V. (1999). *Air transport sector restructuring*. Malaysia: Halcrow AirPlain. https://www.icao.int/meetings/amc/ma/1999/aps/13_pp_craig_e.pdf Retrieved on: September 21, 2021.
- De Wit, B. and Meyer, R. (2004). *Strategy Process, Content, Context – An International Perspective*. London: Thomson.
- DePamphilis, D. (2010). *Mergers and Acquisitions Basic Negotiation and Deal Structuring*, USA: Academic Press/Elsevier.
- Erić, D. & Stošić, I. (2013). *Koprporativno restrukturiranje*. Beograd, Srbija: Institut ekonomskih nauka.
- Erić, D. (2000). *Uvod u menadžment*. Beograd, Srbija: Čigoja štampa i Ekonomski fakultet.
- Fiscal council - Republic of Serbia (2020). *Ocena predloga Zakona o budžetu za 2021. godinu*, Novembar 01. http://www.fiskalnisavet.rs/doc/ocene-i-misljenja/2020/fs_ocena_
- Geoffrey, W. & Alister, M. (2006). *Tourism: change, impacts and opportunities*. Harlow, UK: Pearson Education Limited.
- Government of Republic of Serbia. (2021). *Strategija razvoja turizma do 2025. godine* <https://www.srbija.gov.rs/dokument/45678/strategije-programi-planovi-.php> Retrieved on: September 24, 2021.
- <https://novaekonomija.rs/vesti-iz-zemlje/subvencije-za-er-srbiju-i-u-bud%C5%BEtu-za-2022-godinu> Retrieved on: October 03, 2021.
- <https://www.airserbia.com/air-serbia-etihad-guest/program-lojalnosti/o-programu>
- https://www.airserbia.com/footer_menu/kompanija/affiliate-program/kako-program-funkcionise
- https://www.airserbia.com/footer_menu/kompanija/elevate/
- https://www.airserbia.com/footer_menu/kompanija/novosti/novosti?id=618
- https://www.airserbia.com/footer_menu/kompanija/odrzivo-poslovanje
- https://www.airserbia.com/footer_menu/kompanija/o-nama/etika-i-uskladjenost-poslovanja
- https://www.airserbia.com/footer_menu/kompanija/o-nama/nasa-prica
- https://www.airserbia.com/footer_menu/servisi
- <https://www.airserbia.com/informacije/pre-leta/tarife/brendirane-tarife>
- <https://www.airserbia.com/specijalne-ponude>
- <https://www.aviatica.rs/air-serbia-objavila-rekordne-rezultate-u-2019-godinu/> Retrieved on September 11, 2021.
- Ignjatović, J., Kisin, J. & Brajković, M. (2020). Export as a trigger of economic growth of the Republic of Serbia. *Business Economics*, 14 (2): 19-38.
- Ignjatović, J., Kisin, J. & Mashović, A. (2021). *Economic aspects of the Covid-19 Pandemic in the Western Balkans region*. Paper presented at International scientific conference “Sustainable economic transformation in the post pandemic period”, Educons University, Novi Sad, Serbia, October 15, 2021 (pp.63-88). Novi Sad: Educons University.
- Karampela, C., Kizos, T. & Spilanis, I. (2016). Evaluating the impact of agritourism on local development in small islands. *Island Studies Journal*, 11 (1), 161-176.
- Kisin, J., Mihić, S. & Ignjatović, J. (2021). Ekonomski aspekti pandemije COVID-19: Slučaj Republike Srbije. *Ecologica*, 28 (103): 369-377.

- Listeš, K.C. (2018). *Poslovni savezi u putničkom zračnom prometu kao oblik restrukturiranja preduzeća*. Split: Sveučilište u Splitu, Ekonomski fakultet.
- Mansury, Y. & Hara, T. (2007). Impacts of Organic Food Agritourism on a Small Rural Economy: A Social Accounting Matrix Approach, *The Journal of Regional Analysis & Policy*, 37(3), 213-222.
- Marjanović, I., Rađenović, Ž., & Marković, M. (2019). EU members multi-criteria ranking according to selected travel industry indicators. *4th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era, Belgrade*. 639-655. DOI: <https://doi.org/10.31410/tmt.2019.639> Retrieved on: September 28, 2021.
- Milojević, N. (2017). *Analiza privrednog društva Air Serbia pre i posle strateškog partnerstva sa Etihad Airways avio-kompanijom i projekcija za budući period*. Beograd, Srbija: Univerzitet Singidunum,
- Mirović, V., Kalaš, B. & Pavlović, N. (2020). An empirical analysis of relationship between tourism and economic growth: panel evidence from Western Balkan countries. *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era, Belgrade*. 39-53. DOI: <https://doi.org/10.31410/tmt.2020.39> Retrieved on: September 28, 2021.
- More, G. (2015). *A project report on a study on corporate restructuring of Air India*. Mumbai: University of Mumbai. <https://pdfcoffee.com/corporate-restructuring-of-air-india-pdf-pdf-free.html> Retrieved on: September 18, 2021.
- Njeguš, N. (2014). *Specifičnosti procesa restrukturiranja u privredi Republike Srbije*. Beograd, Srbija: Univerzitet Singidunum.
- Nova ekonomija. (2021). *Subvencije za Er Srbiju i u budžetu za 2022. godinu*. September 11.
- Pešić, A. (2019). (In Press). Definicija uspešnosti: Šta jednu avio-kompaniju čini najboljom na svetu? *Turistički svet*. <https://www.turistickisvet.com/vesti/turizam/definicija-uspesnosti-sta-jednu-avio-kompaniju-cini-najboljom-na-svetu.html>
- Petrevska, B. (2017). Predicting tourism demand by A.R.I.M.A. models. *Economic Research – Ekonomska istraživanja*, 30(1), 939-950. DOI: 10.1080/1331677x.2017.1314822
- Pjanić, M. (2019). Economics effects of tourism on world economy. *4th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era, Belgrade*. 291-307. DOI: <https://doi.org/10.31410/tmt.2019.291> Retrieved on: September 21, 2021.
- Pjanić, M., Andrašić, J., & Mitrović, V. (2018). Analysis of financial effects of tourism on economy in Serbia. *3rd International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era, Belgrade*. 115-129. DOI: <https://doi.org/10.31410/tmt.2018.115> Retrieved on: September 21, 2021.
- Počuča, M., Obradović-Matijašević, J. (2018). A strategic approach to the key modern tourism trends in the Republic of Serbia, *3rd International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era, Belgrade*. 369-383. DOI: <https://doi.org/10.31410/tmt.2018.369> Retrieved on: September 21, 2021.
- Počuča, M., Obradović-Matijašević, J. (2019). Analysis of quantitative indicators of modern tourism development in the Republic of Serbia. *4th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era, Belgrade*. 493-509. DOI: <https://doi.org/10.31410/tmt.2019.493> Retrieved on: September 21, 2021.
- predloga_budzeta_za_2021_godinu_final.pdf Retrieved on: August 12, 2021.
- Rogerson, C.M., Rogerson, J. M. (2014). Agritourism and local economic development in South Africa. *Bulletin of Geography, Socio-economic Series*, 26 (26), pp. 93-106.
- Samaras, A. H. (2004). Corporate Restructuring - An Overview. [Online] *Pytheas*.

- Statistical Office of the Republic of Serbia (SORS) (2021). *Statistika saobraćaja i veza, Ukupan prevoz putnika i robe*. Prvo polugodište 2021. br. 260. LX XI, September 24. <https://www.stat.gov.rs/sr-Latn/oblasti/saobracaj-i-telekomunikacije/prevoz-putnika-i-robe> Retrieved on: October 03, 2021.
- Štefko, R., Gallo, P. & Matušiková, D. (2018). Modern managerial methods and their potential in context of regional tourism development. *3rd International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era*, Belgrade. 101-115. DOI: <https://doi.org/10.31410/tmt.2018.101> Retrieved on: September 21, 2021.
- Stošić, I. (2014). Korporativno restrukturiranje preduzeća u svetu i Srbiji. *Poslovna ekonomija*, 8(1): 157-176. <https://scindeks-clanci.ceon.rs/data/pdf/1820-6859/2014/1820-68591401157S.pdf> Retrieved on: August 22, 2021.
- Tatalović, M. (1990). Deregulacija I liberalizacija zračnog prometa u Evropi i Jugoslaviji. *Tehnologija i organizacija*, 2 (5/6): 421-428.
- The International Air Transport Association (IATA). (2021). Publications. www.iata.org
- The Serbian Business Registers Agency (SBRA) (2021). Pretraga evidencije obveznika finansijskih izveštaja. September 01. <http://pretraga3.apr.gov.rs/pretragaObveznikaFI/Home/Index>
- Vance D. (2009). *Corporate restructuring, From cause analysis to execution*. London and New York: Springer.
- Vemić Đurković, J., Muhi, B., Marinović Matović, I. (2021): Communication of Company Mission and Values as an Essential Element of Human Resource Management in the State of Emergency, *The International Thematic Monograph – Thematic Proceedings: Psychology of Disaster, State of Emergency and their Effects on Health*, University of Priština, Kosovska Mitrovica. 153-177. ISBN 978-86-6349-160-1
- Vemić Đurković, J., Muhi, B., Nikolić, I. (2018): Employer Brand as a Key Managerial Tool for Achieving Success of the Tourist Company, *3rd International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era*, Belgrade. 159-171. DOI: <https://doi.org/10.31410/tmt.2018.115> Retrieved on: September 21, 2021.
- Wall G., Mathison A. (2006). *Tourism: change, impacts and opportunities*. Harlow: Pearson Education Limited.
- Wan, W.P. and Yiu D.W. (2009). From crisis to opportunity: Environmental jolt, corporate acquisitions, and firm performance. *Strategic Management Journal*, 30: 791–801.
- Yawson, A. (2009). Interaction effects of restructuring decisions on operating profit following performance shocks. *Journal of Economics and Business*, 61: 216–237.



Measuring Perceived Tourism Service Quality in Quantitative Marketing Research

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Abstract: *The need to measure service quality in the tourism industry is present for decades. During that period many different instruments designed to perform that measurement were developed. However, the analysis performed when using those instruments relatively rarely relies on scientific contributions by which service quality should be treated as reflective-formative constructs. Such misspecifications can lead to serious mistakes in the results and can raise doubts about implications from studies that do not consider service quality appropriately. Having all previously stated in mind, this paper has three main objectives. The first objective is to present instruments designed to measure perceived tourism service quality in one place. The second goal is to demonstrate the view of perceived service quality as second order formative-reflective construct. Finally, the third objective is to present simulation of differences in the results when treating perceived service quality as reflective-reflective and as a reflective-formative construct.*

1. INTRODUCTION

When it comes to service quality, there can be identified two conceptualization models (Arias-Bolzmann et al., 2018). The first model is known as the Nordic model, which was developed by Grönroos. It incorporates two dimensions: technical and functional quality. In the case of the former, the emphasis is on what the customer directly receives as a result of the process, while considering latter, the stress is on “how” the service is provided. Such a model is also present in the research of tourism services as will be presented later (e.g. Ali et al., 2016). The second model is known as American (Arias-Bolzmann et al., 2018). It was developed by Parasuraman, Zeithaml and Berry, and is founded on the disconformity paradigm i.e. the difference between the expected level of service and the customer’s perception of it. That model is implemented to a larger extent in research, including in those of a tourism service quality (Ali et al., 2016), although the instrument originating from that approach is sometimes adapted to specific circumstances (e.g. Knutson et al., 1990; Getty & Thompson, 1994; Wong Ooi Mei et al., 1999; Frochot & Hughes, 2000; Getty & Getty, 2003) or even the measurement is performed only for performances (Cronin & Taylor, 1992).

Many instruments are concretely used for measuring tourism service quality (Liu et al., 2016; Ali et al., 2016). They are to a large extent based on the SERVQUAL instrument. However, because of the wide range of circumstances in which tourism services are delivered as well as different aspects of that process, the adaptations of the previously mentioned instrument or development of new ones are performed, resulting in questionnaires measuring the quality of services provided in lodging, hotels, historic houses, at specific destinations, regarding food as souvenirs, etc.

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An important issue regarding tourism service quality is its operationalization. It has sometimes been operationalized in different wrong manners: as a single-item measure, as a first-order reflective construct or by using first-order subdimensions as separate latent constructs, which can lead to empirical bias and create measurement errors (Hallak et al., 2017). Even the researchers that treat service quality as higher-order construct, often present it as reflective-reflective instead of reflective-formative (Liu et al., 2016). That can also have, as is stressed in a general case by Jarvis et al. (2003), significant consequences for theoretical conclusions regarding the model.

2. INSTRUMENTS FOR MEASURING TOURISM SERVICE QUALITY

In the literature, there can be identified different instruments for measuring perceived service quality in the tourism area: SERVQUAL, SERVPERF, LODGQUAL, HOLSERV, LODGSERV, HISTOQUAL, LQI (Liu et al., 2016; Ali et al., 2016). In addition, many instruments have no specific names but do have specific dimensions as described by Ali et al. (2016). Hereby, in this section are provided items and dimensions of previously listed instruments, as well as of some of the instruments used in part of the research conducted in recent years.

Table 1 presents dimensions (dim.) and items of the original SERVQUAL instrument. The instrument is based on the gap theory. Within it are observed service users' expectations regarding the performance of a general class of service providers on one side. On the other side, attention is devoted to the assessment of the actual performance of a specific service provider. The difference between performances and expectations is what drives the perception of service quality. It should be however noted that items written in italic in Table 1 must be reverse coded. A later development introduced the possibility to add important weights regarding elements of the instrument.

Table 1. SERVQUAL instrument

Dim.	Items - expectations	Items - performances
Tangibles	• They should have up-to-date equipment & technology.	• XYZ has up-to-date equipment.
	• Their physical facilities should be visually appealing.	• XYZ 's physical facilities are visually appealing.
	• Their employees should be well dressed and appear neat.	• XYZ 's employees are well dressed and appear neat.
	• The appearance of the physical facilities of these institutions should be in keeping with the type of services provided.	• The appearance of the physical facilities of XYZ is in keeping with the type of service provided.
Reliability	• When these institutions promise to do something by a certain time, they should do so.	• When XYZ promises to do something by a certain time, it does so.
	• When customers have problems, these institutions should be sympathetic and reassuring.	• When you have problems, XYZ is sympathetic and reassuring.
	• These institutions should be dependable.	• XYZ is dependable.
	• They should provide their services at the time they promise to do so.	• XYZ provides its services at the time it promises to do so.
	• They should keep their records accurately.	• XYZ keeps its records accurately.
Responsiveness	• <i>They shouldn't be expected to tell their customers exactly when services will be performed.</i>	• <i>XYZ does not tell its customers exactly when services will be performed.</i>
	• <i>It is not realistic for customers to expect prompt service from employees of these institutions.</i>	• <i>You do not receive prompt service from XYZ employees.</i>
	• <i>Their employees don't always have to be willing to help customers.</i>	• <i>Employees of XYZ are not always willing to help customers.</i>
	• <i>It is okay if they are too busy to respond to customer requests promptly.</i>	• <i>Employees of XYZ are too busy to respond to customer requests promptly.</i>

Assurance	• Customers should be able to trust employees of these institutions.	• You can trust employees of XYZ.
	• Customers should be able to feel safe in their transactions with these institutions' employees.	• You can feel safe in your transactions with XYZ's employees.
	• Their employees should be polite.	• Employees of XYZ are polite.
	• Their employees should get adequate support from these institutions to do their jobs well.	• Employees get adequate support from XYZ to do their jobs well.
Empathy	• <i>These institutions should not be expected to give customers individual attention.</i>	• <i>XYZ does not give you individual attention.</i>
	• <i>Employees of these institutions cannot be expected to give personal attention to customers.</i>	• <i>Employees of XYZ do not pay personal attention to you.</i>
	• <i>It is unrealistic to expect employees to know what the needs of their customers are.</i>	• <i>Employees of XYZ do not know what your needs are.</i>
	• <i>It is unrealistic to expect these institutions to have their customers' best interests at heart.</i>	• <i>XYZ does not have your best interests at heart.</i>
	• <i>They shouldn't be expected to have operating hours convenient to all their customers.</i>	• <i>XYZ does not have operating hours convenient to all its customers.</i>

Source: Parasuraman et al. (1988)

Although criticized from several aspects, the approach based on the gap model is present in the literature from the moment the instrument was introduced.

Cronin and Taylor (1992) argue that performance-based measure of service quality (SERVPERF) may be an improved means of measuring the service quality construct, whereas it outperforms SERVQUAL (Service Quality = (Performance – Expectations)), weighted SERVQUAL (Service Quality = Importance* (Performance - Expectations)), and weighted SERVPERF (Service Quality = Importance* (Performance)). However, it should be noted that the items used in that approach are equal to the original items from SERVQUAL but only on its performance side.

Table 2. LODGQUAL instrument

Dimensions	Items
Tangibles	• Front desk was visually appealing.
	• Employees had neat, clean uniforms.
	• Rooms were comfortable.
	• Property was bright and well lighted.
	• Property was well maintained.
	• Property was clean.
	• Mechanical equipment worked correctly.
	• Property provided a safe environment.
Reliability	• Room service orders were correct.
	• Room service bills were correct.
	• Meeting arrangements carried out OK.
	• Check-in/out procedures were efficient.
Contact	• Employees greeted me with a smile.
	• Employees helped me solve problems.
	• Reservations were made accurately.
	• Employees accurately answered questions.
	• Employees were committed to a good job.
	• I received individual attention.
	• Reservationists made an effort to accommodate my needs.
	• Employees were eager to please me.
	• Employees understood my problems.
	• Employees listened to me.

Source: Getty & Thompson, 1995.

The LODGQUAL scale was developed to measure customers' perceptions of delivered quality within the lodging industry. The scale is based upon SERVQUAL, but the results reveal that there were three dimensions: tangibility, reliability and contact. The initial 68 items can be seen in Getty and Thompson (1994), while the adapted version of 22 item scale was provided in Getty and Thompson (1995). The dimensions and items of that scale are presented in Table 2.

Knutson et al. (1990) developed an instrument named LODGSERV. The intention was to measure expectations for service quality in the hotel experience. It is also based on SERVQUAL and keeps its five dimensions. The instrument consists of 26-items, as can be seen in Table 3.

Table 3. LODGSERV instrument

Dimensions	Items
Reliability	• Equipment Works
	• Dependable/Consistent
	• Quickly Correct Problems
	• Services On-Time
Assurance	• Trained/Experienced Employees
	• You Feel Comfortable
	• Company Supports Employees
	• Knowledgeable Staff
	• Reservationists Are Knowledgeable
Responsiveness	• Prompt Service
	• Staff Shift Where Needed
	• Do Special Requests
Tangibles	• Neat Personnel
	• Quality Food/Beverage
	• Attractive Room
	• Decor Reflects Concept
	• Attractive Public Areas
	• Up-To-Date Equipment
Empathy	• You Feel Special/Valued
	• No Red Tape
	• Sympathetic Employees
	• Sensitive Employees
	• Convenient Hours
	• Anticipates Your Needs
	• Complimentary Services
	• Has Healthful Menus

Source: Knutson et al., 1990.

Wong Ooi Mei et al. (1999) researched the dimensions of service quality in the hospitality industry. The resulting instrument is shown in Table 4.

The authors started from the SERVQUAL scale and extended it by including eight new items specific to the hospitality industry and named the instrument HOLSERV. Within the instrument, there are 27 items belonging to three dimensions: employees (their behaviour and appearance), tangibles and reliability. The questionnaire was formulated in one-column format, whereas the items were measured on a seven-point scale (from "completely failed to meet my expectations" to "far exceeded my expectations"). Besides the items and their corresponding dimensions, in Table 4 are also presented the dimensions of SERVQUAL to which items originally belonged (either originally or customised or being new).

Frochot and Hughes (2000) developed a historic houses assessment scale (Table 5).

Table 4. HOLSERV instrument

Dimensions	Items	Original dimensions
Employees	• Gives prompt service.	Responsiveness
	• Always willing to help.	Responsiveness
	• Never too busy to respond to guests' requests.	Responsiveness
	• Instils confidence in guests.	Assurance
	• Guests feel safe in the delivery of services.	Assurance
	• Polite and courteous employees.	Assurance
	• Have the knowledge to answer questions.	Assurance
	• Have the skill to perform the service.	Assurance
	• Gives individual attention.	Empathy
	• Deals with guests in a caring fashion.	Empathy
	• Has guests' best interests at heart.	Empathy
	• Understands guests' specific needs.	Empathy
	• Neat and professional employees.	Tangibles
Tangibles	• Equipment, fixtures and fittings are modern looking.	Tangibles
	• Facilities are visually appealing.	Tangibles
	• Materials are visually appealing.	Tangibles
	• Fixture and fittings are comfortable.	Tangibles
	• Equipment and facilities are easy to use.	Tangibles
	• Equipment and facilities are generally clean.	Tangibles
	• Variety of food and beverages meet guests' needs.	Tangibles
	• Services are operated at a convenient time.	Tangibles
Reliability	• Promises to provide a service and does so.	Reliability
	• Shows dependability in handling service problems.	Reliability
	• Performs the service right the first time.	Reliability
	• Provides services at the time it promises to do so.	Reliability
	• Tells guests exactly when the services will be performed.	Responsiveness
	• Guests feel safe and secure in their stay.	Assurance

Source: Wong Ooi Mei et al., 1999.

Table 5. HISTOQUAL instrument

Dimensions	Items
Responsiveness	• Staff are always helpful and courteous.
	• Staff are willing to take time with visitors.
	• Visitors are made to feel welcome.
	• Level of crowding is tolerable.
	• Staff are well informed to answer customers' requests.
	• Visitors feel free to explore, there are no restrictions to access.
	• The property and grounds are opened at convenient hours.
	• Staff are always available when needed.
Tangibles	• The property is well kept and restored.
	• The general cleanliness and upkeep of the property and grounds is satisfying.
	• The grounds are attractive.
	• The site has remained authentic.
	• Direction signs to show around the property and grounds are clear and helpful.
	• The garden and/or park contain a large variety of plants.
	• The interior of the house offers a lot of interesting things to look at.
Communications	• The written leaflets provide enough information.
	• The information on the property and grounds is detailed enough.
	• Visitors are well informed of the different facilities and attractions available at the property.
	• Foreign language leaflets are helpful.

Consumables	• The restaurant offers a wide variety of dishes and refreshments.
	• The shop offers a large variety of goods.
	• The restaurant' staff provides efficient service.
Empathy	• The property considers the needs of less able visitors.
	• Facilities for children are provided.

Source: Frochot & Hughes, 2000.

The authors start from the SERVQUAL scale as a useful tool to measure service quality but stress the need for its adaptation. During the survey for the development of the instrument named HISTOQUAL, the respondents were asked to rate on a five-point scale whether they believed the attraction had the features described in individual statements. The result was a 24-item solution with five corresponding dimensions, as can be seen in the previous table.

Getty and Getty (2003) developed Lodging quality index (LQI) which was specific by taking into account all ten dimensions that were considered in developing original SERVQUAL (reduced later to five). The resulting questionnaire can be seen in Table 6.

Table 6. LQI instrument

Dimensions	Items
Tangibility	• The front desk was visually appealing.
	• The employees had clean, neat uniforms.
	• The restaurant's atmosphere was inviting.
	• The shops were pleasant and attractive.
	• The outdoor surroundings were visually attractive.
	• The hotel was bright and well lighted.
	• The hotel's interior and exterior were well maintained.
	• The hotel was clean.
Reliability	• My reservation was handled efficiently.
	• My guestroom was ready as promised.
	• TV, radio, A/C, lights, and other mechanical equipment worked properly.
	• I got what I paid for.
Responsiveness	• Employees responded promptly to my requests.
	• Informative literature about the hotel was provided.
	• Employees were willing to answer my questions.
	• Employees responded quickly to solve my problems.
	• Room service was prompt.
Confidence	• Employees knew about the local places of interest.
	• Employees treated me with respect.
	• Employees were polite when answering my questions.
	• The hotel provided a safe environment.
	• The facilities were conveniently located.
Communication	• Charges on my account were clearly explained.
	• I received undivided attention at the front desk.
	• Reservationists tried to find out my particular needs.
	• Employees anticipated my needs.

Source: Getty & Getty, 2003.

The adapted version of the previous instrument was integrated as part of the model that use Ali et al. (2016). The LQI instrument was used for measuring functional quality. However, the authors stress that technical quality, often neglected in research, should be measured as well. For its measurement, they relied on another previously developed instrument, that included dimensions named sociability, valence and waiting time. This approach is in accordance with the Nordic conceptualization model of service quality developed by Grönroos. The first version of the instrument is presented in Table 7, while the items typed in italic were deleted because of low factor loadings.

Table 7. Instrument for measuring functional and technical quality

Dimensions	Items
Tangibility	• The front desk was visually appealing.
	• The employees had clean, neat uniforms.
	• The hotel's atmosphere was inviting.
	• The hotel's interior was pleasant and attractive.
	• The outdoor surroundings were visually attractive.
	• The hotel was bright and well lighted.
	• The hotel's interior and exterior were well maintained.
	• <i>The hotel was clean.</i>
Reliability	• My reservation was handled efficiently.
	• My room was ready as promised.
	• All the equipment in the room worked properly.
	• I got what I paid for.
Responsiveness	• Employees responded promptly to my requests.
	• Informative literature about the hotel was provided.
	• Employees were willing to answer my questions.
	• Employees responded quickly to solve my problems.
	• Room service was prompt.
Confidence	• Employees knew about local places of interest.
	• Employees treated me with respect.
	• Employees were polite when answering my questions.
	• The hotel provided a safe environment.
	• The facilities were conveniently located.
Communication	• Charges on my account were clearly explained.
	• I received undivided attention at the front desk.
	• Reservationists tried to find out my particular needs.
	• <i>Employees anticipated my needs.</i>
Sociability	• I was provided with opportunities for social interaction.
	• I felt a sense of belonging with other customers.
	• I made social contacts.
Valence	• At the end of my stay, I felt that I had a good experience.
	• When I left, I felt that I've got what I wanted.
	• <i>I would evaluate the outcome of the services favourably.</i>
Waiting time	• The waiting time for service was reasonable.
	• The employees tried to minimize my waiting time.
	• The employees understood that waiting time is important to me.
	• The employees provided service for me punctually.
	• <i>The employees were able to answer my questions quickly.</i>

Source: Ali et al., 2016.

Dmitrović and Žabkar (2010) consider tourism quality at the destination level. They use different quality attributes (including attributes that are destination-specific) for assessing the quality of a city destination, seaside destination and spa-recreational destination. Not all of the attributes were connected to all three destinations (minus in the appropriate column in the table). The participants evaluated the level of their approval that certain attribute was exceptional/at an exceptionally high level at a particular tourist destination, as well as the overall quality of the tourist destination. The list of the attributes can be seen in Table 8.

Hallak et al. (2017) consider the perceived quality of tourism destinations in the case of Australia. The authors used a model of reflective-formative type. The items were measured on a five-point Likert scale from 1 – “much lower than my expected quality level” to 5 – “much higher than my expected quality level”. Those items as well as the six dimensions to which those items belong are presented in Table 9.

Table 8. Measuring tourism service quality through destination attributes

Attributes	City destination	Seaside destination	Spa-recreational
Personal safety and security	+	+	+
Destination can be reached easily	+	+	+
Overall cleanliness of the destination	+	+	+
Unspoiled nature	+	+	+
Climate conditions	+	+	+
Diversity of cultural/historical attractions (architecture, tradition and customs...)	+	+	+
Quality of accommodation (hotel, motel, apartment...)	+	+	+
Friendliness of local people	+	+	+
Organization of local transportation services	-	-	-
Local cuisine	+	+	+
Possibilities for shopping	+	+	+
Nightlife and entertainment	-	+	-
Opportunity for rest	+	+	+
Availability of sport facilities and recreational activities	-	+	+
Offer of cultural and other events	-	+	-
Thermal spa offer	-	+	+
Wellness offer	-	+	+
Casino and gambling offer	-	+	-
Conference offer	-	-	-

Source: Dmitrović & Žabkar, 2010.

Table 9. Instrument for tourism destination quality

Dimensions	Items
Natural and well-known attractions	• Australia has spectacular scenery and natural attractions.
	• Australia is a country with many well-known tourist sites.
	• Australia has magnificent sunny beaches.
	• Australia has fascinating native animals and vegetation.
Variety of tourists services and culture	• Australia offers a food variety of souvenirs and duty-free goods for travellers.
	• Australia has wonderful historical sites and excellent museums/art galleries.
	• Australia has a unique aboriginal culture.
Quality of general tourists atmosphere	• Australia service staff are qualified, helpful and friendly.
	• Australia is a safe destination for travellers.
	• The environment in Australia is very clean.
Entertainment and recreation	• Australia has a variety of entertainment/nightlife activities for travellers.
	• Australia offers many opportunities for sports and adventurous activities.
	• Australia has good tourism infrastructure facilities, for example, restaurants, accommodations, and so on.
General environment	• Australia's climate is good.
	• Australia is a good place for rest and relaxation.
Accessibility	• Australia is a value for money destination.
	• Communication is not a serious problem for non-English speaking tourists.
	• Australia is easy to access.

Source: Hallak et al., 2017.

Ho et al. (2020) researched the quality of food souvenirs. They consider quality as a multidimensional construct and explain it as formative-formative model. The items and dimensions used in that research can be seen in Table 10.

Previously presented instruments are only the part of instruments possible to be presented. However, the authors believe that, besides providing those instruments with all their dimensions and corresponding items in one place, the special contribution of this part of the paper is the possibility to observe the variety of tourism service quality measurements.

Table 10. Instrument for measuring food souvenir quality

Dimensions	Items
Production specification	• The product is made by special/unique manufacturing method.
	• I like the local materials/ingredients of the products.
Brand	• I buy the product because of its brand-name.
Traditions & history	• I like and learn the stories behind the product.
	• I find the products sold by the manufacturer with a history.
Packaging	• I like the aesthetic packaging of the product.
Word-of-mouth	• I think the food souvenir is a hot product.
	• I find the online comments about the product are positive.
	• I receive good recommendations from friends/relatives for the product.
Award	• The product has been awarded a prize in a contest.
Food safety & health	• The food souvenir manufacturer certificates in food safety.
	• I find the food souvenir manufacturer follows the standards of hygiene in product production.
Price	• I accept the price of the product.
Sensory appeal	• I find the taste of the food souvenir pleasant.
	• I like the freshness of the product.
	• I think the appearance of the product is attractive.

Source: Ho et al., 2020.

3. TOURISM SERVICE QUALITY AS A REFLECTIVE-FORMATIVE MODEL

It has already been emphasised that treating service quality as higher order reflective-reflective construct instead of reflective-formative construct presents a mistake (Liu et al., 2016) which can lead to significant consequences for theoretical conclusions regarding the model (Jarvis et al., 2003). At this place are presented instructions for differentiation between formative and reflective constructs – Table 11.

Table 11. Differentiation between formative and reflective constructs

	Formative model	Reflective model
1. Direction of causality from construct to measure implied by the conceptual definition	• Direction of causality is from items to construct	• Direction of causality is from construct to items
• Are the indicators (items) (a) defining characteristics or (b) manifestations of the construct?	• Indicators are defining characteristics of the construct	• Indicators are manifestations of the construct
• Would changes in the indicators/items cause changes in the construct or not?	• Changes in the indicators should cause changes in the construct	• Changes in the indicator should not cause changes in the construct
• Would changes in the construct cause changes in the indicators?	• Changes in the construct do not cause changes in the indicators	• Changes in the construct do cause changes in the indicators
2. Interchangeability of the indicators/items	• Indicators do not have to be interchangeable	• Indicators should be interchangeable
• Should the indicators have the same or similar content?• Do the indicators share a common theme?	• Indicators do not need to have the same or similar content/indicators do not need to share a common theme	• Indicators should have the same or similar content/indicators shouldshare a common theme
• Would dropping one of the indicators alter the conceptualdomain of the construct?	• Dropping an indicator may alter the conceptual domain of the construct	• Dropping an indicator should not alter the conceptual domain of theconstruct
3. Covariation among the indicators	• Not necessary for indicators to covarywith each other	• Indicators are expected to covary with each other

• Should a change in one of the indicators be associated with changes in the other indicators?	• Not necessarily	• Yes
4. Nomological net of the construct indicators	• Nomological net for the indicators may differ	• Nomological net for the indicators should not differ
• Are the indicators/items expected to have the same antecedents and consequences?	• Indicators are not required to have the same antecedents and consequences	Indicators are required to have the same antecedents and consequences

Source: Jarvis et al., 2003.

If implementing previously listed instructions to, for example, already presented LQI instrument (Getty & Getty, 2003), several conclusions can be made. Firstly, relationship between individual items and their corresponding dimensions can be examined. Secondly, relations between quality dimensions and second-order quality construct can be studied.

When it comes to the first issue, an example can be taken. If looking at the two items belonging to the dimension Responsiveness: “Employees responded promptly to my requests” and “Employees responded quickly to solve my problems”, it can be seen that those items are actually manifestations of the dimension and that changes in them should not cause changes in the dimension, but opposite. In addition, the items have similar content/share a common theme and dropping one of them should not alter the conceptual domain of the dimension. Finally, a change in one of the items is associated with changes in another and they have the same antecedents and consequences. From all presented above, it can be concluded that the relation of dimensions and their corresponding items is reflective.

On the other hand, when considering relations of quality dimension and second-order quality construct, the example of Tangibility and Reliability can be taken. The first refers to physical characteristics regarding service encounters, while the second is related to performing the service right the first time. If considering those relations, it can be seen that those dimensions are defining characteristics of the quality construct and changes in them cause changes in the quality, but not instead. Furthermore, those dimensions do not have similar content, nor share a common theme, and dropping one of the dimensions will alter the conceptual domain of the construct. Those dimensions do not necessarily covary, nor have the same antecedents and consequences. It can be concluded that the relationship between quality dimensions and quality construct is formative.

Having all previously said in mind, it can be concluded that it is supported by a specific example that quality as a hierarchical construct should be reflective-formative, as stressed in part of the literature.

4. RESULTS OF THE SIMULATION

It has already been announced that the point of the simulation is to present the differences in the results when treating perceived service quality as reflective-reflective and as reflective-formative construct. A graphical representation of those two models is given in Figure 1. The analysis is performed on a base consisting of answers from 100 respondents regarding items from LQI instrument. Data processing is conducted in SmartPLS3 software according to instructions provided by Grubor et al. (2021). Repeated-indicator approach was used. It should be stressed that since the simulation is implemented, the results cannot be generalized (from managerial implications aspect). In addition, items in Table 12 are provided in the same order as in Table 6, when the instrument was introduced.

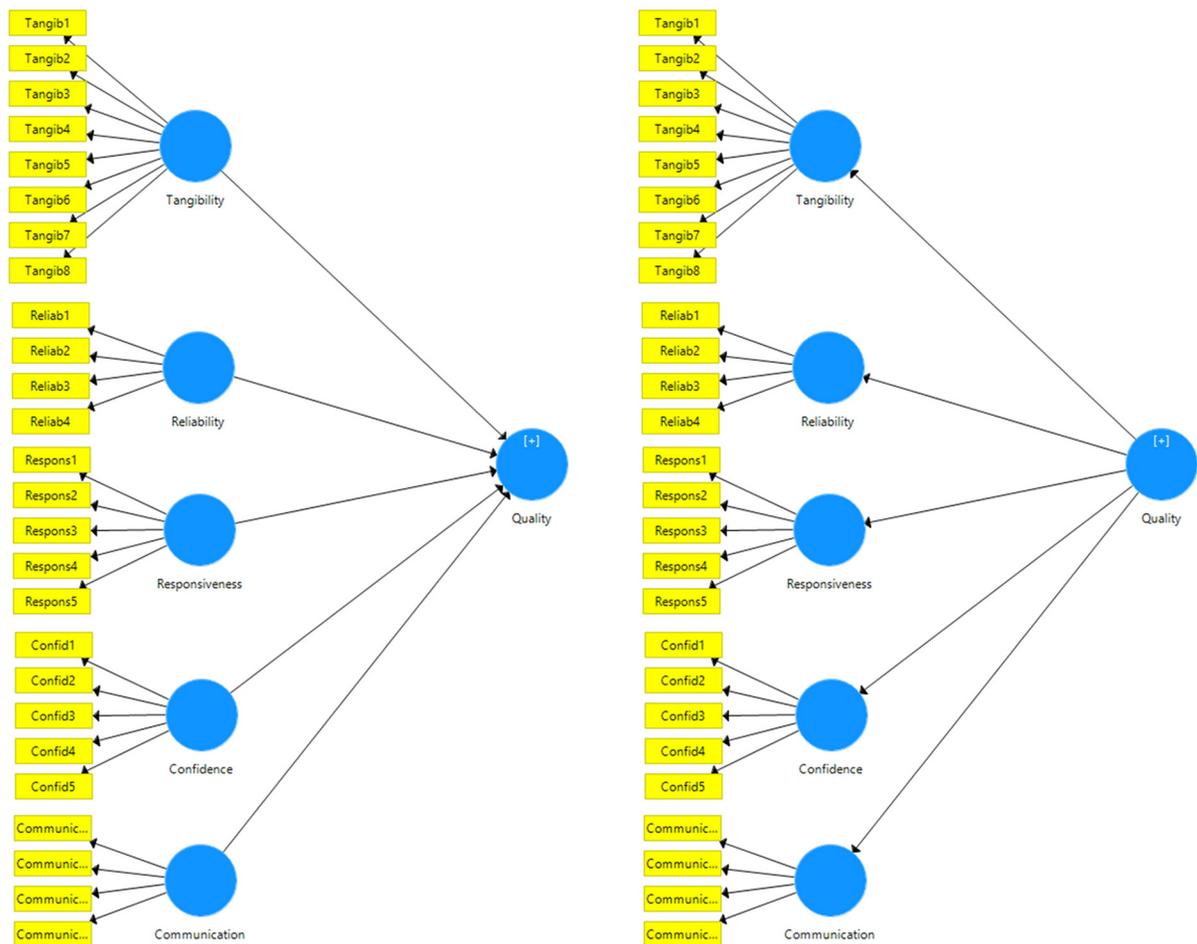


Figure 1. Reflective – formative (left) and reflective-reflective (right) model

Source: Authors' analysis in SmartPLS3 software

For testing convergent validity, indicator reliability (outer loadings) was checked and all items with corresponding loadings higher than 0.7 were kept. The other items with values of loadings between 0.4 and 0.7 (tangib8, confid1 and communicat3 in the first stage and confid2 in the second) were removed in order to increase composite reliability and average variance extracted. In addition, during convergent validity testing, average variance extracted (AVE) was observed and was in all cases equal to or higher than 0.5, as suggested (that was also performed after removal of listed items as well, but is not reported since values were acceptable already at the first stage). Testing reliability (internal consistency) was also performed. Hereby, all alpha coefficients were higher than 0.7 and composite reliability (CR) values were from 0.7 to 0.95 (analogously to AVE, since those values were acceptable already at the first stage (before removing individual items) and were later only improved, the results from the beginning are presented). The previously described results are presented in Table 12. Table 13 presents the results of testing discriminant validity by using Fornell-Larcker criterion. It can be seen that the square root of average variance extracted from each construct was (even before excluding certain items) higher than its correlations with other constructs. Thus, discriminant validity is also proven.

It should be noticed that since first-order constructs are treated as reflective in both cases, there were no differences in previous tests. The only difference appears in the case of testing the relation of quality as second-order construct with its dimensions as first-order constructs. Those results are presented in Table 14. Those results can also serve for testing second-order construct

in the case of reflective-formative model. Hereby, all VIF values (1,380; 1,334; 1,149; 1,198 and 1,403 in that order) are lower than 5, and the impact of the four dimensions is at $p < 0.05$, significantly contributing to the formation of the second-order construct.

Table 12. Testing internal consistency reliability and convergent validity

Dimensions and items	Loadings	Alpha	CR	AVE
Tangibility		0.931	0.944	0.680
Tangib1	0.881			
Tangib2	0.858			
Tangib3	0.777			
Tangib4	0.831			
Tangib5	0.899			
Tangib6	0.835			
Tangib7	0.834			
Tangib8	0.658			
Reliability		0.744	0.837	0.562
Reliab1	0.722			
Reliab2	0.721			
Reliab3	0.755			
Reliab4	0.797			
Responsiveness		0.931	0.948	0.784
Respons1	0.863			
Respons2	0.922			
Respons3	0.912			
Respons4	0.876			
Respons5	0.853			
Confidence		0.829	0.879	0.596
Confid1	0.612			
Confid2	0.714			
Confid3	0.823			
Confid4	0.908			
Confid5	0.769			
Communication		0.855	0.904	0.704
Communicat1	0.848			
Communicat2	0.934			
Communicat3	0.689			
Communicat4	0.866			

Source: Authors' analysis

Table 13. Testing discriminant validity

Dimensions	Communicat.	Confid.	Reliab.	Respons.	Tangib.
Communication	0.839				
Confidence	0.299	0.772			
Reliability	0.451	0.228	0.749		
Responsiveness	0.181	0.236	0.213	0.885	
Tangibility	0.382	0.299	0.329	-0.073	0.825

Source: Authors' analysis

Table 14. Results of the two models

Reflective-formative model			Reflective-reflective model		
	Path coefficients	p		Path coefficients	p
Tangibility-> Quality	0.695	0.000	Quality -> Tangibility	0.825	0.000
Reliability-> Quality	0.194	0.000	Quality -> Reliability	0.632	0.000
Responsiveness -> Quality	0.066	0.613	Quality -> Responsiveness	0.259	0.258
Confidence-> Quality	0.182	0.000	Quality -> Confidence	0.559	0.000
Communication -> Quality	0.240	0.000	Quality -> Communication	0.706	0.000

Source: Authors' analysis

When looking at the results of the reflective-formative model, it can be concluded that perceived tourism quality is formed to a far larger extent by perceptions regarding tangibles. The coefficient is high, almost 0.7. Three additional dimensions significantly form quality construct – communication, reliability and confidence. The values of the obtained coefficients are lower in comparison to the ones associated with tangibility and range from 0.182 to 0.240. The influence of responsiveness is not significant.

On the other hand, the results of the reflective-reflective model, although resembling to some extent to previous results, are at the same time different. If looking at individual coefficients, their order and significance are similar to the previous situation. However, the difference in their strength is not. According to the results, quality is significantly reflected through tangibility, relatively closely followed by communication, reliability and confidence. The range of all path coefficients is in this case from 0.559 to 0.825.

5. FUTURE RESEARCH DIRECTIONS

Future research could be directed to several aspects introduced in this paper. Firstly, a critical review of the instruments can be conducted. Secondly, the level to which general instruments correspond to individual cases can be considered. Thirdly, research regarding real situations can be performed and compared with each other.

6. CONCLUSION

The importance of measuring perceived tourism service quality is widely recognized resulting in many instruments developed for that function. This paper deals with that issue trying to provide several contributions.

As the first contribution of the paper can be stressed that different instruments previously developed for measuring perceived tourism service quality are presented together in one place. They are used for measuring the quality of services provided in lodging, hotels, historic houses, at specific destinations, or regarding food as souvenirs. Besides pointing out that there is a wide range of circumstances in which tourism services are delivered as well as different aspects of that process, some methodological considerations are provided together with the presentation of the instruments.

The second contribution of the paper is the emphasis on the appropriate operationalization of tourism service quality as a construct. Although one might have an appropriate instrument at his/her disposal, if inappropriately formulating the model, the results would not be useful. Therefore, it is stressed that, in the case of most of the developed instruments, it would be appropriate to consider tourism service quality as reflective-formative model. Besides, the instructions from relevant literature are provided allowing the decision of which model would be appropriate in the case of individual instruments. Those instructions can be valuable for developing new instruments as well, especially when considering the possibility of mixing formative and reflective approaches regarding constructs of the same level.

Finally, the third contribution of this work can be identified in the presented simulation. On the one hand, it can be used as instruction on how to process data after their collection in quantitative marketing research on the quality of tourism services. On the other hand, the simulation presents how conclusions change in the case of inappropriate modelling. On the concrete database, the order and the significance of dimensions were not changed, but the range of coefficients did to a large extent. In some other simulations, the changes could be even greater.

REFERENCES

- Ali, F., Hussain, K., Konar, R., & Jeon, H.-M. (2016). The Effect of Technical and Functional Quality on Guests' Perceived Hotel Service Quality and Satisfaction: A SEM-PLS Analysis. *Journal of Quality Assurance in Hospitality & Tourism, 18*(3), 354-378. <https://doi.org/10.1080/1528008x.2016.1230037>
- Arias-Bolzmann, L., Bravo-Falcón, K. P., & Mendoza-Cabrera, P. E. (2018). Link Between Customer Loyalty and Customer Service in Tourist Hotels. *Revista Espacio, 39*(44), 5-21.
- Cronin, J. J., & Taylor, S. A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing, 56*(3), 55-68. <https://doi.org/10.2307/1252296>
- Dmitrović, T., & Žabkar, V. (2010). Assessing Tourism Supply Quality Using Formative Indicators: Implications for Destination Management. *Tourism Economics, 16*(2), 405-425. <https://doi.org/10.5367/000000010791305608>
- Frochot, I., & Hughes, H. (2000). HISTOQUAL: The development of a historic houses assessment scale. *Tourism Management, 21*(2), 157-167. [https://doi.org/10.1016/s0261-5177\(99\)00045-x](https://doi.org/10.1016/s0261-5177(99)00045-x)
- Getty, J. M., & Getty, R. L. (2003). Lodging quality index (LQI): assessing customers' perceptions of quality delivery. *International Journal of Contemporary Hospitality Management, 15*(2), 94-104. <https://doi.org/10.1108/09596110310462940>
- Getty, J. M., & Thompson, K. N. (1994). A Procedure for Scaling Perceptions of Lodging Quality. *Hospitality Research Journal, 18*(2), 75-96. <https://doi.org/10.1177/109634809401800206>
- Getty, J. M., & Thompson, K. N. (1995). The Relationship Between Quality, Satisfaction, and Recommending Behavior in Lodging Decisions. *Journal of Hospitality & Leisure Marketing, 2*(3), 3-22. https://doi.org/10.1300/j150v02n03_02
- Grubor, A., Djokic, N., Milicevic, N., & Djokic, I. (2021). *Marketing istraživanje (Marketing research)*. Subotica, Serbia: Ekonomski fakultet u Subotici
- Hallak, R., Assaker, G., & El-Haddad, R. (2017). Re-examining the relationships among perceived quality, value, satisfaction, and destination loyalty. *Journal of Vacation Marketing, 24*(2), 118-135. <https://doi.org/10.1177/1356766717690572>
- Ho, C.-I., Liu, L.-W., Yuan, Y., & Liao, H.-H. (2020). Perceived food souvenir quality as a formative second-order construct: how do tourists evaluate the quality of food souvenirs? *Current Issues in Tourism, 24*(4), 479-502. <https://doi.org/10.1080/13683500.2020.1715928>
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003) A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research, 30*(2), 199-218. <https://www.jstor.org/stable/10.1086/376806>
- Knutson, B., Stevens, P., Wullaert, C., Patton, M., & Yokoyama, F. (1990). Lodgserv: A Service Quality Index for the Lodging Industry. *Hospitality Research Journal, 14*(2), 277-284. <https://doi.org/10.1177/109634809001400230>
- Liu, X., Fu, Y., Chao, R.-F., & Li, J. (2016). A formative measurement approach for exploring how to form service quality in hot spring resorts. *Tourism and Hospitality Research, 19*(1), 27-39. <https://doi.org/10.1177/1467358416683767>
- Parasuraman, A., Zeithaml, V., & Berry, L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing, 64*, 12-40.
- Wong Ooi Mei, A., Dean, A. M., & White, C. J. (1999). Analysing service quality in the hospitality industry. Managing Service Quality: *An International Journal, 9*(2), 136-143. <https://doi.org/10.1108/09604529910257920>



Linking Tourism Service Quality Measurement and Qualitative Marketing Research

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Abstract: Generally, increasing service quality leads to more satisfied and loyal service customers. The instruments for measuring service quality are developed and implemented in many service industries, including tourism. However, using such instruments for assessing tourism service quality considers conducting quantitative marketing research which requires significant resources and cannot be performed constantly. On the other hand, the best way to capture all the aspects of tourism service quality is to use those instruments. The authors of this paper consider the possibility of using qualitative marketing research and available data about tourists' reviews as a manner for monitoring tourism service quality constantly. They propose the approach in which tourists' reviews are analysed within the qualitative marketing research framework by using quantitative tourism service quality instruments' items and/or dimensions for coding. The demonstration of such an approach is presented followed by a managerial implications discussion.

1. INTRODUCTION

Although part of research models dealing with perceived service quality, satisfaction and loyalty include some additional variables and sometimes consider the relations among those variables differently to some extent (Hallak et al., 2017), it can be generally stressed that increasing service quality leads to more satisfied and loyal service customers. Hereby, within the consideration of perceived service quality as a multidimensional construct, Liu et al. (2016) list many instruments used for its measurement in the tourism area: SERVQUAL, SERVPERF, LODGQUAL, HOLSERV, LODGSERV, HISTOQUAL. The use of such instruments presents the best way to capture all the aspects of tourism service quality.

The application of standardized, structured instruments, as are those previously listed, is the specificity of quantitative marketing research (Daymon & Holloway, 2011). However, conducting quantitative marketing research requires significant resources and cannot be performed constantly, while at the same time business subjects (including those from the tourism area) have at their disposal a number of marketing intelligence data that are mostly qualitative and are generated within the subject or come from unofficial sources, especially social media (Malhotra et al., 2017). Tourists' reviews can be considered as such data.

Having all previously described in mind, the authors of this paper propose the approach in which tourists' reviews are analysed within the qualitative marketing research framework by using quantitative tourism service quality instruments' items and/or dimensions for coding.

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That approach allows keeping elements from quantitative marketing research instruments thus allowing capturing all the aspects of service quality, analysing available tourists' reviews within developed framework, monitoring tourism service quality constantly and obtaining appropriate managerial implications.

The paper is organized into several sections. Firstly, an instrument that can be used in quantitative marketing research for measuring service quality is described. Secondly, service quality is considered as a construct and implications from those considerations for an approach presented within this paper are discussed. Thirdly, characteristics of quantitative versus qualitative marketing research are presented, with special emphasis on coding as a part of qualitative marketing research. Fourthly, the approach proposed by the authors of this paper is described and demonstrated in an example. Finally, a discussion with special emphasis on potential managerial implications is provided.

2. QUANTITATIVE TOURISM SERVICE QUALITY MEASUREMENT INSTRUMENT

Numerous instruments are used for measuring perceived service quality in the tourism area and among them, as already stated, also belong SERVQUAL, SERVPERF, LODGQUAL, HOLSERV, LODGSERV, HISTOQUAL (Liu et al., 2016). Most of those instruments rely on SERVQUAL, especially considering studied dimensions and items. Table 1 presents SERVQUAL instruments with modifications to specificities of the tourist industry.

Table 1. A version of SERVQUAL instrument for measuring tourism service quality

Dimensions	Items
Assurance (ASS)	• Employees are credible and courteous with tourists. (ASS1)
	• Experienced and competent tour and hotel escorts. (ASS2)
	• Willingness to help tourists and advice on how to use free time. (ASS3)
	• The behaviour of employees' reinforces tourists' confidence. (ASS4)
	• Tourists are being served by appropriate personnel. (ASS5)
	• Fluent and understandable communication with tourists. (ASS6)
Tangibles (TAN)	• Destinations are visually aesthetically attractive. (TAN1)
	• Modern and technologically relevant vehicles. (TAN2)
	• Overall cleanliness of the destination. (TAN3)
	• Unspoiled nature. (TAN4)
	• Appealing accommodation facilities. (TAN5)
	• Personal safety and security. (TAN6)
	• Physical appearance of tour and hotel escorts (tidiness etc.) (TAN7)
	• High-quality meals. (TAN8)
Responsiveness (RES)	• Provision of information on local events/entertainment. (RES1)
	• The staff responds to tourists' requests quickly. (RES2)
	• Cultivation of friendly relationship with tourists. (RES3)
	• Sincere interest in problem-solving of tourist's. (RES4)
	• Sponsors act on participant's suggestions (RES5)
Reliability (REL)	• Insisting on error-free service. (REL1)
	• Performing the service/s at the promised time. (REL2)
	• Performing the service/s right the first time. (REL3)
	• Meeting the tour schedule. (REL4)
	• No sudden increase in tour cost. (REL5)

Source: Bhat, 2012.

Generally, SERVQUAL model relies on differences between expectations and performances of service quality (Parasuraman et al., 1988). The instrument previously presented is also implemented in that manner in cited research. Once again, it can be stressed that the use of instruments from quantitative marketing research, as is the one presented above, is the best way to capture all the aspects of tourism service quality, but at the same time conducting quantitative marketing research requires significant resources and cannot be performed constantly.

In addition, two remarks can be given at this point. Firstly, in this manuscript, the presented instrument will be used only in the context of performances and not expectations. That approach is also acceptable and even recommended in part of the literature dealing with the topic (e.g. Cronin & Taylor, 1992). Secondly, there can be identified a wide range of circumstances in which tourism services are delivered as well as different aspects of that process and therefore different instruments can be used as a starting point when implementing the approach proposed by the authors of this manuscript. This instrument is chosen primarily for demonstration purposes.

3. TOURISM SERVICE QUALITY AS A CONSTRUCT IN QUANTITATIVE MARKETING RESEARCH

Within this section of the paper, two important issues regarding tourism service quality will be discussed. The first is related to the formulation of individual items in instruments used for measurement in the area. The second refers to the relationship of those items to their corresponding dimensions, as well as of those dimensions and the quality itself. The last consideration requires understanding formative and reflective models in marketing research.

When it comes to the formulation of individual items for an instrument for measuring perceived tourism service quality, the considerations can start from the means-end chains theoretical background. A comparison with electronic service quality evaluation can be made. That topic is described by Parasuraman et al. (2005). For example, when listing desirable characteristics of Web sites, there could be identified many features on different levels of abstraction. One level is related to specific, concrete cues, such as tab structuring. Another level refers to more general perceptual attributes, like perceived ease of finding what one is looking for. The more abstract level includes broad dimensions, such as ease of navigation in general. Finally, the last level is related to higher-order abstractions, like overall perceived quality and value. Hereby, the antecedents of service quality are concrete cues that trigger perceptual attributes; evaluations of quality along those attributes coalesce into evaluations along more abstract dimensions; which together lead to more global assessments at higher levels of abstraction. The most important is that the domain from which items are drawn for developing the instrument includes the perceptual attributes and dimensional levels.

After previous elaborations, one should have in mind that items such as, for example, “there was no thrown garbage from pizza and juice at the beach” would not be an appropriate level for the formulation of an individual item in an instrument measuring tourism service quality since it is at the level of the cues. Instead, formulation like “unspoiled nature” would be more appropriate because it is on a higher level of abstraction.

Another important issue about tourism service quality, as already stated, is its relations to quality dimensions, as well as relations between those dimensions and individual items. For the

consideration of that issue, it can rely on instructions provided by Jarvis et al. (2003). Those authors offer a list of four relevant criteria. The first is the direction of causality from construct to measure implied by the conceptual definition. Hereby, that direction should be from items to construct in the formative model, while from construct to items in the reflective model. The second criteria is the interchangeability of the indicators/items. In the case of the formative model, they do not need to be interchangeable; while in the case of the reflective model, they should be interchangeable. The third relevant criteria is covariation among the indicators. It is not necessary to exist in the formative model but is expected in the reflective model. Finally, the fourth and the last criteria is related to the nomological net of the construct indicators. In the case of the formative model, it may differ, while in the case of the reflective model, it should not differ.

One should have in mind that a construct does not have to be formative or reflective *per se*. A valuable example (although in other areas) is provided by Petter et al. (2007) regarding the construct “operational excellence”. In one case it can be measured by the following measures: product delivery cycle time, timeliness of after-sales service, and productivity improvements in terms of assets, operating costs, and labour costs. In another case, the construct can be measured by the following items: “the system has a positive impact on the organization’s operations,” “the system has improved the organization’s operational performance,” and “the system has significantly positively affected the organization’s operations”. In the first case, it is actually the items that define how the concept is going to be interpreted and if one of them improves, the concept itself is improved; therefore, it can be considered formative. In the second case, measures are representations of the construct, and instead of a situation where a change in the measures influences the change in the construct, in this case, a change in the construct is reflected by a change in the measures; therefore, the relation is reflective.

The relevance of the issue is additionally stressed when considering that the mistake in model specification, even in the case of one formative construct in the model, leads to significant consequences for theoretical conclusions regarding the model, as proven in Monte Carlo simulation (Jarvis et al., 2003).

The measurement of service quality in tourism can be observed from different aspects (see Hallak et al., 2017). In previous research, tourism service quality, when being higher-order construct, was mostly formulated as reflective-reflective model (e.g. Petrick, 2004; Ho & Lee, 2007; Chen & Tsai, 2007), followed by reflective-formative model (e.g. Liu et al., 2016; Hallak et al., 2017), and even as formative-formative model (Ho et al., 2020). However, in the literature can be found a discussion whether there is a sense to use reflective-reflective model at all (Becker et al., 2012). In the case of such a model, higher-order construct represents a “common factor” for all first-level reflective constructs which should be conceptually replaceable, which leads to the question of whether first-order reflective constructs can be observed separately.

As already announced, in this paper is presented the approach in which tourists’ reviews are analysed within the qualitative marketing research framework by using quantitative tourism service quality instruments’ items and/or dimensions for coding. The problem may occur if the two approaches (formative/reflective) are mixed in a single instrument. If looking at the presented questionnaire from the previous section, there can be seen that the relation of, for example, items “employees are credible and courteous with tourists” and “fluent and understandable communication with tourists” with quality dimension “assurance” can be described as reflective. In that case, it is possible to keep only the dimension as a code in analysis. However, if analysing

the relation of measures “modern and technologically relevant vehicles” and “unspoiled nature” to their corresponding dimension “tangibles”, one could argue whether that relation is formative, causing the need to keep individual items as codes in analysis.

4. CHARACTERISTICS OF QUALITATIVE MARKETING RESEARCH

Qualitative marketing research characteristics, process and implementation by using the software are described in newer domestic literature by Grubor et al. (2021). Part of the description used in this section of the manuscript is formulated in accordance with that source.

Generally, marketing research can be divided into quantitative and qualitative (Malhotra et al., 2017). In the case of the former, it can be stressed that they are based on research techniques that are attempting to quantify data and use a certain type of measurement and statistical analysis, while in the case of the latter, it can be emphasized that they are not structured, usually of explorative nature on small samples and based on the intention to provide deep insights and understanding.

Maison (2019) stresses that there is no sense in comparing qualitative and quantitative approaches regarding their superiority and that they complement each other allowing different kinds of information to be collected. Table 2 presents a comparison of those methods, while a more detailed comparison of qualitative and quantitative research is given in Table 3.

When it comes to defining steps in qualitative marketing research, according to one approach they are as follows (Maison, 2019):

1. defining a research problem,
2. designing the research schemata and research planning (defining the number of respondents, number of interviews, locations, criteria for choice and selection of moderators, etc.),
3. setting up interviews (recruiting, preparation of guides for interviews and research materials),
4. conducting interviews (moderation),
5. analysis and interpretation of results,
6. writing reports.

A step of qualitative marketing research related to qualitative data analysis is of special importance for the approach described in this manuscript. Therefore, more concrete steps regarding the topic can be analysed as well. According to one of the approaches, there are four steps in the process of qualitative data analysis (Malhotra et al., 2017):

1. data collection,
2. data reduction,
3. data presentation,
4. data verification.

Hereby, in the context of the manuscript topic, the special focus can now be placed on the reduction of data which is achieved by coding. There is a general recommendation that coding should start only after the materials are studied several times. Even after several preliminary interviews or observations, some of the keywords, questions or topics are noticed. However, the complete picture should be obtained. In addition, codes' categorizing should also be mentioned. It requires integration into more stable, compact and coherent structures, so it would be possible to understand and focus on the main research question (Daymon and Holloway, 2011).

Table 2. Quantitative and qualitative methods

	Quantitative methods	Qualitative methods
Research questions	<ul style="list-style-type: none"> • Determinative questions quantitatively describing the problem (questions: “how many”, “who”, “how often”) 	<ul style="list-style-type: none"> • Exploratory questions qualitatively describing the problem (questions: “what”, “how”, “why”)
Measurement tools	<ul style="list-style-type: none"> • Survey – questions with a fixed form and order, prevalence of closed-ended questions 	<ul style="list-style-type: none"> • Interview scenario – freely gained information (topics forming the outline of the interview, open-ended questions)
Samples	<ul style="list-style-type: none"> • Random or quota • Large – usually within a range of 500–1,000 persons 	<ul style="list-style-type: none"> • Purposive • Small – 20–50 persons (better when the sample is defined by the number of interviews/groups and not of persons)
Analysis and interpretation of the results	<ul style="list-style-type: none"> • Analysis harnessing statistics – more objective • Possibility of quantitative generalisation of results to a population 	<ul style="list-style-type: none"> • Analysis without the use of statistics – more free and subjective • Many interpretative possibilities (diverse range of conclusions), also involving the risk of overinterpretation or erroneous interpretation – the analysis is often more challenging than in quantitative research • No possibility of quantitative generalisation of results to a population

Source: Maison, 2019.

Table 3. Comparison of quantitative and qualitative research

	Qualitative research	Quantitative research
Main focus	<ul style="list-style-type: none"> • Meaning 	<ul style="list-style-type: none"> • Measurement
Aim	<ul style="list-style-type: none"> • Exploration, understanding and description of participants’ experiences and life world • Generation of theory from data 	<ul style="list-style-type: none"> • Search for causal explanations • Testing hypotheses, prediction, control
Approach	<ul style="list-style-type: none"> • Initially broadly focused • Process oriented • Context-bound, mostly natural settings • Getting close to the data 	<ul style="list-style-type: none"> • Narrow focus • Outcome oriented • Context free, often in laboratory settings
Sampling	<ul style="list-style-type: none"> • Participants, informants • Sampling units such as place, time, concepts • Purposive and theoretical sampling • Flexible sampling that can develop during the research 	<ul style="list-style-type: none"> • Respondents, participants (the term ‘subjects’ is now discouraged in the social sciences) • Randomized sampling • Sample frame fixed before the research starts
Data collection	<ul style="list-style-type: none"> • In-depth non standardized interviews • Participant observation/fieldwork • Documents, diaries, photographs, videos 	<ul style="list-style-type: none"> • Questionnaire, standardized interviews • Tightly structured observation • Documents, experiments • Randomized controlled trials
Analysis	<ul style="list-style-type: none"> • Thematic or constant comparative analysis, latent content analysis ethnographic, exhaustive description narrative analysis, etc. 	<ul style="list-style-type: none"> • Statistical analysis
Outcome	<ul style="list-style-type: none"> • A story, ethnography, a theory 	<ul style="list-style-type: none"> • Measurable and testable results
Relationships	<ul style="list-style-type: none"> • Direct involvement of researcher • Research relationship close 	<ul style="list-style-type: none"> • Limited involvement of researcher with participant • Researcher relationship distant
Quality/rigour	<ul style="list-style-type: none"> • Trustworthiness, authenticity • Typicality and transferability • Validity 	<ul style="list-style-type: none"> • Internal/external validity, reliability • Generalizability

Source: Daymon & Holloway, 2011.

In the data coding process, the researcher deals with a large number of data and everything that can be characterised as “revealing” can be coded. The researcher summarizes those data in units that can be analysed by creating categories from data. The process of the reduction of qualitative data to essential meaning as seen by the researcher is a very creative and subjective process that includes the following phases (Malhotra et al., 2017):

1. setting up a wide group of coding categories,
2. working through data to detect “chunks” of data that can be placed in parentheses or underlined or emphasized,
3. reviewing the descriptions assigned to codes,
4. exploring the differences between types of participants,
5. developing models of interconnectivity among the coded categories,
6. iterate between the code descriptions and the developing model.

There can be given an important remark regarding the interpretation of qualitative data. Not all qualitative research is conducted for generating the theory, but there are descriptive studies as well, attempting to bring into connection data and theoretical knowledge (Daymon and Holloway).

There can be identified three alternative perspectives in the analysis of qualitative data (Malhotra et al., 2017):

1. grounded theory,
2. content analysis and
3. semiotics.

Analysing qualitative data with grounded theory includes four phases: data coding, writing notes, theoretical sampling and integrating analysis. Content analysis can be understood as objective, systematic and quantitative description of the obvious content of the textual material, forms of communication and images rather than behaviours and physical objects. In the semiotics approach consumers are not observed as independent self-determining agents who make their choices, but as the product of culture. In addition to the analysis of language, it also analyses pictures and photos.

5. PROPOSED APPROACH FOR LINKING TOURISM SERVICE QUALITY MEASUREMENT AND QUALITATIVE RESEARCH

The essence of the approach proposed by the authors of this manuscript has already been mentioned in previous sections. In this section, the steps of that approach will be listed, described in detail as well as presented on the concrete example and with the usage of the software.

The possible approach for constantly monitoring perceived service quality in tourism industry consists of the following steps:

1. collecting marketing intelligence data,
2. categorizing collected data according to the source where collected, service user’s characteristics, period of data generation and other possibly relevant criteria,
3. selecting appropriate quantitative marketing research instrument as a base for coding collected data,
4. coding the collected data – using items and/or dimensions of the instrument as codes and/or code categories,

5. performing the analysis in qualitative research software (for example RQDA),
6. permanently collecting new data for the analysis.

The first step is relating to collecting data. Tourist reviews, for example, can be found in several sources. There are websites where a tourist can give comments about the quality of tourism service at a certain object. In addition, tourists comment on social networks. Furthermore, internal record in which comments are collected usually exists as well. Gathering all those data is the precondition for further analysis.

In the next step, several additional inputs can be gathered. It would be efficient if this step is being performed simultaneously with the first one. When collecting the reviews not only the information about the sources from which they originated can be noted but also the information about the tourist who commented can be gathered. Some of that information may be obvious as gender, and some information can be gathered from the internal record. There could be a sense to consider the age of the tourist, the motives of using the service (for example private or professional motives), the length of the period in which the service was used, and whether the tourist was alone or not during the stay, whether it was his/her first visit to the object or not, etc. The period when the comment was created can also be important to be noted since it allows for tracking potential changes regarding certain aspects of quality. Some additional data, which can be determined by the management as relevant, can also be collected.

It has already been stressed that there is a wide range of circumstances in which tourism services are delivered as well as different aspects of that process. Having that in mind, different instruments can be applied. The instruments listed in this paper differ and some are general for the services, while some are adopted for lodging, hotels and even historic houses. In addition, it would be quite different if evaluating service quality of a certain object providing tourism services and of the whole destination. Therefore, the selection of an appropriate instrument from quantitative research that will later be used for coding is also a very important step. Previously developed instruments are presented mostly in scientific literature and the best way to find them is in the cooperation with universities and professors who are experts in that field. Only in coordination with them, it would have the sense to consider developing new instruments or modifying the existing ones. A section of this paper dealing with tourism service quality as a construct reveals only part of the complexities that can emerge during the process. The development of the new instrument requires even more details that had to be taken into account.

The coding of selected comments is the next step in the analysis. An important decision that has to be made is whether the items or their corresponding dimensions are going to be used as codes for the comments. In the case of items being used as codes, dimensions can be used as code categories. Generally, the recommendation can be given that in the case of using reflective-formative approach, only dimensions can be kept in the final analysis as codes. In the case of using formative-formative instruments both the items and dimensions should be kept – items as codes and their corresponding dimensions as code categories.

However, it has already been suggested that the problem may arise if the model cannot be clearly defined as reflective-formative or formative-formative. The example given in the previous text might be considered in that context. Items from the previously presented questionnaire such as “employees are credible and courteous with tourists” and “fluent and understandable communication with tourists” can be omitted and similar parts of the tourists’ comments can be

coded with their corresponding dimension “assurance”, but items as “modern and technologically relevant vehicles” and “unspoiled nature” might be kept as codes belonging to code category named according to their corresponding dimension “tangibles”.

Finally, it should be emphasized that the managerial perspective can be taken into account and even if the relation of quality dimensions and corresponding items is reflective, those items can be used as codes, although it might be difficult in that case to decide which exact code the comment belongs to. The solution might be the possibility to add several codes to comments or their parts.

Another important issue for coding is determining whether the review is positive or negative. That can double the number of codes and if there are reviews that can be described as neutral, that level of coding might also be appropriate. Since there is a possibility of adding several codes to the same text both, for example, positive code and code in general (that will be added to negative comments regarding the issue as well) can be used regarding the certain text. In the example that will be presented within this manuscript, although from the methodological point of view keeping only the dimensions would be appropriate in some cases, all the items will be kept as codes (their abbreviations can be seen in the table presenting the instrument). The reason is the attempt to provide as much detailed explanation as possible.

The example can now be introduced. Since there can usually be found numerous comments about tourism service quality, for the illustration within this manuscript, only five possible reviews (not real but realistic) will be considered. The authors believe that it would be sufficient to explain the essence of the process. The imagined situation can be related to tourist reviews regarding the hotel in the mountain.

The first review comes from a male that is 40 years old and that spent only one night in the hotel. According to the internal record, he was on his way to another destination and decided to sleep and have breakfast in a hotel before continuing the journey. His comment from May 2021 is available in the book of impressions:

“I was on a journey when decided to stay in a hotel for a night. I want to praise the receptionist with whom I had a good understanding of what I needed and who recommended me a room and appropriate service. The parking had cameras and I was relaxed about leaving my car there. The breakfast was rich and excellent.”

The second comment is given by a family that stayed in a hotel for a holiday. The mother and father are about 35 years old and two children are in lower grades of primary school. They stayed for a week on the mountain in February 2021 as a part of recovery from COVID-19. The comment was written by the mother on a social network:

“The staff was very courteous to us. Receptionists, as well as waiters, recommended how to spend time on this mountain. They told us about the market nearby visited mostly by locals. Staff helped us find an excellent ski instructor on the day of our arrival as they promised before. Nature is awesome. The accommodation is clean and spacious. The meals are however not adapted to vegetarians.”

The third review is obtained on a specialized site for tourist reviews. One of two student girls who were in the hotel for a weekend at the beginning of March 2021 and spent most of the time on parties wrote that review:

“Room was great. Food is cool.”

The fourth comment is given by a 65-year-old retired woman that worked during her career abroad. She stayed alone in a hotel for 15 days in April 2021. She visited it for a spring rest. The comment is given in the book of impressions:

“My visit would not be so nice without excellent advice from the staff on how to spend my time. After 15 days here I feel your staff almost as friends. They informed me about the local fair that I enjoyed much. They also helped me find the dentist and solve the problem that suddenly appeared. I also liked the accommodation. I felt secure keeping my money in the room. I enjoyed the rich and local food offered.”

Finally, the last comment was left by a 40-year-old manager being in a hotel for a weekend in June 2021 for a seminar. It is obtained from a site specialized in tourist reviews:

“Comfortable room. I would prefer less fat food. The staff was precise about all services.”

All previous comments can be coded in a manner presented in Table 4 (note: negative comments are written in italic and only used codes are presented).

Table 4. Coding the reviews using items as codes

Codes/Items	Review 1	Review 2	Review 3	Review 4	Review 5
ASS1		<ul style="list-style-type: none"> The staff was very courteous to us. 			
ASS3		<ul style="list-style-type: none"> Receptionists, as well as waiters, have recommended how to spend time on this mountain. 		<ul style="list-style-type: none"> My visit would not be so nice without excellent advice from the staff on how to spend my time. 	
ASS6	<ul style="list-style-type: none"> I want to praise the receptionist with whom I had a good understanding of what I needed and who recommended me a room and appropriate service. 				
TAN4		<ul style="list-style-type: none"> The nature is awesome. 			
TAN5		<ul style="list-style-type: none"> The accommodation is clean and spacious. 	<ul style="list-style-type: none"> Room was great. 	<ul style="list-style-type: none"> I also like the accommodation. 	<ul style="list-style-type: none"> Comfortable room.
TAN6	<ul style="list-style-type: none"> The parking had cameras and I was relaxed about leaving my car there. 			<ul style="list-style-type: none"> I felt secure keeping my money in the room. 	

TAN8	<ul style="list-style-type: none"> The breakfast was rich and excellent. 	<ul style="list-style-type: none"> <i>The meals are however not adapted to vegetarians.</i> 	<ul style="list-style-type: none"> Food is cool. 	<ul style="list-style-type: none"> I enjoyed the rich and local food offered. 	<ul style="list-style-type: none"> <i>I would prefer less fat food.</i>
RES1		<ul style="list-style-type: none"> They told us about the market nearby visited mostly by locals. 		<ul style="list-style-type: none"> They informed me about the local fair that I enjoyed much. 	
RES3				<ul style="list-style-type: none"> After 15 days here I feel your staff almost as friends 	
RES4				<ul style="list-style-type: none"> They also helped me find the dentist and solve the problem that suddenly appeared. 	
REL2		<ul style="list-style-type: none"> Staff helped us find an excellent ski instructor on the day of our arrival as they promised before. 			<ul style="list-style-type: none"> The staff was precise about all services.

Source: Authors' analysis

Even the limited example as is previous suggests that the number of data that can be collected is very large. Considering all the comments related to certain “positive” or “negative” or “general” code or being created in a certain period or by tourists with certain common characteristics, the usage of software package for qualitative marketing research becomes necessary. One of them that is free for use is RQDA and there is a version of the software for Windows users that do not use R program. The process of its installation and usage is relatively simple and is described in detail by Grubor et al. (2021). In this place, only part of its possibilities will be demonstrated.

The process can start by importing each of the reviews as a separate file in the software. It can be followed by adding items as codes. As already stated, it can be deeper by creating “positive”, “negative”, “neutral” or “general” version for each of the codes. Abbreviations can be used for codes and in memo can be given their full description. The appearance of the coded text of review 4 is presented in Figure 1.

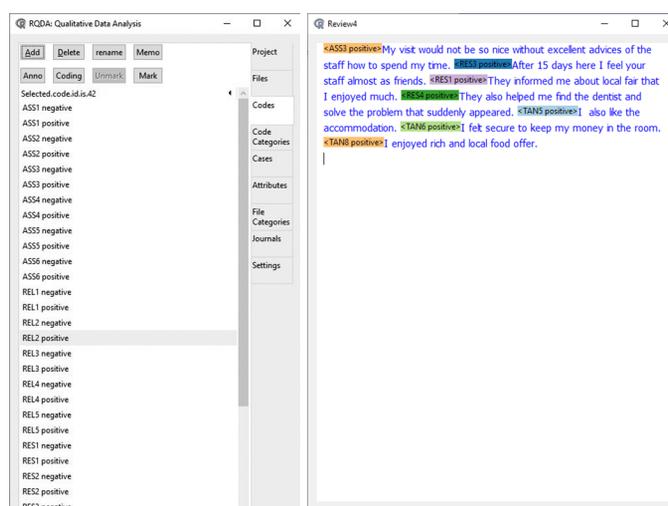


Figure 1. Coding of the review 4

Source: Authors' analysis in RQDA program

On the left side of the figure is presented an interface with part of the codes, while on the right part of it is the appearance of the review 4 after being coded.

Even at this stage, some simple (unconditional) analysis can be performed. For example, if someone would want to find negative comments about food, it would be sufficient to double click on TAN8 negative code and the following output will appear – Figure 2.



Figure 2. Simple analysis after coding

Source: Authors' analysis in RQDA program

Several additional possibilities that are a precondition for performing more complex analysis exist and will be introduced.

Firstly, code categories can be introduced. In the concrete example, dimensions of the quality can be used as such categories. Again, in this case, “positive”, “negative”, “neural” or “general” versions of code categories can exist as well.

Secondly, there is an option named file categories. The usual solution for file categories in an example like this one would be to have file categories according to the sources from which the comment is obtained. In a concrete case, three file categories would exist social networks, sites, and book of impressions. To social network would be added file containing review 2, to sites files with reviews 3 and 5, and to book of impressions files with reviews 1 and 4.

Finally, there is an option for introducing the cases. They are usually referring to some characteristics of the tourist whose review is being analysed. According to the information provided in the example, several cases might be introduced. Firstly, males and females can be differentiated. Hereby, reviews 1 and 5 would be added to case male, while reviews 2, 3 and 4 would be added to female. Secondly, respondents can be differentiated by their age. Review 3 belongs to a person that is about 20 years old, review 2 to person being 35 years old, reviews 1 and 5 to persons about 40 and review 4 to a person who is 65 years old. Some ranges can be established regarding this issue as well. Thirdly, the number of days in which tourists stay can be introduced. Review 1 would be assigned to case 1 day, reviews 3 and 5 to case 2 days, review 2 to case 7 days and review 4 to case 15 days. Fourthly, the motives for staying can be added as cases. Hereby, review 1 would be added to a motive sleepover, review 2 to a family holiday, review 3 to party weekend, review 4 to rest and review 5 to the seminar. Fifthly, a period when tourists were in a hotel can be added as well. To February 2021 would be added review 2; to March 2021 review 3; to April 2021 review 4; to May 2021 review 1; to June 2021 review 5. Everything previously described is one possible solution having in mind available data about tourists.

The interface when assigning certain files to cases is presented in Figure 3.

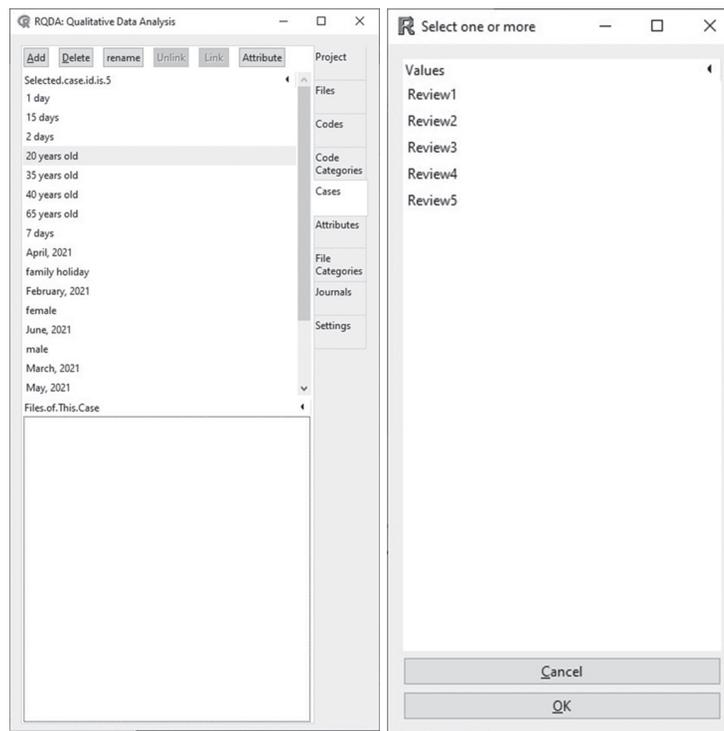


Figure 3. Combining cases and files

Source: Authors' analysis in RQDA program

The following three figures present the results of the more complex analysis. In Figure 4 case is female and the code is TAN8 positive, i.e. one can find out positive comments of females regarding food. In figure 5, the file category is social networks and the code is TAN8 negative, i.e. someone can be interested in negative comments about hotel food on social networks. In figure 6, the file category is social networks, the case is female and the code is ASS1 positive, i.e. one can discover positive comments about courtesy of hotel staff given on social networks by women.

The presented examples show that there is a possibility to combine the most advanced level cases and file categories at the code level. If it would be needed to see, for example, comments of men from January 2021 (both are defined as cases in the previous description of the example) regarding certain code, there is a possibility to use, for example, month as a file category and to leave men as case, and then to perform the analysis.

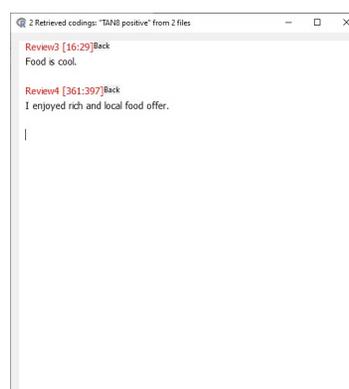


Figure 4. Analysis according to the codes in the context of cases

Source: Authors' analysis in RQDA program

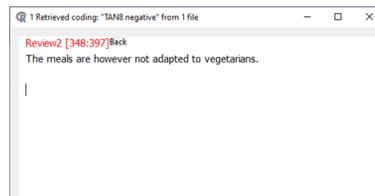


Figure 5. Analysis according to the codes in the context of file categories

Source: Authors' analysis in RQDA program

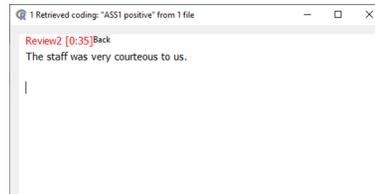


Figure 6. Analysis according to the codes in the context of the combination of cases and file categories

Source: Authors' analysis in RQDA program

Finally, the last part of the process is the possibility to refresh data constantly. For example, once a week, new tourist reviews can be added. The advantage of using quantitative research instruments as a foundation for coding is that the codes are constant i.e. the same codes will be applied to new comments. That is possible because of the characteristic of such instruments that they attempt to capture all the relevant aspects of service quality on the one side, and their formulation, as explained before, is on a more abstract level than concrete cues allowing stability in their formulation, on the other.

6. MANAGERIAL IMPLICATIONS

Several important managerial implications of using the described approach have already been suggested:

1. possibility of capturing all the aspects of service quality,
2. analysing available tourists' reviews within developed framework,
3. monitoring tourism service quality constantly and
4. using the results as a base for managerial actions.

In addition, two important issues need to be addressed. On one hand, there is a need to support tourists to give comments that will be used in later analysis. It is not only connected to verbal support of the staff to the tourists to comment on the aspects of the service they consider as needed to be assessed. The whole organizational culture requires supporting obtaining tourists' reviews and reacting according to them.

On the other hand, it would be important to consider the effects of using the proposed approach from an organizational perspective. The first implication is to give an appropriate employee a task to follow the reviews available in various sources. It is also needed to define what is the period in which those reviews are considered. Another implication refers to the need to collect all additional information that can be used in the analysis. It is possible to use questionnaires and databases in which all the relevant information, without intrusion to tourists' privacy, would be collected.

7. FUTURE RESEARCH DIRECTIONS

Future research could test the value that the managers would give to the presented approach after presenting it to them. Within that topic, a deeper analysis can be performed regarding the acceptance of the approach in the context of tourism supply characteristics as well as characteristics of managers.

8. CONCLUSION

The importance of perceived service quality in general, as well as in the tourism industry, can be considered in the context of its positive relation to the satisfaction and loyalty of service users. Therefore, the need to consider quality is an important aspect of management in tourism. An approach for monitoring all aspects of perceived quality refers to conducting quantitative marketing research that generally requires time and money and cannot be performed constantly. Relevant issues regarding instruments of quantitative marketing research are considered within parts of this paper.

In this manuscript is introduced a potential approach for linking measuring tourism service quality and qualitative marketing research. The characteristics of qualitative research are also considered and their process with special emphasis on coding is presented. The approach suggests using items and/or dimensions from quantitative marketing research that consider all aspects of service quality as codes in qualitative marketing research.

Another important aspect of the approach is related to data that will be coded in accordance to the previous description. Those data are actually marketing intelligence data and can refer to tourist reviews that can be collected from websites, social networks, books of impressions, etc.

The approach is presented in detail, an example is given, its application in qualitative research software is presented and managerial implications are considered. Future research should focus on the potential acceptance of the approach by managers from the tourism industry.

REFERENCES

- Bhat, M. A. (2012). Tourism Service Quality: A Dimension-specific Assessment of SERVQUAL. *Global Business Review*, 13(2) 327-337. <https://doi.org/10.1177/097215091201300210>
- Cronin, J. J., & Taylor, S. A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56(3), 55-68. <https://doi.org/10.2307/1252296>
- Parasuraman, A., Zeithaml, V., & Berry, L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64, 12-40.
- Becker, J., Klein, K., & Wetzels, M. (2012). Models in PLS-SEM: Guidelines for using reflective-formative type models. *Long Range Planning*, 45(5-6), 359-394. <https://doi.org/10.1016/j.lrp.2012.10.001>
- Chen, C.-F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism Management*, 28(4), 1115-1122. <https://doi.org/10.1016/j.tourman.2006.07.007>
- Daymon, C., & Holloway, I. (2011). *Qualitative research methods in public relations and marketing communications*. Oxon, UK: Routledge.

- Grubor, A., Djokic, N., Milicevic, N., & Djokic, I. (2021). *Marketing istraživanje (Marketing research)*. Subotica, Serbia: Ekonomski fakultet u Subotici
- Hallak, R., Assaker, G., & El-Haddad, R. (2017). Re-examining the relationships among perceived quality, value, satisfaction, and destination loyalty. *Journal of Vacation Marketing*, 24(2), 118-135. <https://doi.org/10.1177/1356766717690572>
- Ho, C.-I., & Lee, Y.-L. (2007). The development of an e-travel service quality scale. *Tourism Management*, 28(6), 1434-1449. <https://doi.org/10.1016/j.tourman.2006.12.002>
- Ho, C.-I., Liu, L.-W., Yuan, Y., & Liao, H.-H. (2020). Perceived food souvenir quality as a formative second-order construct: how do tourists evaluate the quality of food souvenirs? *Current Issues in Tourism*, 24(4), 479-502. <https://doi.org/10.1080/13683500.2020.1715928>
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003) A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research*, 30(2), 199-218. <https://www.jstor.org/stable/10.1086/376806>
- Liu, X., Fu, Y., Chao, R.-F., & Li, J. (2016). A formative measurement approach for exploring how to form service quality in hot spring resorts. *Tourism and Hospitality Research*, 19(1), 27-39. <https://doi.org/10.1177/1467358416683767>
- Maison, D. (2019). *Qualitative marketing research – Understanding consumer behaviour*. New York, USA: Routledge.
- Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). *Marketing research – An applied approach*. Harlow, UK: Pearson.
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL. *Journal of Service Research*, 7(3), 213-233. <https://doi.org/10.1177/1094670504271156>
- Petrick, J. F. (2004). The Roles of Quality, Value, and Satisfaction in Predicting Cruise Passengers' Behavioral Intentions. *Journal of Travel Research*, 42(4), 397-407. <https://doi.org/10.1177/0047287504263037>
- Petter, S., Straub, D., & Rai, A. (2007). Specifying Formative Constructs in Information Systems Research. *MIS Quarterly*, 31(4), 623-656. <https://doi.org/10.2307/25148814>



Marketing Communication as a Support to Modern Tourism Business

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Abstract: *The marketing concept in the tourism business requires a good knowledge of the market (all its segments), which implies a continuous analysis and planning approach. In this way, preconditions are created to successfully deliver the service to end consumers, which ensures the basic role of the company in the market, and that is, through the provision of appropriate service quality to consumers and their satisfaction, to achieve the basic interest of the company as a collective - profit. This paper investigates the possibilities and scope of effective marketing communication, which in modern conditions represents significant support to the tourism business. The role of marketing communication should be viewed in the context of the expansion of tourism, especially in the second half of the twentieth century. Marketing communication in tourism has the task of enabling a more efficient exchange between tourist demand and supply.*

1. INTRODUCTION

Various factors such as scientific and technical progress, the development of means of transport, the increase in the level of culture, education and the level of standards, have led to various changes in tourist movements. Among the types of tourism, domestic tourism began to play a key role as the main source of financial income from tourism activities (Nurov et al., 2021, pp. 271-275).

The importance of tourism is reflected in its close connection with many activities, such as transport, culture, health, and politics. The size and structure of the population, economic potential, technological innovations, and political and cultural trends are usually the factors on which the directions of tourism development in the coming period depend. In such conditions, the importance of marketing in the development of tourism in Serbia is increasing. Innovative development is becoming an effective market tool for managing modern economic and social systems (Karimova, 2020, pp. 24-32).

With the development of the market, and especially since the seventies of the twentieth century, when the service sector gained importance, the marketing concept has expanded in addition to the manufacturing and service sectors. One of the important areas in which marketing has found its application is tourism. Their development was complementary, because tourism also gained its full expansion in the last decades of the twentieth century. This is evidenced by the revenues that some countries have generated and still generate today based on tourism, as well as the volume and dynamics of realized tourist movements.

Understanding the marketing concept has exactly the same meaning in tourism as in other economic activities. The desire is to enable the placement of appropriate tourist products and services on the market in order to satisfy tourists as end consumers (consumers). Hence, when we talk about marketing in tourism, the subject of this study is to answer the question of how and in what way it

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can contribute to the facilitation of the exchange process in the tourism market. This interpretation primarily stems from the understanding of marketing as a business concept. Also, the role of marketing and the development of tourism business is linked (Ismailova, Bejšakeeva, 2021, pp. 46-49).

Marketing in tourism as a subsystem in the system of service marketing has developed in parallel with the development of the service sector all over the world. The first works in the field of marketing in tourism dealt with the articulation of certain concepts, different concepts and definitions, which is understandable given the level of tourism development at that time. Successful marketing is considered to be one that exceeds the value offered by the competition. After the purchase, the customer's satisfaction depends on the relationship between the observed performance of the purchased product and/or service and the customer's expectations. Satisfaction is achieved when the obtained performance meets or exceeds expectations. Customer expectations are formed on the basis of information that is available before the purchase. Commercial success is achieved when performance exceeds expectations.

The tourism industry is extremely vulnerable to numerous factors, such as natural disasters, pandemics, terrorism, uprising, and so on (Yeh, 2021, pp. 188-194). Accordingly, the factor that multiplies the significance of this research is the pandemic of Covid-19. Namely, according to the latest edition of the *UNWTO World Tourism Barometer*, an estimated 54 million tourists crossed international borders in July 2021, down 67% from the same month in 2019, but the strongest results since April 2020. This compares to an estimated 34 million international arrivals recorded in July 2020, though well below the 164 million figure recorded in 2019 (<https://www.unwto.org/taxonomy/term/347>).

2. MATERIALS AND METHODS

In the realization of the research task, desk research of data that is predominantly related to the interdependence of marketing and tourism, the adaptation of marketing to a service environment, the legal framework of marketing communication, creating relationships with customers as the basis of marketing, ethical approach in marketing communication in tourism, etc. was used. This research involves the use of data from official sources: UNWTO, UNDP, the professional and scientific literature and internal documentation. The combination of these research methods can provide the most reliable answer to the key questions that have emerged in the analysis of the role of marketing communication in improving the performance of the modern tourism business.

3. INTERDEPENDENCE OF MARKETING AND TOURISM

From the Second World War until today, the tourist market has been transformed, through several stages, from a mass tourist market intended for the wider masses to a market for every consumer or tourist. This is a practical confirmation of customer relationship management, where by satisfying the needs of smaller groups of service users (increasing the diversity of the tourist offer), the base of tourist service users automatically expands quickly and intensively. The specifics without which the tourist market cannot function are (Cvijanović, 2014):

1. The satisfaction of tourist needs cannot be achieved without the travel of tourists (tourist consumers) outside their usual environment to places where the tourist offer is concentrated.
2. Products and services offered in a particular tourist market to meet tourist needs cannot be separated from the space in which they are "produced", but are firmly attached to it. They

- cannot be consumed in any other place unlike commodity markets, where products and services can move indefinitely.
3. Tourists are always an integral part of the production of a tourist product and its consumption is not possible without their personal presence. This is not the case with other markets and other products.
 4. The tourist product is not homogeneous but is the result of a single production process unlike products in other markets. It is an integrated product that is provided by various service providers at the time of consumption, and the tourist perceives it as a unique tourist experience. The diversity of tourist demand is manifested in terms of the needs and requirements of tourists, but also in terms of other important elements in the management and marketing of tourism companies. The diversity of tourist demand is interdependent with the diversity of tourist offers, i.e. services, from the point of view of space, time and quality. That is why the process of providing tourist services must be viewed as a single process. Synchronization of this process from the point of view of space, time and quality must also be ensured.
 5. Due to the spatial separation of tourist demand from tourist offers, it is necessary to establish their contact, through travel agencies and tour operators as intermediary elements of the tourist market. Over time, their role became increasingly important.

As a sector that has interlinkages with virtually all other economic sectors, tourism produces profound and wide-ranging impacts across all dimensions of sustainable development (UNDP, UNWTO, 2017, p. 14). The phenomenon of tourism development has caused the emergence of a large number of scientific disciplines that deal with it in the field of economics, sociology, culture and many other social sciences (Cvijanović, Vuković, 2012, p. 18). Certainly, one of the basic scientific disciplines in the field of studying the phenomenon of tourism development is marketing. In order to properly understand the application of marketing in tourism, it is necessary to first explain the very concept of tourism, as well as the reasons for its accelerated expansion in recent decades.

One of the most frequently cited definitions of tourism is that given by the Swiss authors Hunziker and Krapf, adopted by the International Association of Scientific and Tourism Experts ("AIEST"), according to which: "Tourism is a set of relationships and phenomena that arise from the travel and stay of visitors to the place if the permanent residence is not established by that residence and if no economic activity of theirs is connected with the permanent residence" (Unković, Zečević, 2005, p. 11). The development of tourism is conditioned by numerous factors, but here we will primarily emphasize the scientific and technological progress, which conditioned the appearance of surplus free time, and the possibility of achieving higher salaries for employees, which created the conditions for surplus free funds.

Scientific and technological progress has led to the accelerated development of traffic and all types of vehicles. All these reasons influenced the creation of assumptions that people can travel en masse, which contributed to the development of tourism. One of the most comprehensive definitions of marketing in tourism is that given by Krippendorf (1973): "Marketing in tourism is a systematic and coordinated adjustment of business policy of tourism companies and tourism policy of the state at the local, regional, national and international level, in order to achieve optimal satisfaction needs of certain consumer groups (market segments) and thus made an appropriate profit."

The task of marketing in tourism is to monitor and study all relevant factors at the micro and macro level that can and should lead to the successful realization of business goals on the tourist offer and consumers themselves (tourists) on the side of tourist demand (Cvijanović, Vuković, 2012, p. 21).

The deconcentration of tourist traffic (or seasonal fluctuation of demand) is becoming more pronounced with the growth of tourist trips during the winter and spring months, thanks to the use of vacation several times during the year, increasing winter tourist offers and growing urban tourism (Cvijanović, 2014). Until recently, a very pronounced seasonal concentration of tourist traffic influenced (and still affects) the uneven use of tourist offer capacity, causing many accompanying side effects, which was emphasized by the impossibility of storing tourist services, due to the simultaneous process of creation and consumption.

According to the latest edition of the UNWTO World Tourism Barometer Most destinations reporting data for June and July, 2021 saw a moderate rebound in international arrivals compared to 2020. Nevertheless, 2021 continues to be a challenging year for global tourism, with international arrivals down 80% in January-July compared to 2019. (<https://www.unwto.org/taxonomy/term/347>).

4. ADAPTATION OF MARKETING TO A SERVICE ENVIRONMENT

In modern business conditions, the struggle for the customer is becoming more and more intense, and operational management is expected to enable a sufficient number of loyal and profitable customers through adequate approaches, methods and appropriate allocation of resources. Namely, it is difficult to satisfy modern customers.

They are wiser, rationally oriented, price considerate, more demanding, hard to forgive mistakes, they are constantly bombarded with the same or better competitive offers. Marketing was created to solve the problem of production and producers when supply was higher than demand, and the ultimate goal was the realization of manufactured goods and making a profit for the company. Today, the essence of marketing is to solve consumer problems - faster and better than the competition.

The primary importance of marketing is reflected in the establishment of communication flow between producers and customers, i.e. consumers. Marketing as an economic process takes place continuously and is an integral part of reproduction in the company. Marketing is not a promotion or appearance at a fair or sales - it is a process that lasts and includes research, strategic planning, goal setting, marketing strategy formulation, marketing mix program development, marketing analysis, control and audit. So, there is a whole system and every part of it is equally important and significant (Cvijanović, Mihailović, 2010).

Marketing, as a business concept, is primarily customer-oriented. Consequently, the design of products and services begins with the needs of consumers, and the goal of action is set consumer satisfaction. Where the marketing concept is fully applied, consumers are not only taken care of by the marketing department but by all employees, working with the awareness that they are working for the sake of consumers. Commitment to consumers in these companies is especially true for employees who are in direct contact with them. Managers must ensure that the entire organization recognizes the importance of customer retention. Namely, managers are expected to encourage employees to minimize mistakes (by introducing incentives, planning and proper financing of business activities). More importantly, managers must use errors as a means to continually improve the quality of services they provide to customers.

In domestic markets, consumer characteristics such as age, gender, social class, personality, brand loyalty, product use and attitudes towards a given brand are often used as a basis for segmentation (Cvijanović, Mihailović, 2011). Namely, market segmentation is one of the basic

concepts in marketing. It provides a better understanding of consumer needs and desires. In this way, companies can adapt the tourist product to the wishes and needs of a particular market segment. Consumer grouping and market segmentation enable the development of strategic marketing plans. Through the given plans, companies pay special attention to the needs and requirements of consumers within different market segments.

According to the marketing concept, the market should be understood as a place where all current and potential sellers and buyers of a product and/or service perform some form of exchange, whether it is “output”, money and/or information. The market is a set of supply-demand relations or a place where material goods and services are exchanged for money (Vojnović et al., p. 13). Choosing how to segment the market is often a problem. The socio-demographic method is most often used in market segmentation and is performed by dividing the market into variables such as age, gender, income, occupation, national, religious, and racial affiliation, etc. The process of market segmentation runs through three phases (Dibb et al., 1991, p. 5):

- Segmentation: variables for segmentation are taken into account; the profiles of the obtained segments are analyzed; the obtained market segments are valued.
- Target market selection: deciding on the target market selection strategy; it determines which segments and how many of them could be considered as target markets.
- Positioning: consumer perceptions need to be known; position the product in the thought process; program a specific marketing mix.

In market segmentation, the most important thing is to discover all the variables that are most appropriate to define the different product requirements. If the company is well aware of its target segments, it can make the most of an adequate marketing mix. After discovering the segments, it is necessary to decide which consumer groups will be selected and how many of them will be selected as target markets. It is possible to focus on only one market segment, but also to focus on multiple segments, offering one or more products.

During the evaluation of different marketing segments, the company must see two factors: the overall attractiveness of the segments and the goals and resources of the company. The company must consider whether the potential segment has features that make it particularly attractive, such as: size, growth, profitability, economies of scale, low risk, etc.

Care must be taken as to whether it is easy to persuade members of the segments to buy a given product, how much their business is worth, which customers spend how much, which customers remain attached and how much impact they have on other customers. Also, it must be seen whether the investment in a certain segment is in line with the assets and goals of the company. An unsuitable segment, where the company cannot position itself with its product, is not desirable. Those segments should be selected that can be offered exceptional or superior value (Kotler, 2001).

5. LEGAL FRAMEWORK OF MARKETING COMMUNICATION

Strategic decisions in the field of marketing have long-term effects on the business performance of the company, as well as on the management of business functions, such as product development, production or financial control (Mihailović et al., 2008, p. 18). However, there are four ethical dilemmas or challenges regarding marketing research: misuse of marketing research findings; invasion of privacy; gathering competitive information; using research as an occasion to sell (Jobber, Fahy, 2006, p. 105). Consumers are sometimes bothered by the intrusive nature

of marketing research, especially if questions focus on their age and income, making phone calls at inconvenient times, or stopping on the street to participate in face-to-face interviews (Cvijanović, Mihailović, 2010, p. 123).

Occupations for marketing ethics were formulated as rules of marketing and advertising ethics, which were developed in 1937 by the International Chamber of Commerce (ICC). The content of these regulations has often been changed and modified, obtaining new and stronger provisions (today, the New Ethical Rules in Marketing Communications are used, adopted in 2006 in Paris).

At the same time, one can see the efforts toward the elaboration and publication of ethical rules in the field of marketing research by the European Society for Marketing Research and Public Opinion (ESOMAR), in 1948 (Cvijanović et al., 2009). The importance of marketing ethics also led to the initiative of the American Marketing Society to adopt declarations related to ethics in 2004, a declaration related to ethical regulations and values that must be respected in the business, which also serve as a guide for experts, marketing in their business and designing activities (Cvijanović et al., 2009).

The general regulations contained in the declaration relate to the following aspects (Cvijanović et al., 2009):

- Marketing workers must not harm anyone, which means that in practice they must use what they know and have learned in order to achieve added value for their organizations and consumers, according to the law and regulations, adopting the highest ethical standards in the choices they make.
- Marketing workers must maintain trust in the marketing system, which means that they must promote products so that they correspond to the intentions for which they were created. Communications in marketing should be formed so that products or services must not disappoint or deliberately deceive consumers.
- Marketing workers must communicate and apply in practice the basic ethical values that increase consumer confidence in the integrity of the marketing system. These core values are the goals to be pursued and they must include (Cvijanović et al., 2009):
 - honesty (to be honest and correct in business with consumers, where, among other things, it is required that products are offered at a value expressed through marketing communications);
 - responsibility (accept the consequences of marketing decisions and strategies, among other things, without abusing certain sensitive market categories, such as children, the elderly or the disabled);
 - fairness (provide a clear presentation of the product during sales, as well as in advertisements or other communications);
 - respect (respect for the human dignity of all members of society);
 - openness (transparency in marketing activities);
 - respect for civic duties (fulfillment of economic, legal, philanthropic and social responsibilities).

As can be easily seen, special importance is given to the ethical aspects of the entire marketing communication system, and especially to communication techniques with the greatest and most visible impact on the public - advertising. The same interest in ethics in marketing was observed in the case of ethical rules related to marketing and public relations; the amended version (published in 2006 in Paris by the International Chamber of Commerce) increased the scope of ethical aspects with other components of marketing communication techniques and instruments.

Thanks to the development of technology, development and diversification of customer demand, we have come to a situation where marketing workers have to find new ways to communicate with consumers. The new rules combine previously separated rules (relating to promotional sales, sponsorships, direct marketing, use of electronic media and “green marketing”), additionally including directives for a number of advertising practices and other marketing techniques.

By adopting and adhering to this new version of the rules, a number of firms active in the business world can increase customer satisfaction that makes up the target market. The main objectives of the rules relate to the following aspects:

- proving responsibility and good practice in advertising and marketing communications around the world;
- increasing public confidence in marketing communications;
- respect for the confidentiality and wishes of consumers;
- providing special responsibilities related to marketing communication for children/teenagers;
- protection of freedom of expression for those involved in communications marketing (as specified in Article 19 of the United Nations International Covenant on Civil and Political Rights);
- offer practical and adaptable solutions;
- minimizing the need for laws or some detailed governmental or non-governmental rules (International Chamber of Commerce, World Business Organization, 2006).

In companies where the marketing concept is fully applied, not only the marketing department but also all employees take care of consumers, working with the awareness that they are working for the sake of consumers. Commitment to consumers in these companies especially refers to employees who are in direct contact with them (Mihailović et al., pp. 48-60). To achieve this, the rules are communicated simultaneously to consumers and advertising professionals, thus setting clear standards that marketing communications must adhere to and a minimum degree of consumer protection, so as to maximize trust in the methods used.

The controversy related to ethics in communications is directed towards the messages sent to the public, as well as towards the techniques and instruments used in marketing communications. Ethical problems in the field of marketing communications are much more common in international marketing due to: certain barriers that occur only in international communications, barriers that determine disorders in the process of transmission and proper reception of messages, language differences, cultural differences, availability of communication media, legal restrictions related to promotion, economic differences, differences in tastes, customs, attitudes, availability of promotional agents, specific local distributors, etc.

6. CREATING CUSTOMER RELATIONS AS THE BASIS OF MARKETING

“The tourism industry framework, for the most part, depends on data and correspondence advancements for limited time exercises, deals and when creating the executive associations with customers” (Siregar et al., 2020, pp. 262). The concept of relationship marketing has emerged in the areas of service and business marketing. The phenomenon described by this concept is strongly supported by the current developments in modern business. Marketing refers to establishing, maintaining and improving relationships with customers and other partners, in addition to profit, so that the goals of the parties involved in the process are met. In fact, it can be said that the quality

of a product or service is already a relationship between all actors in the chain that goes from production, through placement and distribution to end users (Milivojević et al., Pp. 43-54).

Attention must also be paid to integrate market communications in order to enhance and develop the relationship with customers and retain them for a longer period in order to ensure the achievement of the common benefits of travel & tourism organizations on the one side, and their customers on the other side (Al-Hazmi, 2021, pp. 247-252). When establishing a relationship with customers, we notice two phases: attracting customers and creating a relationship with them so that the economic goals of that relationship are achieved. This is achieved through mutual exchange of values and fulfillment of promises. Such relationships are usually not always long-term (Cvijanović, Mihailović, 2010). Consequently, attracting and retaining customers are the main goals in the relationship management and marketing profession. Retaining existing customers is the first goal of relationship marketing. In order to achieve this, service companies must be ready to notice the hesitation of users in time, especially those who decide not to use the company's services anymore, and then to analyze their procedure and plan future activities based on available information and acquired knowledge (Cvijanović, Mihailović, 2010).

In other words, customer relationship management must pay attention to the specific causes that lead to some users "leaving" the company. One study found that in many service industries, profits increase sharply when a firm reduces its customer outflow rate (Reichheld, Sasser, 1990, pp. 105-111). Firms can increase profits from 25% to 85% (depending on the industry) if they reduce customer outflow by only 5%. This is due to the fact that loyal customers generate more revenue over many years and that the cost of retaining existing customers is lower than the cost of attracting new ones. Accordingly, error analysis is an important process in determining the number, percentage, and reasons for abandonment. Based on the users who leave the company, i.e. no longer use its services, a quality insight into the business can be obtained, which cannot be achieved in any other way. Certainly, it is the initial warning signal and can be used to learn from mistakes and to use the obtained information to improve the business. The principle of interactions and networks in economic marketing and modern principles of service marketing, especially those from the Nordic school, clearly show marketing as an interactive process in a social context, where relationship building and management are essential foundations of marketing (Webster, 1992, pp. 1-17). They are noticeably related to the systemic principles of marketing from the 50s. On the other hand, the idea of a marketing mix with "four P's" is a much narrower approach, which makes the seller the active side and the buyer and the user passive. The concept of relationship marketing has emerged in the areas of service and business marketing. The phenomenon described by this concept is strongly supported by the current developments in modern business. Marketing refers to establishing, maintaining and improving relationships with customers and other partners, in addition to profit, so that the goals of the parties involved in the process are met. When establishing a relationship with customers, we notice two phases: attracting customers and creating a relationship with them so that the economic goals of that relationship are achieved. This is achieved through mutual exchange of values and fulfillment of promises. Consumer value (CV) is endemic to marketing, and therefore, it is a crucial notion to understand the evolution of tourism research (Gallarza, Saura, 2020). There is a growing interest among marketers in the concept of value for tourists, given its potential to provide businesses with a competitive advantage if it is understood and built into the marketing offer (Page, Connell, 2020, pp. 300-324).

An integral element of relationship marketing is the concept of promise. However, the responsibility of marketing does not contain only, or to the greatest extent, making promises. A

promising company can attract new customers and build some initial relationships. However, if promises are not fulfilled, developed relationships cannot be maintained and improved. Fulfilling the promises made is an essential means of customer satisfaction, with the goal of maintaining a customer base and long-term profitability.

Another key element is trust. The means at the disposal of the seller - workers, technology and systems - must be used in such a way as to preserve the user's confidence in the means used, and therefore in the company. In a study of market relations in one industry, Moorman and co-workers defined trust as "the will of users to rely on a trusted partner in exchange." This definition means, above all, that there is a belief in reliability, which comes from the expertise and previous activities of the business partner. Second, if trust is viewed as conscious behavior that reflects reliance on the partner, then there is an element of uncertainty and risk of that trust being betrayed. If there is no indulgence in risk, then trust is unnecessary because one side can control the activities of the other. It must be borne in mind, however, that in many relationship marketing situations it is not clear who relies on when (this situation is somewhat simpler in a relationship between two participants).

Relationship marketing is still evolving as the mainstream of the marketing concept, although it has already been established as a fundamental idea in modern economic marketing and service marketing. Its significance is understood and accepted to an increasing degree. Philip Kotler points out that "firms must move from a short-term transaction-oriented goal to a long-term goal of building relationships" (Kotler, 1992). Kotler also states that a change of ideas happens when experts in a field are not satisfied with the variables they use or the scope of their work. In the field of marketing, this refers, above all, to shifting the focus of research from exchange - in the narrow sense of transactions - to building relationships and marketing networks - starting to think mainly about how to retain existing customers. Consequently, new thinking is different from the focus on the marketing mix and represents a focus on customer relationships.

7. ETHICAL APPROACH IN MARKETING COMMUNICATION IN TOURISM

Media advertising has an informative, convincing and stimulating effect on consumers. The goal is to directly increase sales or to create a positive image of the company or product brand (Rakita, 1999, pp. 135-146). However, the most serious accusations related to the lack of ethics are made in the field of advertising, where numerous marketing techniques are accused, its instruments, as those elements that are subject to the greatest degree of manipulation of consumer consciousness. Advertisements are used by organizations to send messages with the aim of encouraging certain reactions of a perceptual nature or the behavior of the target audience.

Advertisements have certain functions (inform the public - stimulate primary demand, convince consumers - after creating selective demand, comparisons are made in order to establish superior quality and maintain user interest in brands and products) and have many characteristics that offer specificity and reveal controversies about ethical issues: 1. advertising has a public character, repeating its message countless times; 2. can offer the persuasiveness of the advertiser (sponsor), who becomes powerful, trustworthy and successful; 3. has an emphasized expressiveness, combining images, sound, movement, color (especially with the support of television); 4. is effective in maintaining contact between the company and the general public, which is geographically spread; 5. has an impersonal character, as indirect communication. In particular, related to these functions and characteristics, among the main criticisms and controversies related to the lack of ethics in advertising are (Solomon, 2006, pp. 385-395):

- manipulation, which affects the independence of individuals, where advertisements are accused of being coercive because they affect the free choice of the consumer, who cannot decide for himself what he needs but is exposed to influences that may be irrelevant or even contrary to his needs;
- cheating, when false and false information is presented, when half-truths are presented, when essential elements are not presented, etc.; advertising must not take advantage of the lack of information or experience of consumers (especially in the situation when technical tests are mentioned, which must be explicit and their validity proven - for example, in the case of the public announcement of a drug promising a speedy cure, without the possibility of proving this fact or situation when the secondary effects of the drug are not mentioned, but it is recommended to consult a doctor or pharmacist);
- manipulation of children, bad influence on their behavior, because children are very susceptible to advertising messages;
- making comparisons between brands and products, starting from false claims or half-truths (however, from this aspect it is allowed to make certain comparisons, to some extent, using abstract expressions such as “ordinary detergent” compared to the advertised detergent);
- encouraging some “artificial” needs, imposing a state of “dissatisfaction” with already used products, a state that can end with the purchase of other products, which are not necessarily needed;
- use of violence, scenes with inappropriate connotation, provocation or excessive emphasis on some bad human qualities or weaknesses;
- Violation of privacy of persons (especially in the case of direct advertising, when marketing workers use personal customer data), irritating consumers (excessive advertising, high frequency of advertising, etc.), increasing unrest and insecurity, especially in the case of drug advertising, life insurance or other goods and services intended for the health or safety of consumers.

Advertising can also manipulate the content of the message, as well as the way the message is presented. The language and vocabulary of advertising itself (which can create stereotype ideas, depending on the target group), omitting some parts of the structure, skipping preconditions, substitutions, different meanings for one word or word games, creating certain meanings in the minds of individuals, encouraging automatic reactions, body language (gestures, facial expressions, facial expressions, etc.) and the sounds used create certain reactions in the target audience, which is increasingly urged to pay attention to the messages that are transmitted.

One of the most serious accusations against those in the field of advertising is that they are increasingly turning to psychologists and neuropsychologists, with the aim of developing other manipulation techniques in the process of creating advertisements, on the verge of normal perception, where these techniques exist (Prutianu, 2000, pp. 232-234), such as the following: causing intentional confusion (intentionally causing suspicion and confusion in the structure of the advertising message, with the aim of increasing tension); the illusion of naivety (using some advanced techniques and technologies, in order to create naive audio-visual production, as in commercials for children); media strike technique (used in the form of rapid change of images and sounds, at the limit of the capacity of the senses to receive and process, which unconsciously and reflexively increases the effort in people); perceptual automatism (transmission of some sounds and images that can have negative consequences for human activity: crying babies, police sirens, etc., in order to stimulate attention, imagination and memory, short-term

hypnosis most often achieved through short flashes and pulsating sounds and images, which affect receptors, so they are perceived as their own will).

In order to verify these accusations, starting from the second half of the twentieth century, many types of research and studies were conducted, where experts admitted that it is not possible to prove that such advertisements can convince people to buy products and services because no research has proven whether of these theoretical principles are indeed used to increase sales (Brătucu, Brătucu, 2007, p. 17).

Namely, today the essence of marketing still consists in solving consumer problems - faster and better than the competition (Cvijanović et al., pp. 157-167). However, in international marketing, it happens that the content of advertising messages often creates ethical problems, especially due to cultural and linguistic differences between different parts of the world. Some words, gestures, colors, and symbols have different meanings in different meridians of the world, so they are interpreted differently.

What is natural, adequate, or fair in a European country may be ridiculous or unfair on another continent, insulting the modesty, honor and pride of the population (for example, white signifies purity in Western culture, while in Asia it is associated with death and regret, etc.). Another undesirable aspect in advertising is the one related to the adoption of some ideas that have already been used in other advertisements, under a view that is more or less obvious and that is more or less proven. Designing advertising messages starting from a previously conceived and used idea leads to serious ethical problems in the field of intellectual property protection.

All the presented aspects and many others lead us to say that there are many “tricks” used in the advertising world (often on the border of moral and immoral), with the aim of turning consumers into obedient customers, where the products purchased increase the profits of companies and advertising representatives who work for them. Favorable market positioning can also be achieved through adequate public relations (PR).

Namely, public relations actions are aimed at creating a certain public opinion about the product and its characteristics. „In order to have a positive effect on public opinion, messages must be in accordance with the existing value system in society or with a certain part of the public to whom the message is addressed“ (Cvijanović et al., 2009, p. 16).

Among the goals of public relations activities are creating and maintaining a favorable image of companies in public, their products, as well as minimizing the negative impact of the public or some other component of the external market environment, which is reflected in the way the company is presented or in its business strategy. One of the most commonly used techniques of communication with the public, which public relations experts use depending on what kind of image they want to achieve, is cooperation with the media (through announcements, press conferences, etc.) (Cvijanović et al., 2009).

Media advertising is economic propaganda in the narrow or original sense. „It is a form of mass communication with the public and consumers through local, national or global media“ (Rakita, 1999, pp. 135). This relationship is intensifying in conditions of uncertainty and crisis situations.

8. FUTURE RESEARCH DIRECTIONS

From the marketing aspect, tourism is in a phase of maturity characterized by the saturation of the market with existing ways of meeting tourism needs (Cvijanović, 2014). Information and communication technologies (ICT) have revolutionized the daily lives of society and the global economy development (Medeiros et al., 2021). Namely, the successor of the industrial revolution - the information economy and the virtual Internet space - are successfully penetrating all aspects of everyday life, economy and trade, changing the current practice and norms.

The digital revolution and computer technology are fundamentally changing the notion of space, time and matter. Namely, the company no longer has to take up much space, it can be virtual and located anywhere. Businesses can be connected to each other and customers in a seamless virtual network. Finally, the importance and role of e-commerce (“online” or online trade) is growing, concerning retail channels.

Using the online environment helps to reduce expenses and there is also the advantage that the Internet is unlimited. Many services can be purchased through the Internet and people can select their preferences (Cristina, et al. 2020). Understanding how social media induce travelers to visit is crucial for providing insights into destination marketing and management (Shin, Xiang, 2020).

In the developed countries of the market economy, the Internet has already entered tourism and other sectors, and the range of Internet applications for marketing purposes is very wide: from “online” propaganda, through online shopping (or sales), to “online” service. The company can use the Internet to research the environment and the market, to provide information (creating its own website), participate in discussions, perform direct Internet purchases and sales, exchanges, auctions, etc. For example, through online platforms and modern logistics, producers can consolidate business revenues during a pandemic, when rural tourism is almost impossible (Mihailović, Popović, 2021, pp. 111-126). At the same time, there are great opportunities to promote rural areas through the branding of agri-food products (Mihailović, Popović, 2020, pp. 282-298).

On the other hand, indicators in the last few decades indicate the growing role and importance of tourism in the economic life of a large number of countries. Created on the premises of the market and market economy of the XX century, “modern tourism” is constantly evolving, expanding its scope every day (Cvijanović, Vuković, 2012, p. 39). The essence of the service-oriented business trend is reflected in the shift from product-oriented to user-oriented thinking.

Providing the service aims to establish relationships with customers, increase their satisfaction, change the cost structure over time, build greater customer loyalty, and ultimately - to improve performance by increasing revenue. According to service logic (which is enabled by information technology), the key unit of analysis is the value of the relationship between the company and each individual user. The value of the lifespan of the customer base is the most important asset of the company.

Therefore, companies are becoming more service-oriented, and the marketing strategy will have to follow this change and become less product-oriented and more user-oriented. In such conditions, the user capital framework needs to be a flexible, user-oriented principle, which should be a central element of the marketing strategy. By applying this principle, companies can focus on marketing activities that lead to higher revenues.

In such conditions, the accelerated development of science will lead to a better response to the increasingly sophisticated demands of consumers. In that sense, the role of marketing in tourism will be large and promising, especially if it is intertwined with other areas such as sociology, psychology, informatics, consumer behavior and the like. (Cvijanović, Vuković, 2012, p. 39).

9. CONCLUSION

Thanks to the development of air traffic and information-technological progress, tourists today visit once inaccessible parts of the planet. Once completely isolated countries are now involved in the process of globalization, but they are also becoming an important element of the international tourist offer.

Tourist consumers are becoming more demanding, traveling more often, but also for a shorter time. They are increasingly turning to specific forms of tourism in search of new experiences. Globalization is certainly the most recognizable general trend that has marked the development of tourism in recent years. Consequently, the development of tourism markets is inextricably linked to the further progress of the globalization process. Therefore, the explanation of one follows the explanation of the other phenomenon.

Globalization is characterized by the growing interdependence of national economies with the world economy. The countries of the world are connected in a very wide network of economic, social and political ties. The more significant and complex these connections are, the more positive or negative the effects of general movements in the world economy have on individual national economies. All states are in a position to seek some balance between economic independence and the degree of involvement in the international economy. It is difficult to find reciprocity, especially when it comes to developing countries. There is a growing number of economic and other problems that the national economy cannot successfully solve.

In order to properly understand the management of marketing activities in tourism, it is important to point out that it differs from the classic business in manufacturing companies and/or other service activities such as, for example, banking and/or insurance companies and the like. This attitude stems primarily from the character and nature of tourism. Doing business in tourism means that different companies must cooperate, to provide tourists with the appropriate quality of services and provide them with the appropriate level of satisfaction.

Therefore, there must be mutual cooperation between economic entities that operate in tourism (and these are different companies, organizations, associations, professional organizations and other entities). In this way, the exchange of products, services and information is carried out without hindrance, in order to satisfy consumers and realize the interests of the company, which is also a marketing concept.

Companies that deal with tourism through the use of internal resources and all activities they perform, influence the direction of development, nature and the way of functioning in tourism. It is in this context that management and organization of activities became important.

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REFERENCES

- Al-Hazmi, N. (2021). "The impact of customer relationship management on customer retention in travel and tourism organizations". *Management Science Letters*, 11(1), pp. 247-252.
- Brătucu, G., Brătucu, T.O. (2007). *The analysis of the factors system that influences the individual consumer's behaviour*, in *Management&Marketing*, 2 (2), p. 17.
- Cristina, Babcsanyi, et al. (2020). "Communication in tourism promotion campaigns." *Agricultural Management/Lucrari Stiintifice Seria I, Management Agricol* 22.3.
- Cvijanović, D. (2014). *Turističko tržište u dunavskom regionu*, monografija, Institut za ekonomiku poljoprivrede, Beograd.
- Cvijanović, D., Mihailović, B. (2010). *Menadžment i marketing uslužnog sektora*, monografija, Institut za ekonomiku poljoprivrede, Beograd.
- Cvijanović, D., Mihailović, B. (2011). *Međunarodni marketing kao faktor razvoja izvozne konkurentnosti*, monografija, Institut za ekonomiku poljoprivrede, Beograd.
- Cvijanović, D., Mihailović, B., Simonović, Z. (2009). *Uloga i značaj marketinga u razvoju agrarnog sektora Srbije*, monografija, Institut za ekonomiku poljoprivrede, Beograd.
- Cvijanović, D., Paraušić, V., Mihailović, B. (2011). "Afirmacija marketing pristupa u poljoprivredi Srbije", *Zbornik naučnih radova sa XXV savetovanja agronoma, veterinara i tehnologa* Vol. 17, broj 1-2, Beograd 2011, Institut PKB Agroekonomik, Beograd, str. 157-167.
- Cvijanović, D., Vuković, P. (2012). *Uloga marketinga u turizmu dunavskog regiona Srbije*, monografija, Institut za ekonomiku poljoprivrede, Beograd.
- Dibb, S., Simkin, L., Pride, M. (1991). "Targeting segment and positioning", *International journal of retail and distribution management*, Vol.19, No. 5, p. 5.
- Gallarza, M. G., & Saura, I. G. (2020). Consumer value in tourism: a perspective article. *Tourism Review*.
<https://www.unwto.org/taxonomy/term/347>; Retrieved on October 12, 2021
- Ismailova, N. R., Beyshekeeva, N. B. (2021). The role of marketing in tourism business development. *CENTRAL ASIAN JOURNAL OF INNOVATIONS ON TOURISM MANAGEMENT AND FINANCE*, 2(1), pp. 46-49. <https://doi.org/10.47494/cajitmfv2i1.81>
- Jobber, D., Fahy, J. (2006). *Osnovi marketinga*, Redaktor srpskog izdanja: Prof. dr Hasan Hanić, Beogradska bankarska akademija, Data status, Beograd.
- Karimova, A. M. (2020). "Role of marketing services in innovative development of tourism activities". *American Journal of Economics and Business Management*, 3(1), pp. 24-32.
- Kotler, F. (2001). *Upravljanje marketingom: analiza, planiranje, primena i kontrola*, 9. izdanje, Mate, Zagreb.
- Kotler, P. (1992). "It's Time for Total Marketing", *Business Week ADVANCE Executive Brief*, Vol. 2.
- Krippendorff, J. (1973). *Market et Turisme*, Herbert Lang et Cie, Brene.
- Medeiros, T., Sousa, M., & Mendes, J. (2021). "The role of information and communication technologies in senior tourism: a systemic review". *Turismo: Visão e Ação*, 23(3).
- Mihailović B., Popović, V. (2020). "Promotion of rural areas of Braničevo-Danube region through branding of agri-food products". In: *Tourism in Function of Development of the*

- Republic of Serbia - Tourism and Rural Development (2)*. University of Kragujevac, Faculty of Hotel Management and Tourism, Vrnjačka Banja, pp. 282-298.
- Mihailović, B., Cvijanović, D., Paraušić, V. (2011). "Marketing tehnike i alati u funkciji efikasnog poslovnog odlučivanja preduzeća", *Ekonomika*, Niš, 1/2011, str. 48-60.
- Mihailović, B., Paraušić, V., Hamović, V. (2008). *Vodič za evaluaciju konsultantskog učinka*, monografija, Institut za ekonomiku poljoprivrede, Beograd.
- Mihailović, B., Popović, V. (2021, June). "Digital marketing of agri-food products in support of rural tourism during the Covid pandemic". In *Tourism International Scientific Conference Vrnjačka Banja-TISC* (Vol. 6, No. 1, pp. 111-126.
- Milivojević, T., Vukotić, S., Staletović, N. (2009). "Analiza poverenja u kontekstu racionalnosti, kvaliteta i ekonomske krize", *XIX međunarodna konferencija o kvalitetu, u organizaciji Jugoinspektora, JUQS-a u saradnji sa JUSK-om*, 07.- 09. 09. 2009. godine, Sutomore, Crna Gora, str. 43-54.
- Nurov, Z. S., Khamroyeva, F. K., & Kadirova, D. R. (2021, March). "Development of domestic tourism as a priority of the economy". In *E-Conference Globe*, pp. 271-275.
- Page, S. J., & Connell, J. (2020). Marketing tourism. In *Tourism* (pp. 300-324). Routledge.
- Prutianu, Șt. (2000). *Manual of Business Communication and Negotiations*, Iasi, Polirom Publishing House, pp. 232-234.
- Rakita, B. (1999). "Medijsko oglašavanje u međunarodnom marketingu", *Marketing* 1999, vol. 30, br. 4, str. 135-146.
- Reichheld, F.F. and W.E. Sasser, Jr. (1990). "Zero Defections: Quality Comes To Services", *Harvard Business Review*, Sept-Oct, pp. 105-111.
- Shin, S., & Xiang, Z. (2020). "Social media-induced tourism: A conceptual framework". *E-review of Tourism Research*, 17(4).
- Siregar, N. S. S., Nasrul, Y., Sriekaningsih, A., & Agus, E. (2020). "Social media for tourism marketing". *Journal of Environmental Treatment Techniques*, 8(1), pp. 262-264.
- Solomon, R.C. (2006). *Ethics of Business Relations*, In Singer, P. (ed.), *Ethics Treaty*, Iasi, Polirom Publishing House, pp. 385- 395.
- UNDP, UNWTO (2017). *Tourism and the Sustainable Development Goals – Journey to 2030*, 2017.
- Unković S., Zečević B. (2005). *Ekonomika turizma*, Ekonomski fakultet, Univerzitet u Beogradu, str. 11, prema Hunziker & Krapf (1942): "Grundriss der Allgemein Fremdenverkehrs", lehre Zürich.
- Vojnović B., Cvijanović D., Stefanović V. (2012). *Razvojni aspekti turističke delatnosti, monografija*, Institut za ekonomiku poljoprivrede, Beograd.
- Webster, Jr, F.E. (1992). "The Changing Role of Marketing in the Corporations", *Journal of Marketing*, Vol. 56, October, pp. 1-17.
- Yeh, S. S. (2021). "Tourism recovery strategy against COVID-19 pandemic". *Tourism Recreation Research*, 46(2), pp. 188-194.



Urban Culture in Pandemic Era: Opportunities for Using Virtual Marketing Tools in Local Tourism

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Abstract: *Today, cities and communities face the challenge of how to maintain urban culture and develop the social and cultural capital of individuals, despite the ongoing COVID-19 pandemic. The answer lies in the intersection between Industry 4.0 and marketing tools that can effectively mediate a cultural experience or cultural service in a virtual space. The chapter aims to point out the use of modern marketing tools in local tourism during the COVID-19 pandemic. The main method of the paper is a case study, carried out on selected examples of cultural institutions in Ostrava, Czech Republic. The obtained results show that even after the COVID-19 pandemic, new marketing tools will gain a permanent place in the provision of cultural services and thus also in tourism. This will make urban culture more accessible, open and transparent. At the same time, we assume that thanks to the application of virtual tools, the age limit for the target group of consumers of cultural services will be shifted from the older productive class to young people up to 30 years of age.*

1. INTRODUCTION

The development of cities, urban culture and social life have been affected in the last two years by the persistent case of COVID-19. Volatility, non-stationary, a sharp change in social and economic conditions or strict adherence to the boundaries of the changes have influenced strategic planning both in the life of the individual and in the life of business entities. Featherstone (2020) takes a borderline approach, marking the COVID-19 pandemic as the end of globalization. Nevertheless, in the paper we consider the current global development to be revolutionary. As a result, the role of science and research or the importance of the fourth industrial revolution (Industry 4.0), which focused on the development of information and communication technologies, has strengthened (Vladimirovich, et al., 2021). As a result, the world has slowed during the pandemic but has not stopped. The greatest volatility of the individual waves of the virus spread affected the health, social and cultural sectors of the economy. From a global perspective, however, we see the benefits of Industry 4.0, especially in health care (Javaid, et al., 2020), where it helped to connect the production network of services and to prevent the spread of disease by monitoring society, speeding up the diagnosis of related symptoms or creating virtual clinics that provide expert advice from a doctor through telemedicine consultations. In the economic sector, Industry 4.0 also contributed to the transfer of the necessary factors of production in the industrial sector in order to ensure the production of protective equipment.

The economic situation marked by the recession significantly shapes urban culture (Hristova, Aiello and Quercia, 2018). In this context, we present the idea of the French sociologist Bourdieu (1986) that everyone is a bearer of social and cultural capital, which needs to be developed in society. Bourdieu also names the effect of hysteresis, which in application to the urban

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environment expresses that the city is constantly changing and taking on new positions over time, while the success of changes in the city depends on social and cultural capital. However, the consequences of lockdowns have significantly affected urban life, economic and cultural capital and caused unexpected changes. As part of several repeatedly adopted anti-pandemic measures, the operation of urban and cultural life was suspended. This suspension also had a secondary effect on support activities that were directly or indirectly linked to cultural life and cultural services. Due to its severity and size, the COVID-19 pandemic did not only affect the development strategies of municipalities and cities, gastronomic and hospitality services, support staff activities, publishing houses, regional tourism and development organizations, distribution companies, technical services, but the tourism industry as a whole.

Baculáková (2020) states that the field of culture during the pandemic period faces pressure from the public when the public demands that artists or other people active in culture compensate for the lack or loss of work by engaging in industries or trade. On the other hand, the COVID-19 pandemic pointed to systemically unresolved shortcomings and lack of interest in the field of culture on the part of the government, long-term financial undersizing or a weak structure of multi-source financing. Despite these adverse effects, cultural institutions responded to the change in society by applying new marketing tools that conveyed a cultural experience to their consumers at a distance. In this context, the aim of the chapter is to point out the use of modern marketing tools in local tourism during the COVID-19 pandemic.

2. THEORETICAL FRAMEWORK OF CULTURE AND TOURISM

Perception of culture is a partial part of tourism. Despite the frequent synergistic use of these terms, tourism, in contrast to a historically unlimited culture, is conditioned by the achievement of certain socio-economic development. From a historical perspective (Walton, 2009), we have identified tourism as a separate economic sector since the second half of the 20th century. Over time, tourism has become the fastest growing area, accounting for an average of 60 % of the GDP of advanced economies. However, tourism as an economic sector has a cross-cutting character (Gůčik, 2011). It can be defined as a set of activities aimed at satisfying needs, while it is not organizationally unified and the resulting product is heterogeneous. The provision of services forms a substantial part of tourism. However, these services are locally and time-bound. For this reason, every user of tourism services has a unique and unrepeatable benefit from the consumption of the service (Ferreira, Sousa, 2020).

From the definitions of culture (Jahoda, 2012; Spencer - Oatey, 2012) we choose that these are purposeful, deliberate and institutionalized activities created by individuals or communities. The basic element of any culture is the activity of the members of the community and their purposeful activity. Thus, culture cannot exist without the personal participation of man, and the diverse activities of the community that prepares, teach and help individuals to participate in culture. Culture is also a system constantly enriched with new elements. Among these enriching elements, we include discoveries and innovations, the result of which is the emergence of new cultural components. The cultural component can be production technologies, inventions in science, ideological systems or new ways of artistic representation (Baigozhina, et al., 2020). As a result, cultural development has a socio-economic-political, spatial and regional dimension (Papazoglou, 2019). It is therefore not just a matter of the passive consumption of cultural services, but of active participation in the creation of culture and the purposeful awareness of the cultural elements that are the work of the community. Such awareness can be considered a

cultural turning point in society. At the same time, achieving the cultural turnover of society should be the goal of all countries (Steinmetz, 2018). In general, culture includes various forms of life, value systems and beliefs. Metaphorically, we can perceive culture as “alive” as long as the human community improves and cultivates it.

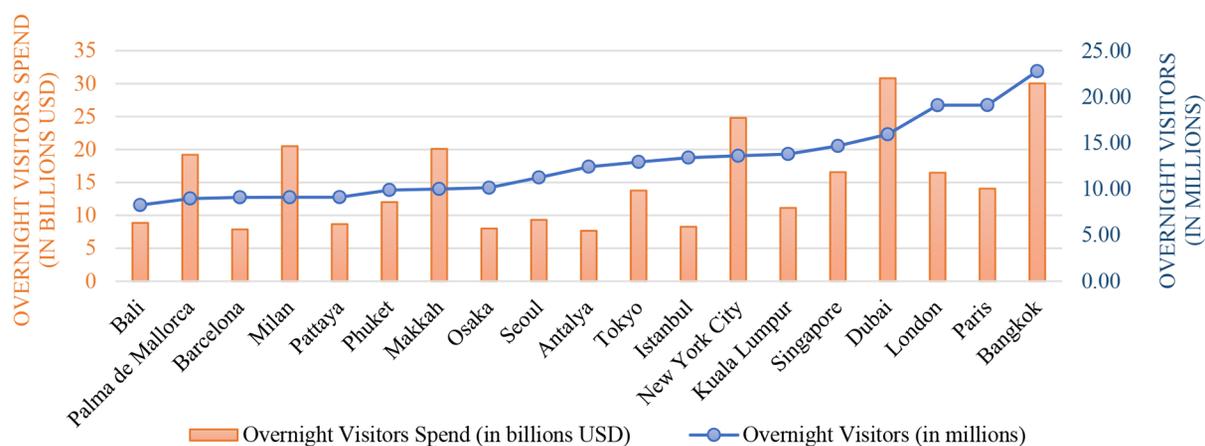


Figure 1. Comparison of Spend and Visits in Global Top 19 Destination Cities

Source: own processing according to Global Destination Cities Index (2019)

The study by Hristova, Aiello and Quercia (2018) talks about the cultural and economic dynamics in cities. It expresses the view that culturally interesting cities tend to attract the creative class of society - to become cultural centers, as a result of which local tourism increases and their economy improves. However, the opposite correlation was not shown in the study, i.e. the economic capital of the city does not explain the development of culture in cities. Thus, cities referred to as centers of commerce that are economically strong may suffer from low cultural development. Figure 1 shows the 19 most visited cities in the world and the economic cost of their visitors. Using the GaWC (2020) categorization, the cities of London and Paris were placed in the category of Alfa ++ and Alfa + cities, which, in addition to their strong economic position, also have historical value. The most important elements of these cities are the reference to Europe’s cultural heritage. However, the authors Hernández-Garcia, Calle-Vaquero and Yubero (2017) point to the discourse that is taking place in these cities regarding sustainable local tourism. The cities of Singapore and New York were also included in the comparison. However, there is no representation of trade centers such as Beijing, Shanghai or Hong Kong. On the contrary, cities with a weaker economic position, such as Bangkok or Kuala Lumpur, received more than 15 million visitors in 2019. Pratt (2011) states that the intersection between a culturally and economically developed city reflects the creative city’s paradigm. The creative city provides a direct link between cultural facilities, high quality of life and economic development. Achieving synergies, however, requires a conceptual approach to the city as a developing territorial unit, protection of values and character of the city, complexity and continuity in the provision of services, or participation in the creation of a creative city by its inhabitants.

2.1. Position of urban culture in local tourism

Using a subsidiary view of the development of culture, we can state that the basis of an individual’s cultural life is formed at the level of the family and the immediate environment, then at the local level of the city and local community and then at the country level. The regulation of culture at the country level is influenced by state cultural policy (Bell and Oakley, 2014). At the same time, there

is a vertical relationship, where the state cultural policy adjusts the goals of cultural development formally, strategically and planned. However, in relation to the citizen, the state cultural policy is the most remote. Eijck (1997) confirms this in research results where he states that the main determinant of an individual's cultural consumption is the family background and cultural resources of the parents. The precondition for the development of an individual's cultural awareness is thus created in the basic cell of society - the family. However, this development cannot be achieved without a network of cultural institutions at the local level in cities and communities.

Cultural institutions can be characterized as organizations that have an artistic, cultural or cultural-educational character. Their formal and content age is processed well and at a sufficient level. A cultural institution is considered to be a purpose-built institution whose goal is to mediate cultural services (cultural house, educational center) or a specialized cultural facility such as a library, museum, gallery, cinema, theater, concert hall, house of music, etc. (Pravdová, 2015; Chomová, 2015). However, a cultural institution cannot be understood in isolation; this term is also used in relation to activities, it is characterized by typification, functionality and ability to develop. It also includes not only facilities and resources, but also secondary services, supportive human resources, and other ongoing activities (Banks, 2020). Both the public and private sectors have the founding power of cultural institutions. In the case of the public sector, the funding comes from the state budget (in the case of the Czech Republic redistributed by the Ministry of Culture) or from the budget of the self-governing region or municipality in whose competence the cultural institution is established.

Constructively designed local tourism can play an important role in the development of the local community (Giampiccoli and Hayeard, 2012). Current trends in modern local tourism complement traditional forms of tourism with visits to tangible and intangible cultural heritage. Industrial areas and monuments are also gaining popularity in local tourism, as suggested by several studies (Timothy, 2011; Bujok et al., 2015). Several localities marked by a high degree of industrialization in the past transform the industrial areas of cities into adventure parks, where cultural events take place and refer to local culture. Local culture thus becomes a basic determinant of functional local tourism.

Local culture can be divided into regional and local cultures (Chomová, 2015). Regional culture has a supra-local character and its feature is the interconnectedness of regions in order to convey the same values. The manifestation of regional culture is common traditions, dialects, specific linguistic landscapes (Saduov, 2021), or similarities in folk culture. Local (urban) culture indicates the territorially smallest component of culture. Its elements are cultural and social phenomena occurring in the relevant municipality or city. Local/urban culture aims to focus on cultural and educational activities (establishment of educational, hobby, artistic and cultural and social institutions). Urban culture is also influenced by a dynamic social environment. Krase (2012) argues that currently, at the level of urban culture, racial and ethnic diversity caused by migration is concentrated and the socially peripheral areas of cities are being gentrified.

2.2. Possibilities of applying modern marketing tools in cultural institutions: Literature review

Kesner (2005) describes the marketing of culture as a tool for fulfilling the basic goals of a cultural institution towards the public. He considers cultural services to be socially relevant and desirable. For this reason, in culture, the concept of marketing distinguishes between cultural

marketing (aimed at mediating cultural experience, and services) and commercial marketing (based on business practices). Wroblewski (2017) states that cultural marketing should preserve the autonomy of artistic creation, which aims to pay attention to the quality of cultural service. Also, to maintain the hierarchical position of the overarching artistic goal over marketing. At the same time, it is appropriate to use marketing to streamline communication practices and emphasize consumer knowledge and consumer behavior, i.e. to use target groups to create an adequate marketing strategy.

During the COVID-19 pandemic, marketing strategies and cultural opportunities focused on the digital online space. Rautela and Agrawal (2020) conducted an extensive study naming various modern marketing tools used during the COVID-19 pandemic. Among the tools of modern virtual marketing are social networks that allow a more comprehensive view of consumer behavior, but also, biometric tools and conversational user interfaces that offer added value for both the organization and the consumer. The study states that digital transformations have taken place during this period due to the increased use of artificial intelligence (AI) in the provision of diverse services. And cognitive technology and AI are the way to capture the imagination of the public. AI has also become part of marketing strategies and is creating a new way of distributing value to the consumer.

The importance of social networks as a new marketing tool is also confirmed by Corona (2021). In her research, she states that social networks (Facebook, Instagram, YouTube, TikTok, etc.) have become an everyday part of people's lives across age categories. De Gottardo, et al. (2014) defines social networks as an online tool that creates virtual communities of people who share the same interests. Corona (2021) further states that Italian museums use this tool to communicate with the great masses. From the point of view of museums, public sector administration is an inexpensive solution for communication with the target group, the base of which is growing over time with the number of follow-up on social networks. Especially for small museums, social networks represent a real breakthrough in spreading awareness of their cultural services. Research shows that the public appreciates the use of modern technologies in cultural institutions.

Villaespesa and Navarrete (2019) emphasize the importance of the World Wide Web as a technological tool that enables institutions to communicate worldwide across industries. The presence of cultural institutions on the Internet has evolved and has become an integral part of marketing strategy. In this context, Cho, Wang and Fesenmaier (2008) point to virtual tours as an effective tool for promotion. The virtual tour forms the basis of experiential marketing, the aim of which is to evoke a confident emotional reaction in a potential consumer. As a tourist, the consumer also has the opportunity to look into the institution and learn about the uniqueness of the place or culture through remote access, often from the comfort of home. The introduction of virtual tours is becoming a key aspect of sustainable tourism.

A critical view of the use of virtual reality in cultural institutions is expressed by Mills, et al. (2020). He states that virtual reality provides a highly mediated, filtered and one-sidedly designed image. Virtual reality conveys the cultural experience to the user only flatly and in accordance with the current marketing strategy of the cultural institution. In this context, Kern (2014) adds that digital-mediated intercultural contact may not lead to cultural understanding. The special experience created by the atmosphere of the place, the feeling of a work of art or performance is thus truncated, without the possibility of immersing yourself in various cultural contexts.

Despite this criticism, Begicevic, et al. (2019) confirms that self-service, mobile and web technologies fulfill their potential in cultural institutions, either in the form of audio translation into a foreign language during the show or in the form of interactive visualizations of the exhibits. Stetic, et al. (2020) in her work confirms this and state that mobile applications are becoming an important marketing tool in tourism. Research conducted in 3 metropolises have shown that tourists use mobile applications mediating the service of a digital mobile guide. The research reiterates that during the COVID-19 pandemic, a virtual reality tool is also being applied to provide an integrated cultural experience. The possibilities of using virtual reality in tourism were discussed by the authors Guerra, Pinto and Beato (2015), Chiao, Chen and Huang, (2018), Nata, Mega and Putu (2021). The virtual reality mediates a 360 ° view resp. a tour of the destination areas or destinations. This evokes a higher degree of incorporation of mental imaginations and increases presence, which turns it into a “real” experience.

3. METHODOLOGY OF RESEARCH

Examining the theoretical basis of the issue leads us to the goal of the research in the presented chapter. The aim is to point out the use of modern marketing tools in cultural institutions of local tourism during the COVID-19 pandemic. The subject of research is modern marketing tools, which we identify in more depth in the literature review. The object of the research are municipal cultural institutions in the city of Ostrava (Czech Republic). The main method of the paper is a case study, carried out at the city’s cultural institutions, which are represented by a selected theater, gallery but also in the industrial area. The case study has a descriptive character and helps us to explore a given subject in a specific cultural context. The preparation and execution of the case study were performed in accordance with the implementation procedure proposed by Rashid, et al. (2019). To prepare a case study, we select three cultural institutions that are the most visited in the city and have a wide cultural reach. We determine the basic research question as follows:

RQ: How was the virtual marketing tool applied to provide an integrated cultural experience in selected cultural institutions in the city of Ostrava during the COVID-19 pandemic?

We draw sources and data from the available websites of selected institutions and data collected from the statistical collection. We address the research results primarily to other cultural institutions as inspiration for the possibility of using modern marketing tools in practice. Of course, we point out the limitedness of research. In the future, we plan to expand the research to include cultural institutions in other cities in the Czech and Slovak Republics, or to create a comparison in a broader international context.

4. MODERN MARKETING TOOLS IN URBAN CULTURE INSTITUTIONS: CASE STUDY

The city of Ostrava is the third-largest city in the Czech Republic (city area of 214.2 km²; a population of 290,000 inhabitants). In terms of territorial division, it is part of the Moravian-Silesian Region. The field of culture is organized by the City of Ostrava (2021), which prepares proposals for the city’s cultural policy in all areas of cultural and social life. The municipality participates in advisory and consulting activities, collects data and cooperates with the Ministry of Culture of the Czech Republic, national minorities, non-profit organizations, private institutions and citizens. According to the SWOT analysis prepared for the needs of the city (*Results of the SWOT Analysis*, 2008), among the most important external cultural opportunities in the city we

can include a strong legacy of industrial heritage, a suitable geographical location on the border with 2 neighboring countries (Slovakia, Poland), a high proportion of artistic personalities from the region with a direct connection to the city of Ostrava, a high proportion of universities and the existence of regional media mutations that convey information about social events. To prepare a case study, we analyze the following institutions in the city of Ostrava: The Gallery of Fine Arts in Ostrava (GVUO), the National Theater of Moravia-Silesia (NDMS) and the Dolní Vítkovice Industrial Park (DOV).

4.1. Gallery of Fine Arts in Ostrava (GVUO)

Due to its organizational establishment, GVUO is a contributory organization established by the Moravian-Silesian Region, which is the largest collection-creating gallery in this region. This cultural institution focuses on providing cultural services in the form of exhibitions and events, which are visited annually by approximately 100,000 visitors. GVUO is a dynamically developing organization whose collections are constantly expanding. According to data from 2021 (GVUO, 2021), there are currently more than 23,000 art objects in the collections. The quality level of GVUO's cultural potential is rated high, as a result of which GVUO has been ranked as the 5th most important collection gallery in the Czech Republic.



Figure 2. Preview of the Virtual Tour of Jurečka gallery in 1926: Room No. 1

Source: Gallery of Fine Arts in Ostrava (2021)

GVUO embarked on the path of using new marketing tools as early as June 2018, when it provided its visitors with the first virtual tour of GVUO's *Spectrum / Creation of a New Visual Language* on its website. As part of the virtual tour function, visitors to the website can view, for example, Jureček's Picture Gallery (Figure 2) without restriction, where they can compare changes to the original appearance of the Picture Gallery's rooms from 1926 to 2020. In addition to virtual tours, visitors can visit the online openings that took place here via the GVUO website, the social network Facebook or the organization's YouTube channel. In 2020, during

the spreading of the COVID-19 pandemic, the GVUO was closed to the public. In response, the gallery moved its exhibition activities to virtual space and provided visitors with 7 virtual tours in 2020 and 11 virtual tours in 2021. A virtual tour of *Metakódy*, which is part of the *Ostrava Sobě* exhibition series, is being commented on from current events in the gallery.

4.2. National Moravian-Silesian Theater (NDMS)

The Moravian-Silesian National Theater is the largest and oldest professional theater in the Moravian-Silesian Region. NDMS is the largest cultural institution established by the city of Ostrava. NDMS is the embodiment of the cultural, spiritual, intellectual and social life of the citizens of Ostrava and the wider area. It is the only theater in the Moravia region that has four artistic ensembles. These files consist of opera, drama, ballet and musical. Cultural service is provided to citizens on three permanent stages, which are the Antonín Dvořák Theater, the Jiří Myron Theater and the “12” Theater. All of these scenes will present an average of 17 premieres a year and will play an average of 500 performances a year.

NDMS, as a cultural institution providing cultural services to the general public and during the COVID-19 pandemic, created a “theater under the mask” due to the closure of cultural centers. The “theater under the mask” project started on March 31, 2020. The “theater under the mask” project used social networking tools to communicate with the public. Using the YouTube channel, the theater offered the possibility of online performances from the recording, which viewers could watch from the comfort of their homes. The performances were regularly broadcast on Thursdays and Saturdays from 6.30 pm. Thanks to this possibility, spectators and fans of theatrical art could watch their favorite performances without restrictions, i.e. without the need to purchase a ticket. To enrich the offer of cultural services, the theater has prepared for spectators and visitors virtual tours of the backstage of the Antonín Dvořák Theater. As part of these virtual tours (Swiderová, 2020), viewers were able to look at spaces that are not commonly available to artists.

Communication channels with the public have also been expanded with podcasts NDMS and Internet Magazine. The NDMS podcasts began to be offered to the public in June 2021, with individual episodes featuring not only actors engaged in NDMS, but also conductors, producers, screenwriters and other important artistic personalities connected with NDMS, the city of Ostrava or the Moravian-Silesian region. By October 2021, the theater had published 13 podcasts with the aim of continuing to create podcasts even after the end of the pandemic. As another form of marketing tool, an online magazine has a long history. The operation of this instrument was not significantly affected by the COVID-19 pandemic. The content of the magazine is linked to current news in the theater, premieres and important anniversaries.

4.3. Industrial Park Dolní Vítkovice (DOV)

The Dolní Vítkovice complex is a reference to the industrial period from 1828 to 1998 when it was used for coal mining and pig iron production. At present, it is a world-unique industrial park, which serves as a unique educational, cultural and social center with an international dimension. In addition to the ubiquitous industrial character, DOV also has a historical and artistic overlap. In the area of DOV there is a section of the Amber Road (Figure 3), the historical significance of which dates from prehistory to the Middle Ages. We will also find a link to the artist Jaromír Nohavica (No. 10 in Figure 3) in honor of which they set up a club called Heligonka (a

musical instrument characteristic of this singer). From the point of view of local tourism, DOV provides hotel, gastronomic and tourist services, which it complements with a site of adventure activities. On average, more than 1.5 million visitors visit this site each year. The complex of cultural, educational, social and scientific services offered in DOV is really extensive. However, the target group is not strictly defined and the services are targeted at visitor of all ages. DOV responded flexibly to changes in consumer behavior as a result of COVID-19, as evidenced by the active use of online space and the establishment of an interactive website.

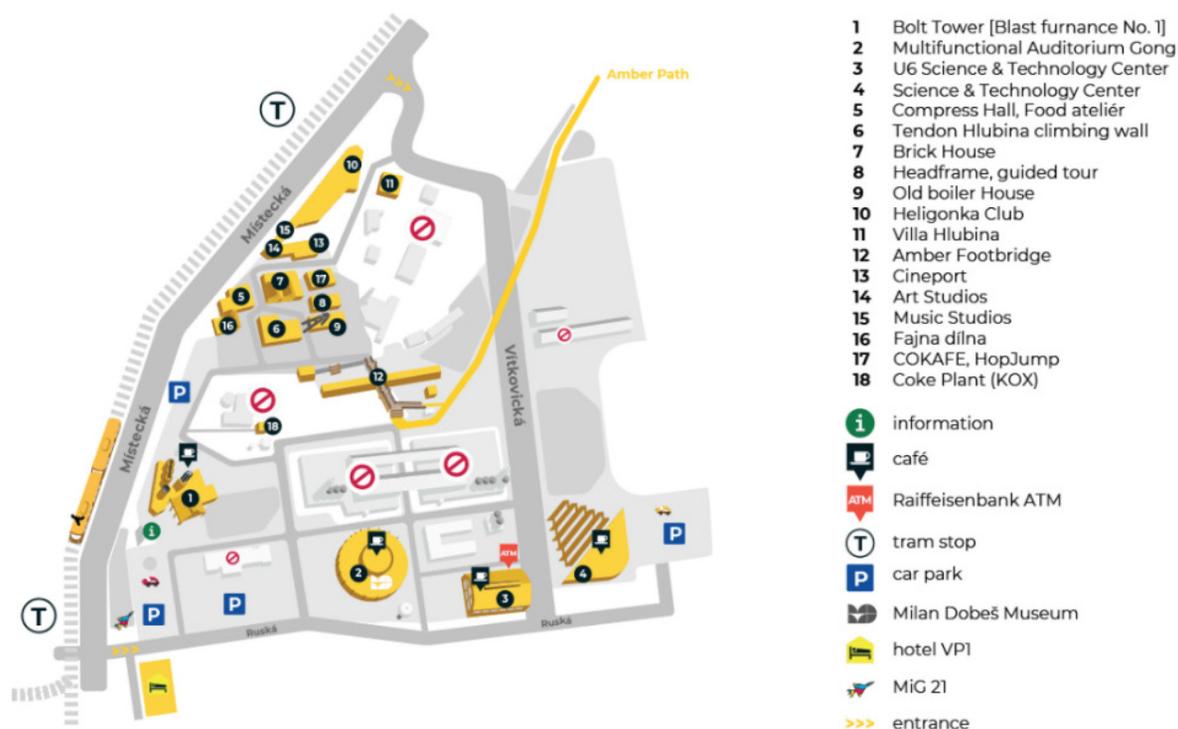


Figure 3. Map of Industrial Park Dolní Vítkovice

Source: Dolní Vítkovice (2021)

During the pandemic, DOV tried to educate its visitors through the online school *Svět a Technika* (*World and Technology*). Within this school, viewers could watch various experiments on the social network YouTube or gather knowledge and insights. The *World and Technology Online School* focused on a wide range of knowledge and also tried to make videos for kindergartens, where they posted videos with various products such as how to make a robot, formulas, etc. It can be said that they tried to make educational videos for the general public across all generations. In addition to this online school, they have created an online presentation of study opportunities within the *Living Library*, which can be viewed on their YouTube channel. The *Living Library* (more about project on DOV, 2021) is intended to help students choose their future careers. In this video, nine representatives from various fields are recorded (practical nurse, orthotic-prosthetic technician, paramedic, firefighter, laboratory assistant, storage operator, logistics, IT technician and electrician).

Even in the case of DOV, we encounter the application of the marketing tool of the virtual tour. Visitors can see the indoor and outdoor areas of the DOV, while the virtual tour offers, in addition to general views, the opportunity to view various parts of the rooms. Among other things, DOV during the COVID-19 pandemic and the closure of all cultural centers organized an outdoor traveling exhibition "*Beskydy is more than the Lysá hora phenomenon*". It is a cultural

service of the gallery, which consists of winning quality images, which were collected during one month from the ranks of tourists, photographers and families from their trips around the Beskydy Mountains. The aim of the exhibition is to convey the natural wealth of the Beskydy Mountains from a professional and lay point of view.

5. CONCLUSION

The COVID-19 pandemic has become a challenge for the functioning of local tourism and local culture. From an economic point of view, tourism as a sector has stalled, which has had a negative impact on the economies of the countries and secondary support services. From a cultural point of view, however, as a result of socio-economic changes, cultural institutions reacted operatively to a reduction in attendance and moved their activities to the online space. The provision of an integrated cultural service was thus possible with the acceptance of a change in the communication and marketing tools of these institutions. For this reason, the aim of the chapter was to point out the use of modern marketing tools in cultural institutions of local tourism during the COVID-19 pandemic. In the chapter, we used the method of a case study carried out in selected cultural institutions of the city of Ostrava. Based on the analysis of the urban environment in the city of Ostrava, we verified the established research question: How was the virtual marketing tool applied to provide an integrated cultural experience in selected cultural institutions in the city of Ostrava during the COVID-19 pandemic?

The results confirm Rautel and Agrawal's (2020) claim that artificial intelligence and virtual tools are becoming an integral part of the marketing strategies of cultural institutions. At the same time, thanks to these tools, the integrated cultural experience is distributed to the consumer without losing its value. At the same time, we take into account that the generation of young people is often reaching for new virtual and smart tools. It is therefore not the fault of classical cultural institutions to respond to this demand and modernize their marketing strategy. Therefore, we evaluate the mediation of an integrated cultural experience in a modern way positively. In this context, we agree with Corona's (2021) assertion that, thanks to virtual tools, cultural institutions are expanding their target group. In the case study in the analysis of the industrial park DOV, we observe that the marketing strategy is focused on the target group under 30 years, specifically on primary school students in the implementation of the online school *World and Technology* or *Living Library*. Also, typical cultural institutions such as a theater or gallery have shown that by including virtual tours or podcasts in their marketing strategy, they respond to changes in demand for cultural experiences as well as changes in consumer behavior. Therefore, we cannot state that the COVID-19 pandemic has completely stopped local cultural life. We perceive the changes that have taken place revolutionarily. In the next period, we plan to continue the implementation of research in the framework of international scientific projects, with the aim of making a robust analysis of cultural institutions from an economic, social and cultural point of view. The conclusions presented in this chapter are addressed primarily to local cultural institutions that are interested in applying new modern virtual tools to their marketing strategy in order to expand the target group while maintaining a relatively low cost.

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REFERENCES

- Baculáková, K. (2020). The First Impact of Covid-19 Pandemics on Culture and Creative Industries. In A. Kiner, et al. (Eds.), *International Relations 2020: Current Issues of World Economy and Politics*. Proceedings of Scientific Works from the 21th International Scientific Conference, University of Economics, Bratislava, December 3rd – 4th, 2020 (pp. 36 - 42). Bratislava: Ekonóm.
- Baigozhina, O. D., et al. (2020). Modern Trends in Mediatisation of Culture in a Digital Society. *International Journal of Criminology and Sociology*, 9(1), 3187 – 3197. DOI: 10.6000/1929-4409.2020.09.385
- Banks, M. (2020). The work of culture and C-19. *European Journal of Cultural Studies*, 23(4), 648 – 654. DOI: 10.1177/1367549420924687
- Bell, D. and Oakley, K. (2014). *Cultural Policy*. London: Routledge.
- Bogicevic, V., et al. (2019). Virtual reality presence as a preamble of tourism experience: The role of mental imagery. *Tourism Management*, 74(2), 55 – 64. DOI: 10.1016/j.tourman.2019.02.009
- Bourdieu, P. (1986). The Forms of Capital. *Readings in Economic Sociology*, 1/1986, 280 – 291.
- Bujok, P., et al. (2015). Industrial Tourism in the Context of the Industrial Heritage. *Geo Journal of Tourism*, 15(1), 81 – 93.
- Chiao, H. M., Chen, Y. L., and Huang, W. H. (2018). Examining the usability of an online virtual tour-guiding platform for cultural tourism education. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 23(1), 29 – 38. DOI: 10.1016/j.jhlste.2018.05.002
- Cho, H. Y., Wang, Y., and Fesenmaier, R. D. (2008). Searching for Experiences. *Journal of Travel and Tourism Marketing*, 12(4), 1 – 17. DOI: 10.1300/J073v12n04_01
- Chomová, S. (2015). *Vádemékum lokálnej a regionálnej kultúry*. Bratislava: Polygrafické stredisko UK.
- Corona, L. (2021). Museums and Communication: The Case of the Louvre Museum at the Covid-19 Age. *Humanities and Social Science Research*. 4(1), 15 – 26. DOI: 10.30560/hssr.v4n1p15
- De Gottardo, F., et al. (2014, July). *Communicare la cultura on line: una guida pratica per i musei*. Progettazione di siti web, content management, social media e analisi dei risultati, a cura di. Retrieved Sept 04, 2021 from https://www.academia.edu/10139643/Communicare_la_cultura_online_una_guida_pratica_per_i_musei_Progettazione_di_siti_web_content_management_social_media_e_analisi_dei_risultati
- DOV.(2021,January). Živáknihovna studijních možností – videoprezentace. Retrieved Oct 19, 2021 from <https://www.dolnivitkovice.cz/aktuality/ziva-knihovna-studijnich-moznosti-videoprezentace/>
- DOV. (2021, n. d.). *Site Map*. Retrieved Oct 20, 2021 from <https://www.dolnivitkovice.cz/o-dolnich-vitkovicich/>
- Eijck, K. (1997). The impact of family background and educational attainment on cultural consumption: A sibling analysis. *Poetics*, 25(4), 195 – 224. DOI: 10.1016/50304-422X(97)00017-X
- Featherstone, M. (2020). Problematizing the Global: An Introduction to Global Culture Revisited. *Theory, Culture and Society*, 37(7-8), 157 – 167. DOI: 10.1177/0263276420957715
- Ferreira, L., and Sousa, B. B. (2020). Understanding the Role of Social Networks in Consumer Behavior in Tourism: A Business Approach. In Ramos, C. et al. (Eds.), *Handbook of Research on Social Media Applications for the Tourism and Hospitality Sector* (pp. 367 – 385). Hershey: IGI Global: Publisher and Timely Knowledge. DOI:10.4018/978-1-7998-1947-9
- Giampiccolli, A., and Hayward, K. J. (2012). Community-based tourism and local culture: the case of the Amampondo. *Pasos, Revista de Turismo y Patrimonio Cultural*, 10(1) 173 – 188. DOI: 10.25145/j.pasos.2012.10.017

- Global Destination Cities Index. (2019). *The MasterCard*. Retrieved Oct. 01, 2021 from <https://newsroom.mastercard.com/wp-content/uploads/2019/09/GDCI-Global-Report-FINAL-1.pdf>
- Globalization and World Cities Research Network. (2020, August). *The World According to GaWC 2020*. Retrieved Oct. 02, 2021 from <https://www.lboro.ac.uk/gawc/world2020t.html>
- Gúčík, M. (2011). *Cestovný ruch – politika a ekonomika*. Banská Bystrica: Slovak-Swiss Tourism.
- Guerra, J. P., Pinto, M. M., and Beato, C. (2015). Virtual reality – shows a new vision for tourism and heritage. *European Scientific Journal*, 11(9), 49 – 54. DOI: 10.19044/esj.2015.v11n9p
- GVUO. (2021, n. d.). *Virtual Tour*. Retrieved Oct 05, 2021 form <https://www.gvuo.cz/en/virtualni-prohlidky>
- Hernández – Garcia, M., Calle-Vequeiro, M. and Yubero, C. (2017). Cultural Heritage and Urban Tourism: Historic City Centers under Pressure. *Sustainability*, 9(8), 1346 – 1352. DOI: 10.3390/su9081346
- Hristova, D., Aiello, M. L., and Quercia, D. (2018). The New Urban Success: How Culture Pays. *Interdisciplinary Physics*, 6(27), 1 – 13. DOI: 10.3389/fphy.2018.00027
- Jahoda, G. (2012). Critical reflections on some recent definitions of “culture”. *Culture and Psychology*, 18(3), 289 – 303. DOI: 10.1177/1354067X12446229
- Javid, M., et al. (2020). Industry 4.0 Technologies and Their Applications in Fighting COVID-19 Pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(4), 419 – 422. DOI: 10.1016/j.dsx.2020.04.032
- Javorčíková, J. et.al (2020). Business English Today: The Need for Intercultural Approach. *Exploring Business Language and Culture*. Cham: Springer. DOI: 10.1007/978-3-030-58551-8_1
- Kern, R. (2014). Technology as Pharmakon: The promise and perils of the internet from foreign language education. *Modern Language Journal*, 98(1), 340 – 357. DOI: 10.1111/j.1540-4781.2014.12065.x
- Kesner, L. (2005). *Marketing a manažment muzeí a památek*. Prague: Grada Publishing.
- Krase, J. (2012). *Seeing Cities Change*. London: Routledge. DOI: 10.4324/9781315608174
- Mills, N., et al. (2020). Culture and Vision in Virtual Reality Narratives. *Foreign Language Annals*, 53(4), 733 – 760. DOI: 10.1111/flan.12494
- Národní divadlo Moravsko-slezské. (2021, June). *Podcasty*. Retrieved Oct 20, 2021 from <https://podcast.ndm.cz/>
- Nata, G. N. M., Anthony, S., and Putu, P. Y. (2021). Knowledge Discovery and Virtual Tour To Support Tourism Promotion. *Transactions on Sustainable Digital Innovation*, 2(2), 94–106.
- Ostrava City. (2008, June). *Výsledky SWOT analýzy*. Retrieved Oct 20, 2021 from <https://www.ostrava.cz/cs/urad/magistrat/odbory-magistratu/odbor-kultury-a-volnocasovych-aktivit/oblast-kultury/vymezeni-cinnosti/c-documents-and-settings-kolarcikovada-plocha-doc-pracovna-web-noval-2-web-kultura-analyzakultury7-swot.pdf>
- Ostrava City. (2020, May). *Magistrát města Ostrava*. Retrieved Oct 20, 2021 from https://www.ostrava.cz/cs/urad/magistrat?set_language=cs
- Papazoglou, E. G. (2019). Society and Culture: Cultural Policies Driven by Local Authorities as A Factor in Local Development – The Example of the Municipality of Xanthi – Greece. *Heritage*, 2(3), 2625 – 2639. DOI: 10.339/heritage2030161
- Pratt, C. A. (2011). The cultural contradictions of the creative city. *City, Culture and Society*. 2 (3), 123 – 130. DOI: 10.1016/j.ccs.2011.08.002
- Pravdová, H. (2015). *Manažment & marketing v kultúrnych inštitúciách*. Bratislava: Polygrafické stredisko UK.

- Rashid, Y., et al. (2019). Case Study Method: A Step-by-Step Guide for Business Researchers. *International Journal of Qualitative Methods*, 18(1), 1 – 13. DOI: 10.1177/1609406919862424
- Rautela, A., and Agrawal, P. (2020). A Review of Modern Marketing Tools in the Era of COVID – 19. *PalArch's Journal of Archeology and Egyptology*, 17(6), 11583 – 11602.
- Saduov, R. (2021). Cultural and Linguistic Landscape in a Multi-Ethnic City: A Methodological Turn. *Faces of Urban Cultural Landscape*. Banska Bystrica: Koprnt.
- Spencer – Oatey, H. (2012). What is Culture? A compilation of quotations. *University of Warwick* (pp. 1 – 22). Retrieved from www.warwick.ac.uk/fac/soc/al/globalpad/interculturalskills/
- Steinmetz, G. (2018). *State/Culture: State Formation after the Cultural Turn*. New York: Cornell University Press.
- Štetić, S., et al. (2020). Mobile apps as a tool for destination management – case study of Belgrade. In V. Bevanda & S. Štetić (Eds.), 5rd International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era (pp. 569 - 584). Belgrade: Association of Economists and Managers of the Balkans with Faculty of Tourism and Hospitality, Ohrid, North Macedonia. DOI: 10.31410/tmt.2020.569
- Swiderová, Š. (2020, March). *Národní divadlo moravskoslezské Ostrava: Tiskové zprávy*. Retrieved Oct 19, 2021 from https://www.ndm.cz/userfiles/archiv_priloh/clanky/tiskove-zpravy/2019-2020/divadlo-pod-rouskou-1585662322.pdf
- Timothy, D. J. (2011). *Cultural Heritage and Tourism*. Bristol: Channel View Publications.
- Villaespesa, E., and Navarrete, T. (2019, April). Museum Collections on Wikipedia: Opening Up to Open Data Initiatives. MW19: Boston. Retrieved Sept 01, 2021 from <https://mw19.mwconf.org/paper/museum-collections-on-wikipedia-opening-up-to-open-data-initiatives/>
- Vladimirovich, A. K., et al. (2021). COVID-19 Pandemic Response: Culture, Technology and Law Going Viral. *Science Synergy*, 59(1), 17-85.
- Walton, J. K. (2009). History of Tourism. In Jamal, T., and Robinson, M. (Eds.) *The SAGE Handbook of Tourism Studies* (pp. 115 – 129). London: Sage Publications Ltd.
- Wroblewski, L. (2017). *Culture Management*. Berlin: Logos Verlag. DOI: 10.30819/4378



The Impact of Digital Marketing on Health Tourism in the Western Balkans during the COVID-19 Pandemic

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Abstract: *Health tourism is the fastest growing healthcare industry worldwide and it refers to patients traveling to other developed or developing countries to improve or renew individual medical interventions. The growth of health tourism can also be seen as a chance for innovation and growth in developing countries. With this type of tourism as an export-growing strategy, many socio-economic problems can be solved that developing countries with traditional industries are faced. The Covid-19 pandemic has changed the current views on the ways of doing business, as well as on tourism, which is becoming the industry that has suffered the most damage. In that sense, regional cooperation could be of saving importance for the tourism of Western Balkans countries after the pandemic of the Covid-19 and especially health tourism.*

1. INTRODUCTION

Healthcare is one of the most sensitive and responsible activities of human society, with a dominant social function which implies that any significant change in this area has broader implications for society as a whole (Petković & Lukić, 2013, p. 446). As a result, health tourism is gaining in importance. Health tourism is the fastest growing branch of tourism in the world, with an annual growth of 15 to 20 percent. The World Health Organization predicts that by 2030, health care will become the strongest industry in the world and one of the biggest drivers of tourist travel (WHO, 2021).

In the past, health tourism meant the border area of medicine and tourism, in which tourist and health institutions dealt with an organized stay of tourists in spas and climatic health resorts in order to prevent diseases, rehabilitation and treatment with the help of natural factors (Butler & Szromek, 2019). Today, health tourism can be viewed from different perspectives, but one of the most common is that *health tourism is a very complex tourism product that includes a large number of specialized facilities and services on trips motivated by the need to improve health and people's quality of life* (Institute of Tourism, 2019). Therefore, health tourism can be divided into three forms: spa tourism, medical and wellness tourism.

Spa tourism involves people traveling to spas or climatic health resorts for treatment, rehabilitation and prevention with the help of natural healing factors and modern medical procedures (Moreno-González, León, & Fernández-Hernández, 2020).

Medical tourism refers to people travelling abroad for treatment and complex medical interventions (Pessot et al., 2021). This type of tourism includes dental tourism.

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Wellness tourism is travel associated with maintaining or enhancing one's wellbeing with the use of healing and relaxing properties of nature and other activities (relaxation, meditation, yoga, recreation, beauty care, healthy eating, etc.) (Rydback, 2021).

In the current 'age of the global Covid-19 pandemic, there are serious doubts about whether health tourism will have a bright future and survive even in times of crisis, or is it necessary to include more strategic digital marketing tools in order to continue to develop in a positive direction? This issue is of particular importance for the Western Balkans countries, where health tourism and its subtype, wellness tourism, are recent concepts whose development in some countries is still being actively worked on.

2. HEALTH TOURISM AND DIGITAL MARKETING

The promotion of services provided for the development of health tourism in international markets is extremely important. Successful implementation of health tourism relies on informing the potential patient about processes, procedures, alternatives, treatment services, tourism opportunities, travel organizations and target countries (Tengilimoğlu et al., 2018).

Websites are extremely important for healthcare institutions that are focused on international target markets in terms of reaching potential customers in the target market. For a healthcare institution that provides services of any type of health tourism, a website is the center of its digital world and is perhaps the most important part of the overall digital marketing strategy. A website is a whole series of documents that convey information through custom texts, images, animations, videos and applications and provides various services such as e-commerce, socialization, maps, news, blogs, and banking, including all interconnected pages (Szromek & Naramski, 2019).

Digital platforms are important communication channels for companies and are a mirror of all organizations, including those that promote health tourism. These platforms allow customers to contact the company and get information. At the end of this interaction, the experience between the company and the user can positively or negatively affect the image of the entire service in the minds of customers. As far as health tourism is concerned, these platforms are very cheap platforms with no time and location restrictions and provide many channels to reach potential customers in different regions of the world. Also, digital platforms are one of the easiest ways to interact with clients looking for complete and additional information (Szromek & Naramski, 2019).

In recent years, social networks have taken precedence in the way of promoting all types of tourism. (Chavez et al., 2020). This is due to modern trends in the tourism market. In addition to standard travel motives, modern tourists are increasingly interested in how to, broadly speaking, escape from a stressful life and dedicate themselves to their own health and well-being. This provides the opportunity for all types of health tourism development (Milenković et al., 2019). Also, modern tourists are increasingly seeking confirmation from other visitors about the choice of the desired destination; social networks and forums are a key factor.

Employees are also of great importance for the marketing activities of health institutions. *The hired employees give their maximum, invest additional effort and effort to perform the assigned work tasks, are ready to persevere in difficult situations and circumstances and act as brand ambassadors* (Lukić Nikolić, 2021). However, in the age of the Covid-19 pandemic, when health workers are busy saving lives, it is difficult to count on their engagement in health tourism promotion.

3. PROMOTION OF HEALTH TOURISM THROUGH DIGITAL MARKETING IN THE WESTERN BALKAN COUNTRIES – CASE STUDY OF VRNJAČKA BANJA AND “DR SIMO MILOŠEVIĆ” INSTITUTE IN IGALO

Natural resources are a necessary condition for improving health and creating an image of a health and wellness tourism destination (Moreno-González, León, & Fernández-Hernández, 2020). In this sense, countries of the Western Balkans have a great advantage over other regions, as they have different natural resources, favorable climatic conditions and interesting destinations that can attract wellness tourists.

The Republic of Serbia has very favorable opportunities for the development of health tourism. This is reflected in the favorable conditions of preserved nature, clean air, unpolluted rivers and lakes, mild climate, and rich flora and fauna. Although spa tourism is extremely developed, other subtypes of health tourism are still in their infancy. This especially refers to wellness tourism. Although many centers in our country deal with this branch of tourism, they are not sufficiently represented in marketing, especially in the field of forming a unique tourist offer.

Vrnjačka Banja is the most famous and most visited spa in the Republic of Serbia and is the second in the number of visits as a tourist site in our area. The development of its tourism is based on factors such as extremely favorable geographical position, climatic features, healing thermo-mineral springs, a natural and ecologically preserved environment, flora and fauna, rich cultural heritage, organized events and similar facilities that increase the quality of leisure time (Dimitrovski et. al, 2019). The following table provides an overview of the number of visits and overnight stays of tourists before the start of the Covid-19 pandemic.

Table 1. Tourist arrivals and stays in Vrnjačka Banja (month: February) – before the start of the Covid-19 virus pandemic

Region Vrnjačka Banja	Overnight stay of tourists			Arrival of tourists		
	In total	domestic	foreign	In total	domestic	foreign
2020.	31975	28346	3629	11403	9923	1480
2019.	22094	20064	2030	6766	6061	705
2018.	18657	16662	1995	6296	5672	624

Source: Republican Bureau of Statistics 2018, 2019, 2020

The number of total recorded tourist arrivals in February 2021 is 9316, 8511 domestic and only 805 foreign guests. A total of 25661 overnight stays were realized, of which domestic guests made up the majority - 23501 guests, and 2160 foreign tourists spent the night (RBS, 2021). A drastic drop in guests during the pandemic is noticeable, as of yet unrecorded in the recent history of Vrnjačka Banja.

If we analyze the official website of Vrnjačka Banja before and during the Covid-19 pandemic, it can be concluded that there are crucial differences. While the previous site lacked information and was badly laid out, the current site (<http://www.vrnjackabanja.co.rs/>) provides insight into all segments of this destination. The virtual tour that provides site visitors with an insight into the beauties of the Spa is an interesting feature. However, it is noticeable that the content on the site is geared towards cultural, artistic and entertainment tourist programs, while there is

very little data on the health tourism benefits of this destination. In order for Vrnjačka Banja to maintain its leading position in terms of visitor rate on the territory of the Republic of Serbia, information on its health benefits must be more transparent.

The official Facebook page of Vrnjačka Banja is followed by only 24,519 people, which is a very small percentage if we look at the monthly tourist turnover in this destination. This is much the same as with the social network Instagram, where only 9,075 people follow the official page of Vrnjačka Banja. It can be concluded that it is necessary to pay more attention to this type of promotion of health tourism since social networks are globally the most popular type of information about various tourist destinations.

In Montenegro, tourism has been identified as a sector of strategic importance. Tourism should become the leading sector for the local economic development, which would generate the highest foreign income and have the greatest potential that could bring diversity to the economy, strengthen entrepreneurship (especially the SME sector), attract investment, create a large number of sustainable businesses and initiate the social development of many communities.

One of the important steps in the Republic of Montenegro in terms of health tourism is the creation of the first cluster. The First Health Tourism Cluster in Montenegro is an association whose goals are to promote Montenegro as a health destination and connect leading experts in the field of health, tourism and related support activities in order to improve the overall offer of health tourism in Montenegro and jointly appear on regional and international markets. Tradition, infrastructure and professional human potential are the foundations on which the founders of the Cluster recognized the health industry as a key comparative advantage of Montenegro and emphasized the need for health tourism to become a recognizable regional brand.

Igalo spa was founded as the first Adriatic natural health resort. It expanded to include a children's ward with 200 beds and in the past decades it all grew into a modern, extremely well-equipped health, rehabilitation center with about 1,600 beds, professional medical staff and two higher education institutions that work here ("Queen Jelena" Nursing School and the Faculty of Applied Physiotherapy). The Institute "Dr. Simo Milošević" Igalo is one of the largest and most famous institutions for a multidisciplinary spa treatment in the Balkans. It is a pioneer of modern physical and preventive medicine, rehabilitation, thalassotherapy and wellness and has become one of the main international centers for the rehabilitation of children, adults and the elderly. The Igalo Institute deals with medical rehabilitation, preventive medicine (medical wellness) and health promotion. The institute is a specialized institution for the rehabilitation of patients with rheumatic, neurological, cardiovascular, and respiratory diseases, as well as for post-traumatic orthopedic rehabilitation, in adults and children. Special emphasis is placed on improving health within the framework of preventive medicine programs (for obesity, hypertension, diabetes, osteoporosis) by introducing healthy lifestyles. Besides Montenegro, the guests mostly come from Scandinavia (primarily Norway), the Netherlands, Germany, Russia, and the ex-Yu area. The average age of guests is around 65, while, unfortunately, data on the full structure of guests is not available. Special emphasis is placed on improving health within the framework of preventive medicine programs (for obesity, hypertension, diabetes, osteoporosis) by introducing healthy lifestyles. Besides Montenegro, the guests mostly come from Scandinavia (primarily Norway), the Netherlands, Germany, Russia, and the ex-Yu area. The last available data on visits to this spa was recorded before the Covid-19 pandemic: the total number of guests at the Institute in 2018 was 18,667 and in 2019 18,705.

The Igalo peloid (mud) should be placed as a single brand to the:

- people who, due to medical problems, expect to be healed by using mud;
- people who see Igalo as a zone of rest and relaxation right by the sea (wellness);
- professional and recreational athletes;
- local population who has health problems and are treated at the Institute.

We can assume that the majority of elderly people, pensioners, expect to recover from the use of Igalo mud, as evidenced by the data obtained at the Institute that the average age of their visitors is as much as 65. In order to promote health tourism based on medicinal mud, the Institute may enter into a contract with the health insurance of the former Yugoslavia countries, which stipulates that patients being sent to Igalo for recuperation at the expense of those countries. Also, presentations can be made in private hospitals that do not fall under the state health insurance system. Designing an advertising campaign and presentation in nursing homes, both in Montenegro and in the countries of the region, allows the people to be informed about the benefits of the Institute from its professional staff first-hand. Trial treatments can be offered to those interested to reassure them that this mud is not unpleasant in smell and consistency. It should also be considered that the offer expands to foreign markets by sending promoters to medical fairs and conferences, as well as creating web content in English. The institute has a sports and recreation center that includes: a sports pool (33x25m), sauna, table tennis, gym for small sports with Sika Pulastic surface, fitness room, bowling alley, therapeutic space, laboratory, etc., but this information is not visible on the available web content of the Institute.

People who see the beauties of wellness tourism in Igalo can get a broader picture of mud as a unique health phenomenon through digital marketing. The Institute's website itself can be updated with many marketing tools; for example, a video can be placed that includes a virtual tour through the accommodation and premises in the Institute where the programs are conducted, as well as through the beauties of Igalo spa. In digital marketing, if the emphasis is placed on promoting mud as a part of spa treatment, a wider potential group of users is obtained, and not only those who have health problems. Greater activity on social networks such as Facebook with the gathering of a larger number of visitors through marketing tools used for these purposes can contribute to higher tourist turnover from other countries that prefer wellness tourism. Currently, the Facebook page of the Institute has 7,387 likes, which is a very small number of people who visited, if we keep in mind that in the past year the number of real visitors to the Institute was about 2.5 times higher, and the number of those who indicated that they stayed there are about 11,000 in the Institute. It is generally necessary to pay more attention to the online reputation of the Institute, which is reflected in faster and more favorable responses to users who ask questions and comments via social networks. In that way, a more adequate relationship is established with potential users of the Institute's services.

4. RESEARCH METHODOLOGY

This paper aims to show the impact of digital marketing on health tourism in the Western Balkans during the Covid-19 pandemic. For that purpose, empirical research was conducted in four countries: the Republic of Serbia, the Republic of Montenegro, the Republic of Bosnia and Herzegovina and the Republic of Northern Macedonia. The research sample consists of 159 respondents, employed in organizations dealing with health tourism. These are the following organizations:

- “Merkur”, Vrnjačka Banja, Republic of Serbia,
- “Dr. Simo Milosevic Institute”, Igalo, Republic of Montenegro,
- “Health and Tourist Center Vrućica”, Banja Vrućica, Republic of Bosnia and Herzegovina,
- “Negorski Health and Tourist Center”, Negorski Spa, Republic of Northern Macedonia.

The research was conducted in the middle of July 2021 and included filling in the questionnaire by the respondents. Due to the current situation caused by the Covid-19 pandemic, the respondents were sent questionnaires by e-mail, with a detailed explanation that the research was voluntary, completely anonymous, and that the data would be used exclusively for research purposes.

Survey data were collected using a questionnaire containing three variables related to gender, age, and country of respondents. The questionnaire consists of two parts: the first part contains questions about the socio-demographic structure of respondents, and the second part of the questionnaire contains ten items related to respondents' views on the impact of digital marketing on health tourism in the Western Balkans during the Covid-19 pandemic and is associated with a five-point scale. The questionnaire was originally compiled by the author of this paper. The offered answers were formed according to the Likert scale in the following way: 1 - *I disagree*, 2 - *I partially disagree*, 3 - *Undecided*, 4 - *I partially agree*, 5 - *I completely agree*. Observed variable: gender and country from which the respondents come. Also, a graphic presentation of the general demographic structure of the respondents is given.

The research started from one general and one special hypothesis.

- **Hypothesis One:** Digital marketing significantly contributed to the survival of health tourism during the Covid-19 virus pandemic in the Western Balkans.
- **Hypothesis Two:** Institutions in the Western Balkans that deal with health tourism effectively use digital marketing tools to promote their services.

In order to test the hypotheses, the χ^2 test was applied. The χ^2 test serves to investigate the relationship between two categorical variables. Each of them can have two or more categories. The test compares the frequencies or proportions of cases observed in each of the categories, with the values that would be expected if there was no relationship between the two variables. It is based on a cross table, i.e. on a table in which the categories of one variable are crossed with the categories of another.

5. RESEARCH RESULTS AND DISCUSSION

The gender structure of the respondents is shown in Figure 1, and it can be concluded that more females (60%) than males (40%) participated in the research (Figure 1).

When it comes to age structure, most respondents are aged 36-40, and the least are persons under 35 (Figure 2).

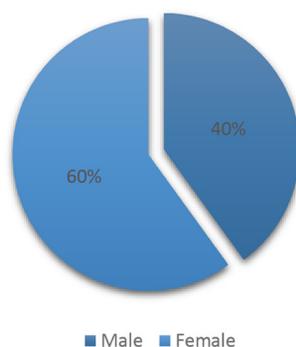


Figure 1. Gender structure of the sample of respondents

Source: Own research

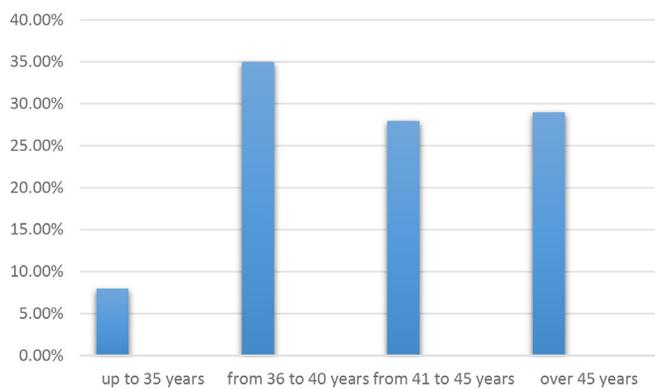


Figure 2. Age structure of the sample of respondents

Source: Own research

When it comes to the education of the total sample of respondents, it is concluded that the largest percentage of those who have a university degree (69%), and the smallest percentage of respondents have secondary education (6%) (Figure 3). The largest percentage of respondents comes from the Republic of Serbia (36%), followed by the Republic of Montenegro (27%), while 19% of respondents from the Republic of BiH participated in the total sample, and 18% from the Republic of Northern Macedonia (Figure 4).

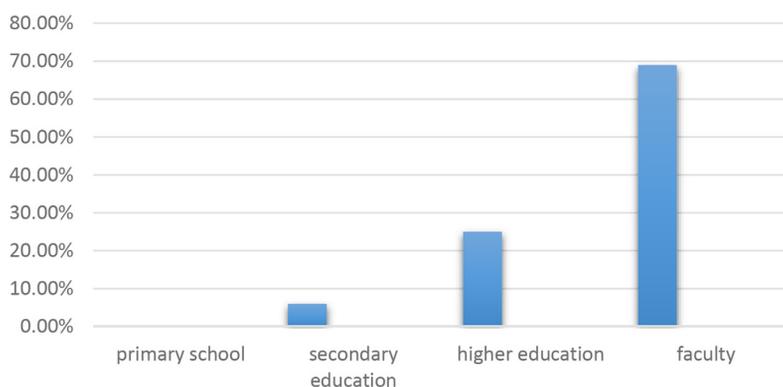


Figure 3. Display of the sample according to education

Source: Own research

Further in the paper, a tabular presentation of the χ^2 test of the influence of variables is given - the ratio of the answers of the respondents from different countries for each statement from the questionnaire.

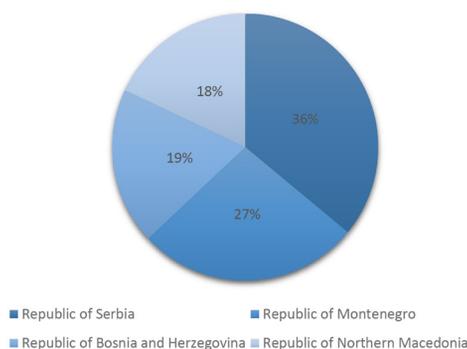


Figure 4. Percentage of respondents by country of origin

Source: Own research

Table 2. χ^2 test the influence of the gender variable in relation to the first question from the questionnaire

A group of respondents	N	The institution where I am employed has a digital marketing strategy that is managed during the promotion of health tourism.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60%	10,0%	9 15,0%	8,33%	36,67%	30,0%	1,195	0,879
Male	40%	10,0%	12,50%	12,50%	32,50%	27,50%		
Total	100%)	12,0%	14,0%	10%	35%	29%		

Source: Own research

Table 2 shows χ^2 test the influence of the gender variable in relation to the first question from the questionnaire. The level of statistical significance is higher than the set critical value ($p=0,05$), which further implies that there is no statistically significant difference between respondents in terms of agreement with the statement *The institution where I am employed has a digital marketing strategy that is managed during the promotion of health tourism* in relation to gender. The following chart shows the percentage distribution of respondents' attitudes in relation to the first question/statement.

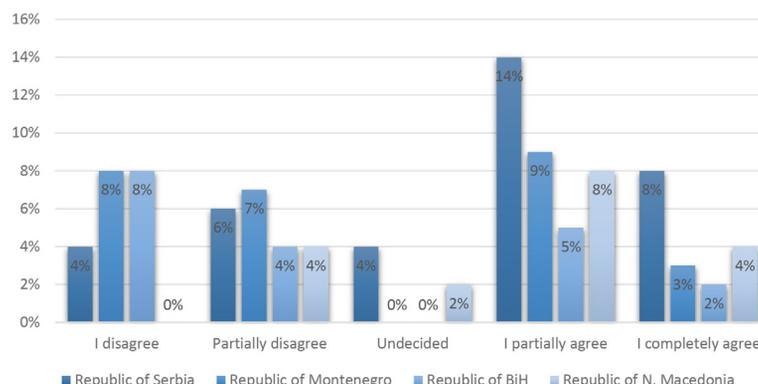


Figure 5. Percentage distribution of respondents' attitudes in relation to the first question/statement

Source: Own research

From the data shown in Figure 5, it can be concluded that the largest percentage of respondents from the Republic of Serbia answered *I partially agree* and *I completely agree* (22%), while the smallest percentage of respondents from the Republic of BiH gave a positive answer.

Table 3 shows χ^2 test the influence of the gender variable in relation to the second question from the questionnaire.

Table 3. χ^2 test the influence of the gender variable in relation to the second question from the questionnaire

A group of respondents	N	During the pandemic, the institution in which I am employed drastically changed the way I promoted services.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60%	13,33%	11,67%	11,67%	28,33%	35,0%	16,179	0,003
Male	40%	27,50%	35,0%	12,50%	12,50%	12,50%		
Total	100%	19,0%	21,0%	12,0%	22,0%	26,0%		

Source: Own research

Table 3 shows that a statistically significant difference was obtained between respondents in relation to gender ($p < 0,05$). The strength of the connections between the variables is of medium intensity. The differences in the answers are shown in the following Figure 6.

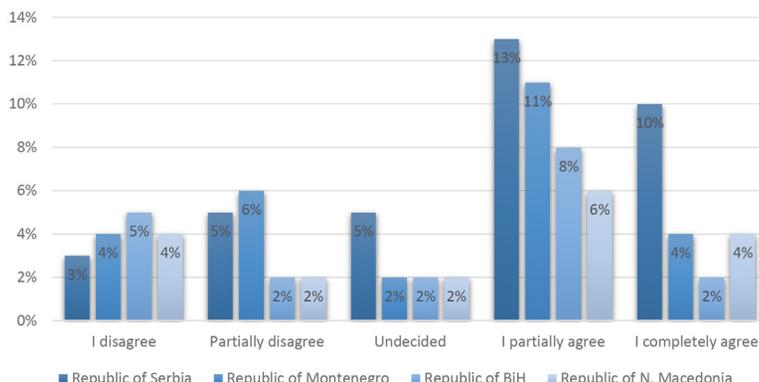


Figure 6. Percentage distribution of respondents' attitudes in relation to the second question/statement

Source: Own research

From the presented data, it can be concluded that the largest percentage of respondents from the Republic of Serbia expressed a position of partial or complete agreement. Therefore, the respondents from the Republic of Serbia realized that the institution in which they were employed changed the way of promoting services in accordance with the new situation. It is concluded that the respondents from the Republic of Serbia are mostly familiar with the way of promoting the services of their institution and the way of working in them.

Table 4. χ^2 test the influence of the gender variable in relation to the third question from the questionnaire

A group of respondents	N	The institution where I work promoted its services exclusively through digital marketing during the Covid-19 virus pandemic.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60%	38,33%	23,33%	10,0%	18,33%	10,0%	0,361	0,986
Male	40%	35,0%	22,50%	12,50%	17,50%	12,50%		
Total	100%	37,0%	23,0%	11,0%	18,0%	11,0%		

Source: Own research

When it comes to the claim: *The institution where I am employed promoted its services exclusively through digital marketing during the Covid-19 virus pandemic*, there is no statistically significant difference in relation to the gender of the respondents ($p > 0,05$).

The largest percentage of respondents from the Republic of Montenegro (31%), then from the Republic of Serbia and Republic of N. Macedonia (29%), and the least from the Republic of BiH (11%) agreed with the statement *The institution where I work promoted its services exclusively through digital marketing during the Covid-19 virus pandemic*.

In relation to the claim *During the pandemic, the percentage of visitors dropped significantly*, there is a significant statistical difference in relation to gender ($\chi^2(4, N=159)=14,136, p=0,007, \text{Cramer } V=0,376$). Among females, there are relatively more who agree with the above statement compared to males. The strength of the connections between the variables is of medium intensity.

Table 5. χ^2 test the influence of the gender variable in relation to the fourth question from the questionnaire

A group of respondents	N	During the pandemic, the percentage of visitors dropped significantly.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60,0%	8,33%	8,33%	6,67%	48,33%	28,33%	14,136	0,007
Male	40,0%	20,0%	27,50%	12,50%	25,00%	15,00%		
Total	100,0%	13,0%	16,0%	9,0%	39,0%	23,0%		

Source: Own research

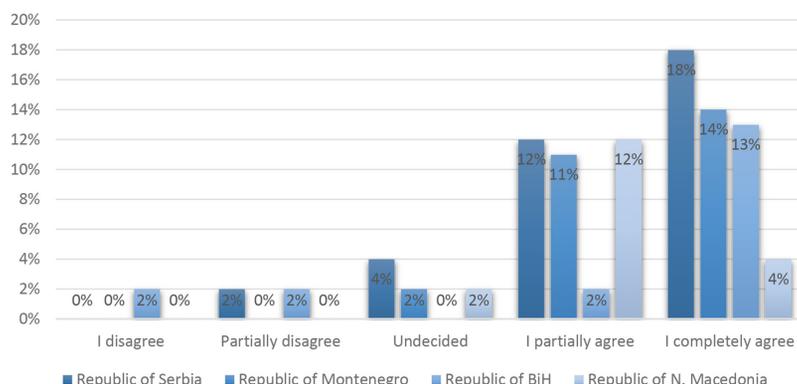


Figure 7. Percentage distribution of respondents' attitudes in relation to the fourth question/ statement

Source: Own research

From the presented data, it can be concluded that respondents from all observed countries were very well informed about the attendance of their institutions and that they recognized a drastic drop in visits during the pandemic, which was expected.

Table 6. χ^2 test the influence of the gender variable in relation to the fifth question from the questionnaire

A group of respondents	N	The website of the institution where I am employed was updated during the pandemic with more convenient information.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60,0%	10,0%	11,67%	26,67%	31,67%	20,0%	2,765	0,598
Male	40,0%	12,50%	20,0%	17,50%	25,0%	25,0%		
Total	100,0%	11,0%	15,0%	23,0%	29,0%	22,0%		

Source: Own research

Table 6 shows that there is no statistically significant difference by gender in relation to the claim *The website of the institution where I am employed was updated during the pandemic with more convenient information* ($p > 0.05$).

Respondents from all countries almost in equal percentage completely agree with the stated statement. Therefore, respondents from all observed countries, except the Republic of BiH, recognized the changes made by the management regarding the updating of sites during the pandemic, as well as the importance of this action.

Table 7. χ^2 test the influence of the gender variable in relation to the sixth question from the questionnaire

A group of respondents	N	The institution where I work has become even more active in promoting social media services during the pandemic.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60,0%	15,0%	15,0%	23,33%	26,67%	20,0%	1,240	0,872
Male	40,0%	12,50%	17,50%	22,50%	20,0%	27,5%		
Total	100,0%	14,0%	16,0%	23,0%	24,0%	23,0%		

Source: Own research

Table 7 also shows that there is no statistically significant difference by gender in relation to the sixth question ($\chi^2(4, N=159)=1,240, p=0,872$). However, there is a percentage difference in responses relative to the countries from which respondents come. Namely, respondents from the Republic of Montenegro and the Republic of Serbia mostly gave positively oriented answers (59%), while a high percentage of respondents from the Republic of Macedonia and the Republic of BiH expressed an attitude of indecision (21%).

Table 8. χ^2 test the influence of the gender variable in relation to the seventh question from the questionnaire

A group of respondents	N	Visitors pay great attention to the comments of other visitors and thus decide to visit our institution, which was especially intensified during the pandemic.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60,0%	10,0%	15,0%	25,0%	25,0%	25,0%	2,823	0,588
Male	40,0%	12,50%	12,50%	12,50%	30,0%	32,50%		
Total	100,0%	11,0%	14,0%	20,0%	27,0%	28,0%		

Source: Own research

There is no statistically significant difference by gender in relation to the claim *Visitors pay great attention to the comments of other visitors and thus make the decision to visit our institution, which was especially intensified during the pandemic* ($p>0,05$).

Respondents from the Republic of Montenegro and the Republic of Serbia mostly expressed a position of complete agreement, while the largest percentage of respondents from the Republic of Macedonia expressed a position of partial agreement and a large percentage of the Republic of BiH expressed a position of indecision.

Table 9. χ^2 test the influence of the gender variable in relation to the eighth question from the questionnaire

A group of respondents	N	Social media marketing enabled direct interaction with tourists during the pandemic, which is a huge advantage over traditional marketing activities.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60,0%	13,33%	8,33%	16,67%	33,33%	28,33%	1,693	0,792
Male	40,0%	12,50%	15,0%	12,50%	37,5%	22,50%		
Total	100,0%	13,0%	11,0%	15,0%	35,0%	26,0%		

Source: Own research

Respondents' attitudes towards the claim: *Social media marketing enabled direct interaction with tourists during the pandemic, which is a huge advantage over traditional marketing activities* **did not differ according to gender, i.e. no statistically significant difference was found.**

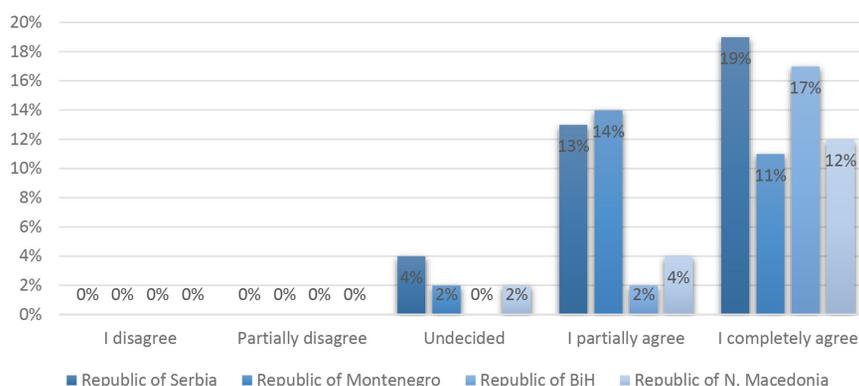


Figure 8. Percentage distribution of respondents' attitudes in relation to the eighth question/statement

Source: Own research

Figure 8 shows the percentage distribution of respondents' attitudes in relation to the eighth statement. Namely, respondents from the Republic of Serbia and the Republic of Montenegro gave an equal, high percentage of answers (31%) oriented towards partial and complete agreement.

Table 10. χ^2 test the influence of the gender variable in relation to the ninth question from the questionnaire

A group of respondents	N	I believe that during the pandemic, the management of the institution recognized the need to introduce innovations such as more active promotion of services on social networks.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60,0%	8,33%	10,0%	25,0%	41,67%	15,0%	11,446	0,022
Male	40,0%	22,50%	22,50%	25,0%	15,0%	15,0%		
Total	100,0%	14,0%	15,0%	25,0%	31,0%	15,0%		

Source: Own research

Table 10 shows that a statistically significant difference was obtained in relation to gender when it comes to the ninth question. Namely, $\chi^2(4, N=159)=11,446, p=0,022, \text{Cramer } V=0,338$. The strength of the connections between the variables is of medium intensity. Among females, there are relatively more who do not agree with the above statement compared to males.

Respondents from the Republic of Serbia mostly expressed a position of complete agreement, while respondents from the Republic of N. Macedonia in a high percentage (11%) refrained from answering.

Table 11. χ^2 test the influence of the gender variable in relation to the tenth question from the questionnaire

A group of respondents	N	I believe that digital marketing has had a positive impact on health tourism in my country in general and has contributed to the maintenance of this important industry.					χ^2	p
		I disagree	partially disagree	undecided	I partially agree	I completely agree		
Female	60,0%	8,33%	11,67%	11,67%	31,67%	22,0%	3,966	0,411
Male	40,0%	15,0%	20,0%	12,5%	17,5%	35,0%		
Total	100,0%	11,0%	15,0%	12,0%	26,0%	36,0%		

Source: Own research

In relation to the last statement from the questionnaire: *I believe that digital marketing has had a positive impact on health tourism in my country in general and has contributed to the maintenance of this important industry*, no statistically significant difference was found in relation to gender ($p > 0,05$).

However, there is a significant percentage difference in the attitudes of respondents from the observed countries. While the respondents from the Republic of Serbia largely partially or completely agree with the statement, the respondents from the Republic of N. Macedonia expressed a position of partial disagreement. Respondents from the Republic of Montenegro show an intense division in relation to the offered answers.

6. CONCLUSION

Since we live in an age of digitalization and expansion of information and communication technologies, it is evident that even in times of crisis caused by the Covid-19 pandemic, the impact of digital marketing is of great importance for the survival of tourism. This is especially true of health tourism, as health has become a priority for people around the world. This is also the case in the countries of the Western Balkans.

The results of the research indicate that in all countries, the application of digital marketing was almost equally taken into account when it comes to the promotion of health tourism services. The management of the surveyed institutions saw the importance and need to intensify the promotion in this way in order to reach as many visitors as possible.

Inspecting the presented results, it is concluded that Hypothesis One: *Digital Marketing significantly contributed to the survival of health tourism during the Covid-19 virus pandemic in the Western Balkans* was confirmed, as almost the same percentage of respondents expressed their positive views on this topic.

Hypothesis Two: *There are statistically significant gender differences compared to the claim that health care institutions in the Western Balkans effectively use digital marketing tools to promote their services* has not been confirmed, as statistically significant differences were found in only three out of ten surveyed claims.

Certainly, the observed countries of the Western Balkans should pay more attention to harmonization with EU standards and global trends when it comes to promoting health tourism services. Further research can move towards examining the impact of digital marketing on health tourism even after the Covid-19 virus pandemic, which is still in full swing.

REFERENCES

- Butler, R., & Szromek, A. (2019). Incorporating the Value Proposition for Society with Business Models of Health Tourism Enterprises. *Sustainability*, *11*(23), 6711. <https://doi.org/10.3390/su11236711>
- Chavez, L. et al. (2020). The role of travel motivations and social media use in consumer interactive behaviour: A uses and gratifications perspective. *Sustainability*, *12*, 8789. <https://doi.org/10.3390/su12218789>

- Dimitrovski, D. et al. (2019). *Dvadeset godina (1999-2019) visokog obrazovanja u Vrnjačkoj Banji – od ideje do ostvarenja*. Vrnjačka Banja: Univerzitet u Kragujevcu, Fakultet za hotelijerstvo i turizam u Vrnjačkoj Banji.
- Institut za turizam. (2019). Zdravstveni turizam 2018, Stavovi i potrošnja korisnika usluga zdravstvenog turizma u Hrvatskoj. Retrieved from: <https://www.htz.hr/sites/default/files/20197/Tomas%20ZDRAVSTVENI%20TURIZAM%202018.pdf>
- Lukić Nikolić, J. (2021). *Angažovanost zaposlenih sa organizacionim ponašanjem i menadžmentom ljudskih resursa*. Beograd: Visoka škola modernog biznisa.
- Milenković, N., et al. (2019). The correlation and interaction of the sustainability and global innovation in transition countries. *Applied ecology and environmental research*, 17(2), 1499-1516. http://dx.doi.org/10.15666/aeer/1702_14991516
- Moreno-González, A.A., León, C.J., & Fernández-Hernández, C. (2020). Health destination image: The influence of public health management and well-being conditions. *Journal of Destination Marketing Management*, 16, 100430. <https://doi.org/10.1016/j.jdmm.2020.100430>
- Szromek, A.R., & Naramski, M. (2019). A Business Model in Spa Tourism Enterprises: Case Study from Poland. Sustainable Tourism – Ways to Counteract the Negative Effects of Overtourism at Tourist Attractions and Destinations. *Sustainability*, 11, 2880. <https://doi.org/10.3390/su11102880>
- Pessot, E. et al. (2021). Natural Resources in Health Tourism: A Systematic Literature Review. *Sustainability*, 13(5), 2661. <https://doi.org/10.3390/su13052661>
- Petković M., & Lukić, J. (2013). Uticaj informacione tehnologije na dizajn organizacije - primer organizacije u zdravstvu. *Sociologija*, 55(3), 439-460. <http://www.doiserbia.nb.rs/Article.aspx?ID=0038-03181303439P#.YVOrlbgzZPY>
- Tengilimoğlu, D. et al. (2018). The evaluation of the digital marketing activities of thermal facilities and JCI accredited hospitals in terms of health tourism. *International Journal Of Health Management And Tourism*, 3(2), 108-121. <https://doi.org/10.31201/ijhmt.454039>



MICE Tourism in the Pre-COVID-19 Era: Key Determinants of Academic Conference Attendees' Satisfaction

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Academic conference;
Academic conference attendees;
Satisfaction



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Abstract: *One of the new trends in the world tourism economy is the large and rapid growth of congress tourism. Congress tourism includes various types of meetings - congresses, conferences, incentive trips, events and manifestations. The congress-tourist offer consists of two components - congress and tourist, so in that sense, it is divided into a working part and part for rest and leisure. This study aims to examine the key determinants of academic conference attendees' satisfaction. Primary data were collected by the survey method. Descriptive statistics, correlation, simple and multiple regression were used in the study for data analysis. The results of the research highlight a key determinant that has a statistically significant impact on satisfaction: the experience of participants. Identification of key determinants of academic conference attendees' satisfaction is essential for organizers of academic conferences and tourism organizations in the destination of the conference because in this way they gain opportunities to improve future business relationships with clients and business performance.*

1. INTRODUCTION

The development and modernization of technology, along with natural and economic resources and an extensive network of academic and educational institutions have conditioned the need to organize the scientific, professional and economic exchange of achievements and education in these areas. Modern scientific and technological development has also influenced the need for closer cooperation between businessmen and scientists in national and international frameworks. To achieve cooperation, and exchange experiences and opinions, various types of gatherings are organized. Their program depends on the professional structure of the participants. The number of these gatherings also contributed to the creation of a new tourist branch, the so-called - congress tourism (Bjeljac, 2006).

At the congress of the International Organization of Scientific Experts in Tourism (AIEST), congress tourism was defined as follows: "Congress tourism is a set of phenomena and relations, which arise from the travel and stay of persons who meet for the exchange of mostly scientific and professional information, and for whom the meeting place is not a permanent place of residence or work." In the true sense of the word, we can talk about international congress tourism only from the period when the modern congress-tourist offer was created, when there was a popularization of tourist movements and when international meetings attendees besides going to meetings for professional, business, or professional reasons, are largely motivated by tourist reasons (Štetić, 2007).

In this part of tourist movements, whether national or international, influential people from various fields of human activity gather - businessmen, scientists, artists, politicians, and representatives of various organizations. Participants usually represent highly educated, qualified and

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renowned people whose grades are very important, so they also represent individual media propaganda. Their impressions can be of crucial value in decision-making and are therefore the subject of special concern of congress cities, as well as congress and tourist offers as a whole (Štetić, 2006).

To identify the key determinants of academic conference attendees' satisfaction an empirical study was conducted on a sample of 102 respondents. Primary data were collected through a survey method in the Balkans, while descriptive statistics, correlation, and simple and multiple regression analysis were used in the data analysis. The importance of the implemented research is reflected in the identification of key determinants of satisfaction of attendees at academic conferences. These are dimensions that relate to the overall experience of attendees at academic conferences, which include all components in the value chain of the conference as a service. Although a large number of studies have been focused on the decision-making process of participation in the conference; factors influencing the choice of the conference; motives for participating in conferences; very few authors are interested in research aimed at the satisfaction of academic conferences attendees, so studies in this field are present to a lesser extent, but are slowly becoming the subject of interest and study.

2. LITERATURE REVIEW

2.1. Congress tourism

Business tourism includes various meetings, seminars, congresses, conferences, conventions, symposiums, exhibitions, and events that contribute to connecting people and exchanging knowledge and information. Due to the inclusion of all economic and non-economic activities in the realization of these trends, this form of tourism is one of the most profitable forms of tourism (Štetić, 2007). Within business tourism, it stands out as a special market niche, the so-called congress tourism, that can be viewed as a subset of a broader area of tourism - business tourism (Ficarelli, Sendra, Parra, & Lloret, 2013). However, despite the everyday use of this term, the ICCA (International Congress and Convention Association) has not proposed a single definition of congress tourism (Šušić & Mojić, 2014).

The development of congress tourism requires the existence of a quality congress-tourist offer, which will satisfy the needs of both participants and organizers of gatherings. The tourist offer, in a broader sense, consists of attractive (natural beauties, cultural heritage), receptive (accommodation capacities) and communicative factors (traffic infrastructure), which are necessary for the development of tourism in a destination. Tourist destinations that have elements of attractiveness are also desirable places for various gatherings because thanks to the tourist attractiveness of the destination, the attractiveness of the gathering is greater, participants come to the gathering accompanied by spouses, children, or friends, and usually stay longer to get to know the given destination. The congress offer of the destination includes all types of facilities and various service activities that enable uninterrupted meetings (Dragičević, Plavša, Štetić, & Stankov, 2009). For the gatherings, primarily congress centers are used, then hotels, university rooms, but also some "exotic" spaces (museums, theaters, theme parks, castles, and even vehicles, usually a ship and train), which will make the gathering more attractive, unique and memorable (Lawson, 2000).

Actors in congress tourism are organizers, i.e. conference holders (corporations, associations and various institutions), direct service providers (congress centers, hotels with conference space, etc.),

intermediaries (travel agencies, destination management agencies, professional congress organizers), as well as attendees (Rabotić, 2013). Organizers are looking for attractive destinations and spaces that will suit the size of their event (Whitfield, 2009), so the destination must provide the organizers with a large selection of congress facilities. Attendees represent the category of tourists with the highest consumption (Holloway, Humphreys, & Davidson, 2009), who spend two to four times more than ordinary tourists (Swarbrooke & Horner, 2001), and are therefore a very desirable category of tourists in destinations (Bučić, Dragičević, & Cimbaljević, 2015).

The International Congress and Convention Association (ICCA), based in Amsterdam, annually publishes data on the number of international congresses, conferences and similar gatherings, based on which the participation or position of certain countries or cities in the congress market is determined.

The ICCA ranking is formed based on the number of meetings held in a country or city (the meeting has a minimum of 50 attendees, is held regularly and the host of the meeting alternates between at least four countries) (ICCA, 2019). Table 1 shows the 10 leading countries and cities by the number of meetings held in 2019. It can be noticed that the USA and European countries occupy leading positions, but also that the participation of Asian countries (Japan and China) is significant. According to ICCA statistics, the France capital Paris is the most popular congress city in the world, with 237 gatherings held in 2019. Certainly, European cities are the most popular cities for congress tourism, according to the given data. For individual countries and cities to maintain or improve their positions in the congress tourism market in the future, it is necessary to adopt national strategies on congress tourism. Also, it is necessary to conduct regular research on the volume, the value of the business travel market, and trends that prevail or are predicted on it, in order to provide reliable statistics to study primarily the impact of congress tourism on national economies (Dragičević, 2008).

Table 1. Top 10 Country and City Rankings

Rank	Country	No. of meetings	Rank	City	No. of meetings
1	U.S.A.	934	1	Paris	237
2	Germany	714	2	Lisbon	190
3	France	595	3	Berlin	176
4	Spain	578	4	Barcelona	156
5	United Kingdom	567	5	Madrid	154
6	Italy	550	6	Vienna	149
7	China	539	7	Singapore	148
8	Japan	527	8	London	143
9	Netherlands	356	9	Prague	138
10	Portugal	342	10	Tokyo	131

Source: ICCA, 2019

The congress activity has reached unexpected proportions in recent years. When talking about congress activities, the acronym M.I.C.E. is often used - for meetings, incentives, conferences and exhibitions (Alananzeh, Maaiah, Al-Badarneh, & Al-Shorman, 2018). From year to year, the share of M.I.C.E. industries is growing in all countries. At congresses and conferences, communication is realized between experts, members of the association, and business people.

The importance of congress activities is visible from the viewpoint of:

- technical and technological development and progress of world science;
- economic and business cooperation;

- communication between people of different, perceptions, cultures, and races;
- mobility of a new group of tourists - “congressmen”;
- propaganda of national and tourist values of the host country;
- peace in the world (Štetić, 2006).

By organizing international congresses, conferences, meetings, etc. high economic effects are achieved and influential visitors are attracted. Congresses affect the development of tourism, increase off-season traffic and create a new image of the destination (Šušić & Mojić, 2014). The second benefit is realized over a longer period. Namely, congresses are an opportunity to present domestic expertise and knowledge to foreign colleagues and customers, as well as an option for domestic products to find their way to foreign customers. Also, domestic experts often do not have the opportunity to go to similar events abroad because they have certain resource limitations, and in this way, they can present their works and research to their colleagues and thus be internationally recognized (Mihajlović & Stošić Mihajlović, 2017).

In addition to the positive, congress tourism can have negative social and environmental consequences, e.g. air pollution due to used transport (airplane, car driving), water and soil pollution during a hotel stay, food and solid waste generation, overuse of natural resources (Han et al., 2019). Congress attendees usually move in groups and in a short period, which can lead to traffic congestion, increased congestion in parking lots, restaurants, shops, etc. This is especially pronounced in destinations that have a smaller spatial coverage (mountain, coastal destinations, etc.). when the number of attendees may exceed the carrying capacity of the destination (Whitfield, 2007).

A country that invests in the development of tourism and takes into account the engagement of existing capacities during the year, sees an alternative in the development of congress tourism because it affects the extension of the tourist season. Due to the wide range of needs of congress tourism participants, their entourage as well as the organizers, the M.I.C.E. industry and their participants are increasingly becoming the subject of competition in the market. The propaganda of a tourist destination begins with announcements and comments about where the meeting, congress, or conference is being held. The role of the media can hardly be measured by numbers or financial data, but it undoubtedly contributes to creating an image of a destination and its characteristics (Štetić, 2006). Conferences can be of great benefit to the congress city if they were successful and if the participants left the city satisfied, which means that depending on the success of the conference depends on the image of the tourist destination and its further placement on the tourist market.

Research in the field of congress tourism is mainly focused on: factors influencing the choice of destination (Crouch, Del Chiappa, & Perdue, 2019; Crouch & Louviere, 2004; Lee & Back, 2008); congress destination attractiveness (Marques & Pinho, 2021; Pavluković, Vuković, & Cimbaljević, 2021; Sikošek, 2020); the impact of congress tourism on national economies (Grado, Strauss, & Lord, 1997; Kim, Chon, & Chung, 2003), motives to attend academic conferences (Fowler, Cardon, Marshall, & Elder, 2021; Mair, Lockstone-Binney, & Whitelaw, 2018; Rittichainuwat, Beck, & Lalopa, 2001; Severt, Wang, Chen, & Breiter, 2007), factors influencing conference and congress participation decision-making process (Baloglu & Love, 2005; Oppermann & Chon, 1997; Pavluković & Cimbaljević, 2020; Yoo & Chon, 2008), quality dimensions of conferences, congresses, and conventions (Kim, Lee, & Kim, 2012), attractiveness factors of academic conferences (Cieślowski & Brusokas, 2020), needs of conference attendees (Aktas & Demirel, 2019).

2.2. Satisfaction of academic conference attendees

Academic conferences are events where the work and research of academics - professors, researchers, experts and students are presented; they are an ideal place for gathering experts from a certain field that is the subject of the conference, exchanging experiences, knowledge and establishing cooperation between researchers and institutions they represent (Campos, Leon, & McQuillin, 2018; Lewis & Kerr, 2012). Academic conferences can, therefore, provide an abundance of scientific and societal impacts (Haus, 2021). Academic conferences are also useful for informal review, something that can improve the quality of research and facilitate publication and citation (Chalvatzis & Ormosi, 2021; de Leon & McQuillin, 2020; Gorodnichenko, Pham, & Talavera, 2021).

Conferences enable the exchange of ideas, they are focused on career advancement (Bjeljac, 2006), and provide attendees with the opportunity to achieve professional and personal goals; obtain feedback relevant to their work; the opportunity to get acquainted with the professional work and achievements of colleagues and experts in the field (McCarthy, McDonald, Soroczak, Nguyen, & Rashid, 2004) as well as a forum for discussion, presentation and debate on new concepts, research and attitudes (Edelheim, Thomas, Åberg, & Phi, 2018; Hobson, 1993). Also, conferences create space for attendees to escape from routine and meet the need for change.

Different types of organizations and academic institutions organize thousands of conferences a year around the world. Conferences can be of national, regional and international character. Conferences of international character are certainly of the greatest importance because they gather a large number of academics and experts from various parts of the world and enable the scientific community to present their work and achievements in the field that is the subject and topic of the conference. Large international conferences gather a large number of attendees, so in that sense, they can be seen as big events, although they occupy relatively low media attention.

Since there are a large number of conferences at their disposal, academics select some of them that they are interested in because it is impossible to participate in each of the conferences that are organized. Numerous factors influence the decision-making process on the selection of conferences in which to participate such as time required for research preparation, travel and accommodation costs, and conference fees (Kadaifci, Asan, & Topcu, 2020).

In 2011, Kozak and Yunci conducted a study on the factors influencing the choice of the conference, which identified 40 factors such as registration fees, accommodation costs, conference time and the possibility of contributing to professional career development. The results of the research showed that the most important factors influencing the decision to participate in the conference are: the possibility of recreation, the destination or location of the conference and the total costs (Gür, Hamurcu, & Tamer, 2016).

In a study conducted by Gur, Hamurcu, & Tamer (2016), 4 factors and 21 subfactors were identified during the conference selection. Factors are divided into costs (subfactors are: registration fee, accommodation and transport costs) time of the conference (subfactors are: travel time, conference length, time of registration and conference intensity), city or country where the conference is held (subfactors are: city/country brand, national cuisine, security, visa required, types of accommodation) as well as the characteristics of the conference (subfactors are: conference

topic, prestige, the official language of the conference, location, keynote speakers, academic contribution of the conference, social activities, accessibility of the conference venue and relevance of the conference). The conclusions of the study imply that when choosing a conference, the primary factor is the topic of the conference itself, and then other factors, such as costs, are taken into consideration.

When talking about factors affecting conference attendance decision-making, Lee & Back (2005) argue that the location of the conference is very important; Oppermann & Chon (1997) emphasize the destination brand as a significant factor while Rittichainuwat, Beck, & Lalopa, (2001) suggest that tourist attractions are important in the conference venue.

As they are service-oriented, academic conferences can be seen as a subset of the service economy. In this regard, organizers of academic conferences must be focused on delivering high-quality services to remain competitive (Weber & Ladkin, 2003).

Satisfaction is the consumer's emotional response to the experience he has in connection with the purchase of a certain product or service (Marinković, 2012). When it comes to academic conferences, it is expected that satisfied attendees will participate in the conference again. Severt, Wang, Chen, & Breiter, (2007) believe that there is a link between satisfaction and conference loyalty. When an attendee in a particular conference is satisfied, he can rank it higher compared to other alternatives in the future (Oppermann & Chon, 1997). However, satisfaction with a particular conference is an insufficient guarantee that attendees will return (Severt, Wang, Chen, & Breiter, 2007) as the impact of other factors such as cost, destination, research and professional development may be more important. Regardless of the influence of other factors, if conference attendees are not satisfied, they are less likely to participate in the future.

Pizam, Neumann, & Reichel (1978) point out that tourism is an intangible composition of interconnected components, where satisfaction or dissatisfaction with one component leads to satisfaction or dissatisfaction with the whole experience. In this sense, conferences can be seen as a set of services of different providers (Otto & Ritchie, 1996) including transport, accommodation, hospitality and conference organizers. Thus, the assessment of conference experience must include all components in the value chain of the conference as a service. The entire experience consists of three phases: before the conference (refers to the application process, communication with the organizers, the review process, travel, accommodation and transfer to the conference venue), during the conference (conference venue and environment, quality of presentations, social activities and networking, tourist tours) and after the conference (return and travel from the conference to the place of residence). Overall satisfaction is achieved if expectations are met for each of the services involved in the overall experience (Lovelock & Wirtz, 2007).

3. RESEARCH METHODOLOGY

To examine the key determinants of the academic conference attendees' satisfaction, empirical research was conducted using the survey. The questionnaire was conceived in the online form and distributed to respondents via e-mail. The total number of e-mail addresses to which the questionnaire was distributed was 300. The number of fully responded questionnaires received in the period from January 24 to February 4, 2019, was 102, which represents a response rate of 34%. The basic sampling criterion is that the respondents attended an academic conference in the previous period (in the past 3, 6, 12 months or more).

The questionnaire consists of two parts. The first part consists of 7 groups of questions (variables), with a total of 18 questions, which respondents rated on a five-point scale, from 1 to 5, with the answer 1 indicating absolute dissatisfaction, while the answer marked 5 indicating absolute satisfaction. In other words, the satisfaction of academic conference attendees was measured through 6 variables, while the last variable represents the overall satisfaction. The questions were taken and adjusted based on questionnaires developed by (Lewis & Kerr, 2012), to measure the full experience or satisfaction of conference attendees, given that the questionnaires distributed by conference organizers after the closing of the conference measure only some aspects of satisfaction. The questionnaire is designed to monitor the entire attendees' experience, from the assessment of transport to the destination where the conference is held, all the way to the assessment of transport upon returning to the place of residence. This formed the basis for measuring the overall satisfaction of academic conference attendees. Table 2 shows the determinants of satisfaction, which include a total of 18 questions.

Table 2. Key determinants of academic conference attendees' satisfaction

Variables	Questions
Transport	Transport (by flight, bus, or car) to conference city was?
	Transfer to conference venue was?
	Transport (by flight, bus or car) from the conference?
Accommodation & Food	The accommodation was?
	The breaks between presentations were?
	The food at the conference venue was?
Communication & Organization	The peer-review process was?
	The registration process was?
	Admin./technical support at the conference was?
Social Activities	The social program at the conference was?
	The networking opportunity at the conference was?
Evaluation of Experiences	My experience as a presenter was?
	My experience as a member of the audience in sessions was?
	The plenary sessions were?
Destination Experience	The destination experience was?
	The tour(s) organized by the conference was?
Satisfaction	To what extent are you satisfied with your participation in the conference?
	To what extent are your expectations met?

Source: Authors, based on Lewis & Kerr (2012)

In the analysis of the collected data, descriptive analysis, correlation, and simple and multiple regression were used. First, a descriptive statistical analysis was conducted on the entire sample of respondents. From the measures of descriptive statistics for each question, the arithmetic mean and standard deviation were calculated. In the second step, correlation analysis was implemented to identify the degree of interdependence of all variables, followed by simple and multiple regression analysis. The problem of multicollinearity was examined through the values of the variance growth factor (VIF). Data analysis was implemented in the statistical package SPSS 19 (Statistical Package for the Social Sciences).

In addition to the above questions, the questionnaire includes questions related to respondents (gender, age, academic position, and nationality) and questions related to conferences (type of the conference, number of attendees at the conference, when the conference was held, topic of the conference, venue of the conference).

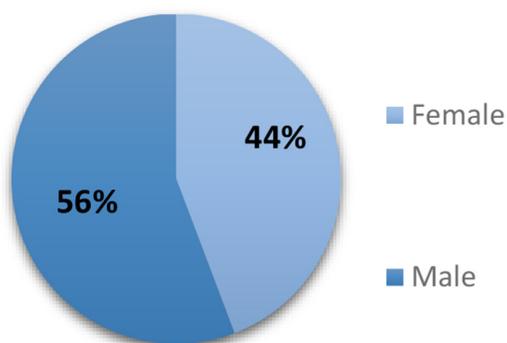


Chart 1. Gender

Source: Authors' research

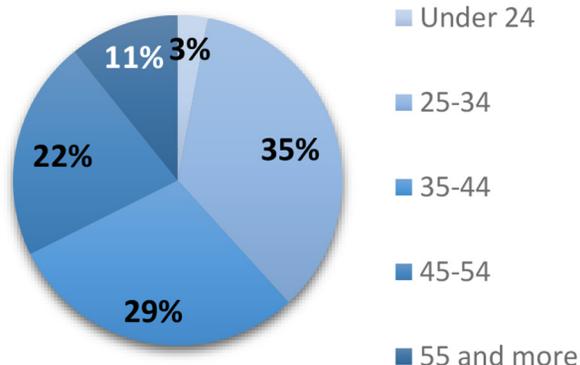


Chart 2. Age structure

Source: Authors' research

Observing the structure of the sample in Chart 1, it can be stated that more male respondents (56%) than women (44%) were included in the sample. When it comes to age (Chart 2) 3% of respondents are under 24, 35% of respondents are between 25 and 34 years old, 29% of respondents belong to the age group between 35 and 44, 22% are respondents from 45 to 54, 11% are respondents over 55 years. It can be concluded that all age groups are present. The sample consists mainly of respondents of two age groups: between 25 and 34 years, 35 and 44 years, in almost equal numbers, and the least present are persons under 24.

If we look at the academic position of respondents (Chart 3), the largest number of respondents (27%) have the title of senior assistant or assistant professor, and approximately the same percentage of respondents have the title of associate professor (21%), while 22% of respondents are graduate students. The smallest group of respondents are full professors (9%), 11% are lecturers, while 10% are mostly doctors of philosophy who participate in conferences and are not engaged in any of the educational institutions.

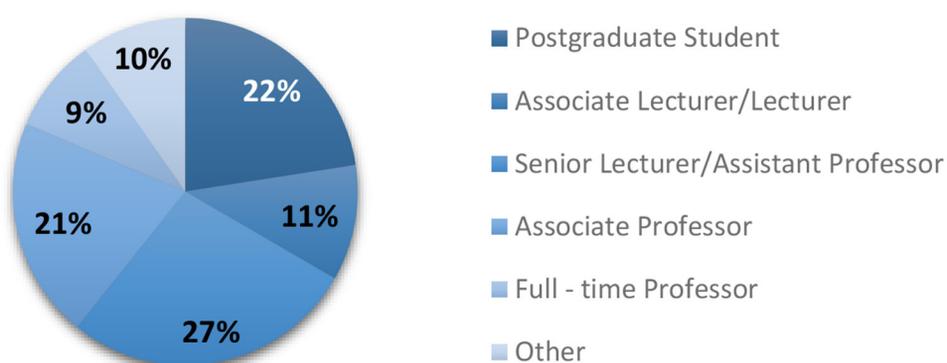


Chart 3. Academic position of respondents

Source: Authors' research

In Chart 4 we have an insight into the nationality of the respondents. The largest group of respondents are from Serbia (50%), while the smallest percentage of respondents are from Montenegro (1%) and Albania (1%). On the other hand, a large group of respondents consists of academics from Slovenia (17%), Croatia (10%) and Turkey (9%). Respondents from North Macedonia (6%), Bosnia and Herzegovina (3%) and Bulgaria (3%) also participated in the research. We can conclude that the respondents are academics from the Balkans region.

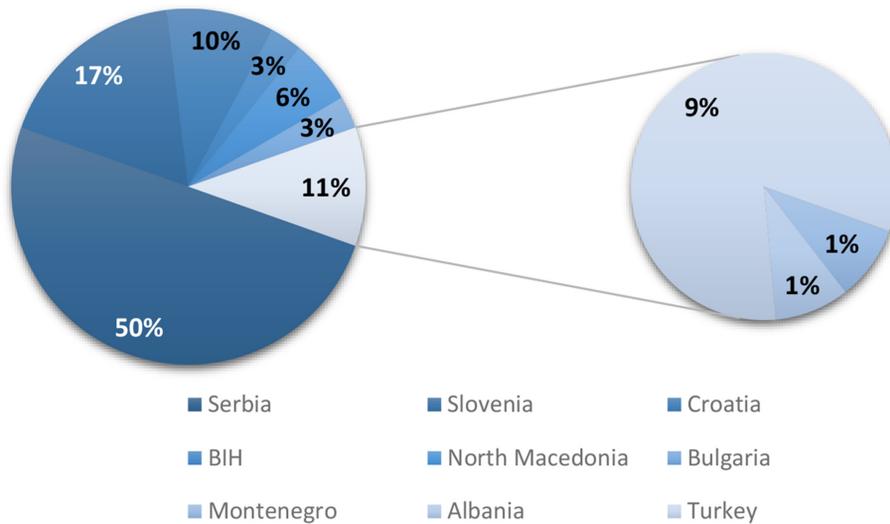


Chart 4. Nationality

Source: Authors' research

When it comes to the period in which respondents attended the conference, in Chart 5 we can see that the largest percentage of respondents attended the conference in the previous three months (67%), while the smallest number of respondents (7%) attended the conference which was held more than 12 months ago.

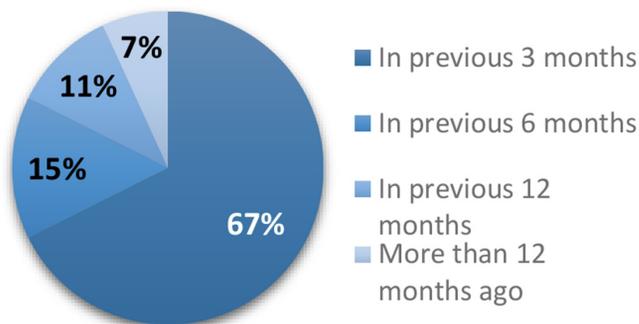


Chart 5. When the conference was held

Source: Authors' research

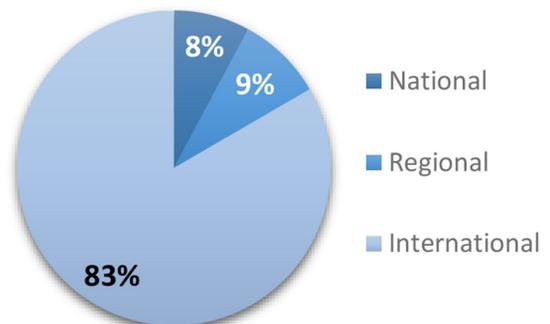


Chart 6. Conference type

Source: Authors' research

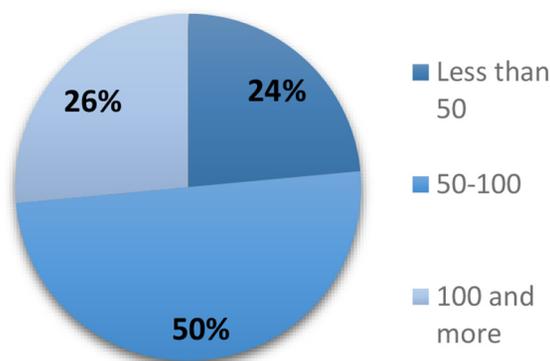


Chart 7. Number of attendees

Source: Authors' research

In the previous period, the largest percentage of respondents attended an international conference (83%), and the least a conference organized at the national level (8%) (Chart 6). When it comes to the number of attendees in given conferences, the largest number of conferences had between 50 and 100 attendees (50%), 26% of conferences had more than 100 attendees, and 24% of conferences had less than 50 attendees (Chart 7).

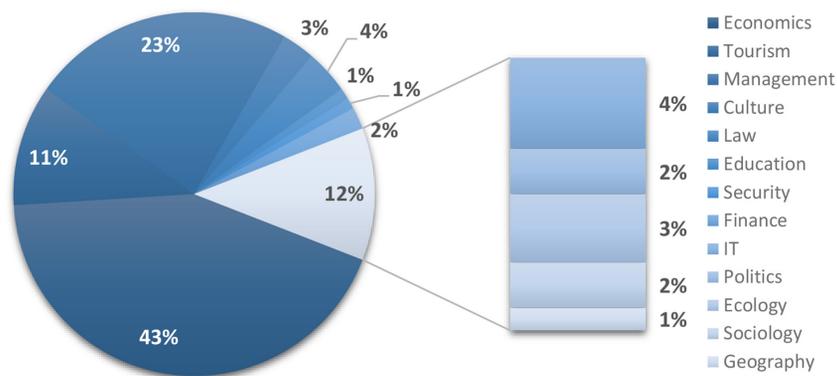


Chart 8. Conference topic

Source: Authors' research

Graph 8 presents the key topics of the conferences that respondents attended. The largest percentage of respondents were at conferences whose key topics were economics (43%), management (23%) and tourism (11%). The same number of surveyed academics (4%) were at conferences on law and IT, while the smallest number of organized conferences at which respondents participated was in the field of education (1%), security (1%) and culture (1%). The mentioned conferences were organized in the following countries: Serbia, Slovenia, Croatia, Bosnia and Herzegovina, North Macedonia, Bulgaria, Montenegro, Albania, Italy, Turkey, Russia, India, China, Greece, Portugal, Switzerland, France, Austria, Slovakia, South Korea, USA, Great Britain, Spain and Romania. Based on the above, it can be concluded that academics from the Balkans, in addition to conferences organized in their or neighboring countries, attended conferences organized not only in Europe but also in the United States and Asia.

4. RESULTS AND DISCUSSION

Table 3 shows the results of descriptive statistics. By implementing descriptive statistical analysis, the arithmetic mean and standard deviation for each question were calculated. The results of the analysis at the level of the entire sample indicate that the grades of the surveyed respondents range from 3.69 to 4.53, with a standard deviation from 0.767 to 1.152.

Respondents rated the highest: the registration process at the conference (4.53), food served during the conference (4.46), and technical assistance at the conference (4.46), while with the lowest scores were rated tourist tours organized by the organizers (3.69).

The reliability and internal consistency of the questions grouped around each variable were measured using Cronbach's alpha coefficient (Table 4). Values of Cronbach's alpha coefficient range from 0 to 1, with values greater than 0.7 being considered to indicate adequate reliability and consistency of the question (Nunnally, 1978). The values of the Cronbach's alpha coefficient in the study ranged from 0.712 (Destination) to 0.944 (Transport). The obtained values indicate adequate reliability and internal consistency of variables. Cronbach's alpha for the whole model is 0.932.

Table 3. Descriptive statistics

Questions	M	SD
Transport (by flight, bus or car) to conference city was?	4,40	,799
Transfer to conference venue was?	4,32	,869
Transport (by flight, bus or car) from the conference?	4,34	,850
The accommodation was?	4,42	,826
The breaks between presentations were?	4,44	,827
The food at the conference venue was?	4,46	,792
The peer-review process was?	4,31	,856
The registration process was?	4,53	,817
Admin./technical support at the conference was?	4,46	,767
The social program at the conference was?	4,08	1,012
The networking opportunity at the conference was?	4,04	1,033
My experience as a presenter was?	4,25	,906
My experience as a member of the audience in sessions was?	4,19	,931
The plenary sessions were?	4,06	,888
The destination experience was?	4,30	,942
The tour(s) organized by the conference was?	3,69	1,152
To what extent are you satisfied with your participation in the conference?	4,34	,850
To what extent are your expectations met?	4,09	,924

Note: M - Arithmetic mean; SD - Standard deviation

Source: Authors' research

Table 4. Reliability of variables - Cronbach's Alpha values

Variable	Cronbach's Alpha
Transport	0,944
Accommodation & Food	0,788
Communication & Organization	0,883
Social Activities	0,714
Evaluation of Experiences	0,823
Destination Experience	0,712
Satisfaction	0,875

Source: Authors' research

The results of the correlation analysis are shown in Table 5. Based on the value of the Pearson coefficient, the degree of dependence between the variables in the model was determined. There is a statistically significant degree of correlation between the model variables. The obtained results show a high degree of correlation between the Evaluation of Experiences and Satisfaction (0.837), the Evaluation of Experiences and Social activities (0.713), as well as the Social activities and Satisfaction (0.704). The lowest degree of correlation is between Transport and Communication and Organization (0.411).

In order to determine the variables that have a significant impact on the satisfaction of academic conference attendees, we use a simple linear regression (Table 6). The individual influence of independent variables on attendees' satisfaction, which is a dependent variable, was tested. The analysis of the obtained results shows that all independent variables have a significant impact on the attendees' satisfaction.

Evaluation of Experiences has the greatest impact on Satisfaction: $\beta = 0.898$, $t = 15,320$, $p < 0.01$; while the smallest influence on the Satisfaction has Destination Experience $\beta = 0.481$, $t = 7.160$, $p < 0.01$.

Table 5. Correlation matrix

	Transport	Accommodation & Food	Communication & Organization	Social Activities	Evaluation of Experiences	Destination Experience	Satisfaction
Transport							
Accommodation & Food	0,644**						
Communication & Organization	0,411**	0,519**					
Social Activities	0,444**	0,544**	0,625**				
Evaluation of Experiences	0,481**	0,577**	0,610**	0,713**			
Destination Experience	0,564**	0,472**	0,408**	0,593**	0,516**		
Satisfaction	0,532**	0,631**	0,607**	0,704**	0,837**	0,582**	

Note: ** Correlation is significant at the 0.01 level

Source: Authors' research

Table 6. Simple regression analysis (dependent variable: Satisfaction)

Variables	B	t	Sig.	R ²
Transport	0,559	6,286	,000**	0,283
Accommodation & Food	0,773	8,140	,000**	0,399
Communication & Organization	0,694	7,646	,000**	0,369
Social Activities	0,654	9,925	,000**	0,496
Evaluation of Experiences	0,898	15,320	,000**	0,701
Destination Experience	0,481	7,160	,000**	0,339

Note: p < 0.01 (**)

Source: Authors' research

By applying multiple regression, the model of joint influence of all six independent variables on the attendees' satisfaction was tested. The results of the analysis are shown in Table 7. The analysis of the obtained results shows that one variable has a significant impact on satisfaction: Evaluation of Experiences: $\beta = 0.615$, $t = 7.310$, $p < 0.01$. The relationship between independent variables and dependent variables can be described by a linearly dependent function, where the coefficient of determination (R^2) is 0.760 which means that 76% of the variability in attendees' satisfaction is described through these six independent variables, while another variability is influenced by other factors. The tested model showed that in the case of joint action of all six variables, only one variable: Evaluation of Experiences has a statistically significant impact on Satisfaction, while the other five variables do not have a significant impact on academic conference attendees' satisfaction.

Table 7. Multiple regression analysis (dependent variable: Satisfaction)

Variables	B	t	Sig.	VIF
Transport	0,032	0,423	,673	2,029
Accommodation & Food	0,170	1,880	,063	2,150
Communication & Organization	0,074	0,942	,348	1,880
Social Activities	0,087	1,148	,254	2,668
Evaluation of Experiences	0,615	7,310	,000**	2,438
Destination Experience	0,100	1,764	,081	1,878

Note: Results are significant at the level of p < 0.01 (**);

Results are not significant: p > 0.05

$R^2 = 0.76$

Source: Authors' research

In this research, the existence of the problem of multicollinearity was examined. This problem was tested through the value of the VIF coefficient. If the value of a given coefficient is greater than 5, then multicollinearity is a serious problem in the implemented study (Field, 2000). In this study, during the multiple regression, suitable values of the VIF coefficient were obtained, which range from 1,878 to 2,668.

5. CONCLUSION

Given the rapid growth of congress tourism around the world, all countries want to get involved in these types of tourism movements. Therefore, to this sector of the business tourism, known as M.I.C.E., special attention is paid. The offer for this market includes all services of economic and non-economic activities intended to meet the needs of tourists involved in congresses, conferences, meetings, events and manifestations. Conference attendees gather to exchange scientific knowledge, but also to leave everyday life for a few days and get to know different places. During the conferences, a specific offer is needed, while for free time, a tourist offer is needed, which should be appropriate in terms of its quality.

In this paper, research was conducted to determine the key determinants of academic conference attendees' satisfaction. Survey respondents generally gave high marks to the questions contained in the questionnaire, which relate to a set of services from different suppliers. As the assessment of the overall conference experience and satisfaction includes all components in the value chain of the conference as a service, the assessments of the surveyed academics testify to the existence of a relatively high degree of satisfaction among conference attendees. On the other hand, the conference attendees rated the tourist tours organized by the conference organizers with the lowest marks. Therefore, this segment represents an exceptional space for improving and increasing the participants' satisfaction. In that sense, better communication and cooperation of conference organizers with competent tourist organizations and travel agencies at the destination of the conference is needed, because if the attendee had a positive experience, it is expected that he will return for vacation, i.e. tourist activities. Also, every satisfied tourist is a potential new visitor and ambassador of the destination.

The results of the simple regression analysis confirmed the significance of all determinants of academic conference attendees' satisfaction, namely: quality of transport to and from the conference destination, accommodation and food at the conference, communication and organization, social activities, attendee experience and destination experience. However, the multiple regression analysis, which measures the cumulative impact of all six independent variables, confirmed only the statistical significance of attendees' experience on satisfaction, while the variables transport quality to and from the conference destination, accommodation and food at the conference, communication and organization, social activities and destination experience did not have a significant impact on satisfaction. Namely, the results of the research showed that by applying simple and multiple regression analysis, the attendees' experience has the most significant impact on the academic conference attendees' satisfaction. It can be concluded that the satisfaction of attendees is mostly influenced by the experience they evaluate from the aspect of the presenter at the conference, the audience member and the quality of the plenary sessions at the conference. In this regard, the most important contribution of the conference is professional development, obtaining relevant feedback for their work, getting acquainted with the work and achievements of experts in the field and space for discussion and debate on relevant and important issues of their interest, research and work. For this reason, the respondents did not attend conferences organized in their or neighboring countries, but in conferences organized in the USA and Asia.

In further research, more determinants should be included in the questionnaire, in order to obtain a more detailed overview of the impact on the academic conference attendees' satisfaction. It is necessary to increase the number of surveyed academics since the sample size is one of the limitations of the given research. Given the great variety of conferences that are organized and a large number of different institutions and organizations that deal with their organization, future researchers could test the impact of these determinants on the attendees' satisfaction in various scientific fields and disciplines. The contribution of the research is reflected in the provision of information and guidance that stakeholders can use as inputs in the process of making future decisions and strategies. Namely, the organizers of conferences through the obtained information can increase the satisfaction of attendees by increasing the quality of plenary sessions, engaging key experts in the subject area, and organizing debates and forums; Tourist organizations in the destination of the conference through cooperation with their organizers can increase the level of destination experience and conference participants "turn" into a tourist who returns to the destination for rest and entertainment. On the other hand, when selecting conferences in which they will participate, academics can give priority to those conferences that will have the greatest contribution to their work, professional development and career advancement.

REFERENCES

- Aktas, G., & Demirel, B. (2019). The genuine needs of conference attendees: An analysis by the modern quality function deployment. *International Journal for Quality Research*, 13, 13–22. <https://doi.org/10.24874/IJQR13.01-02>
- Alananzeh, O., Maaiah, B., Al-Badarneh, M., & Al-Shorman, A. (2018). The geographic distribution of conferences in Jordan from 2014 to 2016 using predictive GIS modeling. *Journal of Convention & Event Tourism*, 19(2), 167–185. <https://doi.org/10.1080/15470148.2017.1406832>
- Baloglu, S., & Love, C. (2005). Association meeting planners' perceptions and intentions for five major US convention cities: The structured and unstructured images. *Tourism Management*, 26(5), 743–752. <https://doi.org/10.1016/j.tourman.2004.04.001>
- Bjeljac, Ž. (2006). *Teorijsko-metodološke osnove manifestacionog turizma, Posebna izdanja knj. 67* (I. Popović, Ed.). Beograd: SANU - Geografski institut "Jovan Cvijić."
- Bučić, A., Dragičević, V., & Cimballević, M. (2015). Komparativna analiza kongresnog turizma Beograda i Praga. *Zbornik Radova - Geografski Fakultet Univerziteta u Beogradu*, 63, 119–146.
- Campos, R., Leon, F., & McQuillin, B. (2018). Lost In the Storm: The Academic Collaborations That Went Missing In Hurricane Issac. *The Economic Journal*, 128(610), 995–1018. <https://doi.org/10.1111/eoj.12566>
- Chalvatzis, K., & Ormosi, P. L. (2021). The carbon impact of flying to economics conferences: Is flying more associated with more citations? *Journal of Sustainable Tourism*, 29(1), 40–67. <https://doi.org/10.1080/09669582.2020.1806858>
- Cieślukowski, K., & Brusokas, A. (2020). Selected attractiveness factors of academic conferences as a product on the international tourism market. *Tourism*, 30(1), 13–20. <https://doi.org/10.18778/0867-5856.30.1.13>
- Crouch, G. I., Del Chiappa, G., & Perdue, R. R. (2019). International convention tourism: A choice modelling experiment of host city competition. *Tourism Management*, 71, 530–542. <https://doi.org/10.1016/j.tourman.2018.10.002>
- Crouch, G., & Louviere, J. (2004). The Determinants of Convention Site Selection: A Logistic Choice Model from Experimental Data. *Journal of Travel Research*, 43(2), 118–130. <https://doi.org/10.1177/0047287504268233>

- de Leon, F. L. L., & McQuillin, B. (2020). The Role of Conferences on the Pathway to Academic Impact: Evidence from a Natural Experiment. *Journal of Human Resources*, 55(1), 164–193. <https://doi.org/10.3368/jhr.55.1.1116-8387R>
- Dragičević, V. (2008). *Stanje i perspektive kongresnog turizma u Novom Sadu*. Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo, Novi Sad, Serbia.
- Dragičević, V., Plavša, J., Štetić, S., & Stankov, U. (2009). Destinacije kongresnog turizma u svetu i Srbiji. *Collection of the Papers*, 57, 199–214. Faculty of Geography, University of Belgrade.
- Edelheim, J. R., Thomas, K., Åberg, K. G., & Phi, G. (2018). What do conferences do? What is academics' intangible return on investment (ROI) from attending an academic tourism conference? *Journal of Teaching in Travel & Tourism*, 18(1), 94–107. <https://doi.org/10.1080/15313220.2017.1407517>
- Ficarelli, S., Sendra, S., Parra, L., & Lloret, J. (2013). Congress and Meetings Tourism and Destination Brand. *The Fifth International Conference on Creative Content Technologies*, 7–15. Universidad Politécnic de Valencia.
- Field, A. (2000). *Discovering Statistics Using SPSS for Windows: Advanced Techniques for the Beginner*. Sage Publications.
- Fowler, B., Cardon, P., Marshall, B., & Elder, K. (2021). What do conference attendees want from academic presentations? A study of an information systems professional organization. *Issues in Information Systems*, 22(3), 96–106. https://doi.org/10.48009/3_iis_2021_107-119
- Gorodnichenko, Y., Pham, T., & Talavera, O. (2021). Conference presentations and academic publishing. *Economic Modelling*, 95, 228–254. <https://doi.org/10.1016/j.econmod.2020.12.017>
- Grado, S. C., Strauss, C. H., & Lord, B. E. (1997). Economic Impacts of Conferences and Conventions. *Journal of Convention & Exhibition Management*, 1(1), 19–33. https://doi.org/10.1300/J143v01n01_03
- Gür, Ş., Hamurcu, M., & Tamer, E. (2016). Selection of Academic Conferences Based on Analytical Network Processes. *Multiple Criteria Decision Making*, 11, 51–62.
- Han, H., Lee, S., Al-Ansi, A., Kim, H.-C., Ryu, H. B., Kim, J. J., & Kim, W. (2019). Convention Tourism and Sustainability: Exploring Influencing Factors on Delegate Green Behavior That Reduce Environmental Impacts. *Sustainability*, 11(14). <https://doi.org/10.3390/su11143903>
- Hauss, K. (2021). What are the social and scientific benefits of participating at academic conferences? Insights from a survey among doctoral students and postdocs in Germany. *Research Evaluation*, 30(1), 1–12. <https://doi.org/10.1093/reseval/rvaa018>
- Hobson, J. S. P. (1993). Not another conference. *International Journal of Hospitality Management*, 12(2), 115–118. [https://doi.org/10.1016/0278-4319\(93\)90002-Q](https://doi.org/10.1016/0278-4319(93)90002-Q)
- Holloway, C., Humphreys, C., & Davidson, R. (2009). *The Business of Tourism, Eight edition*. Pearson Education Limited, England.
- International Congress and Convention Association. (2019). *ICCA Statistics report country & city rankings*. Amsterdam. Retrieved from <https://www.iccaworld.org/newsarchives/archivedetails.cfm?id=3189909>
- Jae Lee, M., & Back, K. (2005). A review of economic value drivers in convention and meeting management research. *International Journal of Contemporary Hospitality Management*, 17(5), 409–420. <https://doi.org/10.1108/09596110510604832>
- Kadaifci, C., Asan, U., & Topcu, I. (2020). A Fuzzy Cognitive Mapping Approach to the Conference Selection Problem. *International Journal of Information Technology & Decision Making*, 19(6), 1451–1484. <https://doi.org/10.1142/S021962202020500352>
- Kim, S., Lee, J.-S., & Kim, M. (2012). How different are first-time attendees from repeat attendees in convention evaluation? *International Journal of Hospitality Management*, 31(2), 544–553. <https://doi.org/10.1016/j.ijhm.2011.07.014>

- Kim, S. S., Chon, K., & Chung, K. Y. (2003). Convention industry in South Korea: An economic impact analysis. *Tourism Management*, 24(5), 533–541. [https://doi.org/doi.org/10.1016/S0261-5177\(03\)00006-2](https://doi.org/doi.org/10.1016/S0261-5177(03)00006-2)
- Lawson, F. (2000). *Congress, Convention And Exhibition Facilities: Planning, Design And Management*. Architectural Press.
- Lee, J.-S., & Back, K.-J. (2008). Attendee-based brand equity. *Tourism Management*, 29(2), 331–344. <https://doi.org/10.1016/j.tourman.2007.03.002>
- Lewis, C., & Kerr, G. (2012). Towards the Development of an Evaluation Questionnaire for Academic Conferences. *Event Management*, 16(1), 11–23. <https://doi.org/10.3727/152599512X13264729827514>
- Lovelock, C., & Wirtz, J. (2007). *Services marketing: People, technology, strategy*. New Jersey: Prentice Hall.
- Mair, J., Lockstone-Binney, L., & Whitelaw, P. A. (2018). The motives and barriers of association conference attendance: Evidence from an Australasian tourism and hospitality academic conference. *Journal of Hospitality and Tourism Management*, 34, 58–65. <https://doi.org/10.1016/j.jhtm.2017.11.004>
- Marinković, V. (2012). *Marketinški aspekti satisfakcije i lojalnosti – Orijentacija na potrošače u savremenom bankarskom poslovanju*. Ekonomski fakultet, Kragujevac.
- Marques, J., & Pinho, M. (2021). Collaborative research to enhance a business tourism destination: A case study from Porto. *Journal of Policy Research in Tourism, Leisure and Events*, 13(2), 172–187. <https://doi.org/10.1080/19407963.2020.1756307>
- McCarthy, J. F., McDonald, D. W., Soroczak, S., Nguyen, D. H., & Rashid, A. M. (2004). Augmenting the Social Space of an Academic Conference. *Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work*, 39–48. New York, NY, USA: Association for Computing Machinery. <https://doi.org/10.1145/1031607.1031615>
- Mihajlović, M., & Stošić Mihajlović, L. (2017). Preduzetništvo u sektoru usluga sa akcentom na poslovna putovanja i kongresni turizam. *Zbornik Radova ITOP17*, 155–162. Fakultet tehničkih nauka u Čačku, Univerzitet u Kragujevcu.
- Nunnally, J. C. (1978). An Overview of Psychological Measurement. In B. B. Wolman (Ed.), *Clinical Diagnosis of Mental Disorders: A Handbook* (pp. 97–146). Boston, MA: Springer US. https://doi.org/10.1007/978-1-4684-2490-4_4
- Oppermann, M., & Chon, K.-S. (1997). Convention participation decision-making process. *Annals of Tourism Research*, 24(1), 178–191. [https://doi.org/10.1016/S0160-7383\(96\)00049-7](https://doi.org/10.1016/S0160-7383(96)00049-7)
- Otto, J. E., & Ritchie, J. R. B. (1996). The service experience in tourism. *Tourism Management*, 17(3), 165–174. [https://doi.org/10.1016/0261-5177\(96\)00003-9](https://doi.org/10.1016/0261-5177(96)00003-9)
- Pavluković, V., & Cimbaljević, M. (2020). Factors affecting conference participation decision-making. *Journal of the Geographical Institute "Jovan Cvijic", SASA*, 70(1), 31–43. <https://doi.org/10.2298/IJGI2001031P>
- Pavluković, V., Vuković, S., & Cimbaljević, M. (2021). Determining success factors for business tourism destinations: Evidence from Zlatibor (Serbia). *Turizam*, 25(3), 110–120. <https://doi.org/10.5937/turizam25-28201>
- Pizam, A., Neumann, Y., & Reichel, A. (1978). Dimensions of tourist satisfaction with a destination area. *Annals of Tourism Research*, 5(3), 314–322. [https://doi.org/10.1016/0160-7383\(78\)90115-9](https://doi.org/10.1016/0160-7383(78)90115-9)
- Rabotić, B. (2013). *Selektivni oblici turizma (Special Interest Tourism)*, 2nd edn. Visoka turistička škola strukovnih studija Beograd.
- Rittichainuwat, B. N., Beck, J. A., & Lalopa, J. (2001). Understanding Motivations, Inhibitors, and Facilitators of Association Members in Attending International Conferences. *Journal of Convention & Exhibition Management*, 3(3), 45–62. https://doi.org/10.1300/J143v03n03_04

- Severt, D., Wang, Y., Chen, P.-J., & Breiter, D. (2007). Examining the motivation, perceived performance, and behavioral intentions of convention attendees: Evidence from a regional conference. *Tourism Management, 28*(2), 399–408. <https://doi.org/10.1016/j.tourman.2006.04.003>
- Sikošek, M. (2020). Congress Destination Attractiveness: The Case of Supply-Side of Business Tourism in Slovenia. *Academica Turistica, 13*(1), 81–95.
- Štetić, S. (2006). M.I.C.E. industrija—Budućnost razvoja turističke destinacije. *Turizam, 10*, 21–24.
- Štetić, S. (2007). *Posebni oblici turizma*. Beograd.
- Šušić, V., & Mojić, J. (2014). Kongresni turizam kao tržišna niša poslovnog turizma. *Ekonomске Teme, 52*(4), 523–539.
- Swarbrooke, J., & Horner, S. (2001). *Business Travel and Tourism* (1st Edition). London: Routledge.
- Weber, K., & Ladkin, A. (2003). The Convention Industry in Australia and the United Kingdom: Key Issues and Competitive Forces. *Journal of Travel Research, 42*(2), 125–132. <https://doi.org/10.1177/0047287503257489>
- Whitfield, J. (2007). Why build purpose-built conference venues? Forecasting new build. *Journal of Retail and Leisure Property, 6*(1), 47–60. <https://doi.org/10.1057/palgrave.rlp.5100045>
- Whitfield, J. E. (2009). Why and How UK Visitor Attractions Diversify Their Product to Offer Conference and Event Facilities. *Journal of Convention & Event Tourism, 10*(1), 72–88. <https://doi.org/10.1080/15470140902768210>
- Yoo, J. J.-E., & Chon, K. (2008). Factors Affecting Convention Participation Decision-Making: Developing a Measurement Scale. *Journal of Travel Research, 47*(1), 113–122. <https://doi.org/10.1177/0047287507312421>



Destination Branding and Cultural Tourism – Case from Serbia

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Abstract: *Destination branding is icing on the cake of the process of destination-making. This process raises the issues such as attitudes of the local community towards tourism development, regarding utilization of their natural and cultural resources, cooperation of national and local decision-makers, and identification of attractions. Such issues are most noticeable in cultural tourism in which tourists choose their destination motivated by an interest to meet the city's local culture. As the new museology paradigm shifted focus onto visitors' experience, museums, guardians and presenters of (local) heritage have become brands of their kind. In their work, they meet the local community's needs to know better and adequately present their culture and heritage and the needs of tourists to meet local particularities. This paper focused on two towns in Serbia, Valjevo and Kikinda, where museums took a leading role in branding cities as cultural tourism destinations.*

1. INTRODUCTION

Since the last quarter of the 20th-century tourism development has had a widespread understanding of its benefits in terms of the economic development of local communities and nations. The relatively rapid growth of tourism, besides its economic benefits, influenced considerations of its effects on both tourists (investing their time and money to explore “other” places) and hosting (local) communities (investing their resources, both natural - such as landscapes and natural history sites, and cultural - such as cultural heritage and contemporary cultural practices). Hence, on a broader scale, tourism nowadays is a complex phenomenon in which the horizons of tourists and their hosts are expanded.

Globalization and increased mobility of people around the globe made almost every corner of our planet accessible, posing challenges for tourism planners, politicians, and various stakeholders regarding creating destinations. The creation process implies synchronization of accessible natural and cultural resources that may be (sustainably) used with infrastructure (accessibility of the location, traffic and tourist signalization, accommodation facilities, restaurants, shops, etc.) As tourism is a highly competitive industry, creating destinations (putting all infrastructure “ingredients” together) is no longer enough for attracting tourists. Branding destinations may be described as “icing on the cake” of the process of creating a destination.

Starting with destination making, branding is instead a subtle process consisting of identification of distinctive elements, titles of stories behind, and creating “new” stories that inspire people to come and visit “one” destination rather than the “other”. Further on, brands are promoted by using “traditional” (analog) and new (digital) media. Branding destination implies continuity

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based upon monitoring the effects of the already identified brand(s) and constant research for contents that may add up the existing brand(s) or contribute to the creation of new brands related to the destination.

Destination branding implies emotional relations of both locals (hosts) and tourists, ideally joined emotional relations of hosts and visitors/tourists (Paunović, 2014). Ideal emotional relations resonate quite well among tourism planners and politicians (especially in small countries such as Serbia) seeking a national brand. Since the 1980s, cultural tourism has rapidly begun to develop, shaking the ideas of tourism planners and politicians to their core. Local communities also recognized possible benefits from tourism development and even took steps to create versions of how destinations mayor should be branded (Wright, 1998).

In this paper, we shall briefly address the development of cultural tourism as a game-changer in the tourism industry because it ignited the necessity for more thorough considerations on how to meet the needs and desires of both the local (host) community and the needs and desires of its guests/tourists. Then we shall analyze two examples from Serbia (from the City Valjevo and the Municipality of Kikinda) that show how local museums succeeded in mobilizing their communities to all work together in positioning themselves as brands, and simultaneously time hubs of local socio-cultural life. These examples show possible ways to address the issues like the attitudes of the local community to the idea that the place in which they live is open to the others, their standpoint with respect to the investment of their natural, material, and human resources from both local and national perspective, and important issues of potential attractions increasing their accessibility for both locals and visitors. By analyzing two said examples, we argue that rooting the brand in the local community ensures longevity in the cultural tourism market. The small size of the country influences opinions that too many brands may “suffocate” each other. The idea of the national brand is a very powerful driver in national economic development and competitiveness as well as an instrument of foreign policy because it may include social and cultural institutions, sports, art, natural resources, tourism, investments, manifestations, festivals, events, people, customs and ethics, mentality, architecture, artistic creativity, cultural and historical monuments (Domazet, 2016). Here we argue on the contrary – emphasizing varieties of heritage and approaches in interpretation are benefit recognition of local “spices” in the broader perspective.

2. BACKGROUND

Cultural tourism had started to develop in the late 1970s, and since then, it has grown continuously. This type of tourism may be defined as traveling in which meeting and learning about the (local) culture on the spot is among the leading motifs for choosing a destination. Though there are more definitions, they emphasize tourism, use of cultural heritage, consumption of experience, product, and of course – the tourist (McKercher & Du Cros, 2002). Culture and cultural heritage are often stressed as primer motifs for traveling. Still, it is acknowledged that culture may also be accompanying interest in business trips and more extended vacations, implying a combination of motifs. Having in mind general distinctions of culture and cultural heritage, it is possible to differentiate some specific types of cultural tourism: a) heritage tourism; b) museum tourism; c) industrial tourism; d) cultural events tourism; e) historical-military tourism; f) religious-pilgrimage tourism; g) gastronomic tourism.

Smith (2003) offered the typology that implores similar differentiation of cultural tourism types and includes relations with interests. According to this typology, heritage tourism that

corresponds with an interest to visit museums, monuments, and archaeological and religious sites is the main field of cultural tourism because the interest in the heritage is also implied in many other types of cultural tourism, such as urban and rural cultural tourism, art tourism, indigenous cultural tourism. Latter suggests that in addition to material, intangible heritage has become extremely popular among tourists searching for authentic and traditional lifestyle testimonials in recent decades. In that sense, within the framework of cultural tourism, many folklore festivals in which intangible heritage elements are represented are being developed. These are gastronomy, music, crafts and above all, the experience of living in a particular region, which is the most insistent in the very experience of the destination.

Cultural tourism has evolved to acquire individual experiences that can be used to create narratives about oneself or provide raw materials for differentiation. More than other forms of tourism, cultural tourism favors experience, becoming a part of the cultural or symbolic economy, “economy of experience”. In search of adventures, tourists seek authenticity, which can be understood as “a conceptual representation of something that we perceive as authentic. (...) the social constructions of authenticity are constantly created and re-created in their various forms.” (Wickens, 2017).

The cultural tourism product is differentiated both in terms of the benefits it offers and to whom it is addressed. Considering the importance of culture when selecting the destinations and experiences and the diversity of cultural and tourist products, it is possible to distinguish five types of tourists. (Niemczyk, 2013). The first type is the cultural tourists with the intention, that is, those whose primary reason for traveling is to gain knowledge about the culture of other people and nations, and the level of reception of content on the site is high. The second type is “the random” (cultural) tourists, for which cultural issues are not particularly important in the planning of the trip, but who are included in some of the cultural activities during their stay (although the cognitive importance of inclusion does not have special significance for these tourists). The third type is “the random finders” whose focus on culture is not essential, especially during the preparation of the trip. Still, they are happy to participate in a cultural activity during their stay so that the content’s reception level is high. The fourth type is the periodical tourists; focusing on culture is not important when planning a trip or traveling. Although it may involve contact with the culture of the site, it is usually superficial in terms of cognitive impact. The fifth type is the visitors who want to get to know the culture of the destination, but this desire is optional and focused on entertainment (Niemczyk, 2013).

The development of cultural tourism contributed to changes in the business of cultural institutions. Faced with budget cuts, they have turned to management and marketing by adapting them to their needs and positioning themselves as equal partners in the tourism business environment. International organizations such as UNESCO, ICOMOS, ICOM, and the Council of Europe encouraged developing strategies for safeguarding cultural heritage and highlighting local particularities that ensure competitiveness in a highly competitive cultural tourism market. In this respect, a trend is noted that specific destinations that do not have “traditional” tourism resources, develop cultural tourism as their main offer, building their image on culturally specific values and authentic cultural-tourism products (Jelinčić, 2009).

In cultural and cultural tourism development, rapidly developed information and communication technologies brought new opportunities and challenges. The Internet changes the attitude towards knowledge, deregulates the movement of cultural goods and services, and changes our apprehension of creativity (Le Glatin, 2007). The development of digital culture and the presentation of a

cultural product in the virtual sphere provide a constant challenge to the concepts and approaches to cultural tourism. The postmodern tourist becomes highly individual, which corresponds to their knowledge of the internet sources of information (Cvjetičanin, 2008). Other than visiting sites of material culture, experiencing, “discovering”, the everyday routine of a city or village, enjoying local gastronomy, visiting a rural household, and getting to know the local craftsman and his products became the necessary cultural experiences in tourist destinations (Shore, 2010). This general background of cultural tourism, still a rising star in the tourism industry, opens issues related to strategies aimed to ensure the longevity of (cultural) tourism destinations by creating brands.

3. MUSEUMS AND TOURISM

Museums are “permanent non-profit institutions in the service of society and its development, open to the public and which collect, conserve, explore, approach and expose the tangible and intangible heritage of humanity and its environment for education, study and enjoyment” (ICOM Statutes, Article 3). In the last decades of the 20th century, museums have attracted many people. “Museums have become focused on a community, points of a physical meeting. Museums have also become meeting points for thinking, reflection, satisfaction and knowledge.” (Roland Arpin, Executive Director Musée de la civilisation - Québec, quoted from: Herreman, 1998).

Since the 1980s, the fact that in the structure of the museum visitors, more represented are those whose permanent place of residence is not in the city where the museum is located, raised the attention to relations between museums and tourism (Capstick, 1985; Lord & Lord, 1982). At that time, tourist visits to museums can be more often recognized as part of a vacation program, rather than a conscious quest for academic knowledge. According to the survey carried out by the British Museum in the 1980s, most visitors did not know how to answer the questions about why they came to the museum, what they would see there, and their enjoyment was more directly related to the recognition of famous and well-known artifacts, such as *Rosetta Stone* or *Elgin Marble*. Similar patterns of behavior have been observed in other museums, for example, visitors to Louvre who came to see *Mona Lisa* or Vatican visitors who only came to see the Sistine Chapel. Research, carried out in 1982 by The National Museum of Canada, showed that more than half of the visitors felt that the knowledge about the museum’s contents that they had before the visit was necessary to understand and appreciate the museum exhibits (Capstick, 1985). The data provided by these researches influenced the re-examination of the role of museums.

On the one hand, there are requirements for the protection of heritage, and on the other hand, the demands of the contemporary life of local communities as well as the requirements set by tourists. Museums had to become innovative in their professional practices without distorting or distancing from traditional goals by harmonizing conservation with current community needs, heritage protection and tourism. In this respect, it is necessary to remind that museums can have the following roles (Herreman, 1998):

- a) to interpret and communicate other cultures for the benefit of the community by designing and implementing the strategic plans of the exhibitions,
- b) to help the local community to understand other cultures in a socially sound way,
- c) to interpret and communicate (interact) local culture, its past and present, for the benefit of tourists so that they can understand the local culture,
- d) to act as educational centers in the local community in terms of understanding cultures,
- e) to act as tourist orientation centers, especially in small communities,
- f) to develop their role as centers for studying traditional crafts and local knowledge and skills.

According to the types of collections and orientation, two types, complex and unique museums, can be differentiated. **Complex museums**, in large, have the following collections: archaeological (from prehistory until the end of the Middle Age), numismatic, historical, ethnographic and artistic. These collections are relevant to the region (regional museums) or local community (local museums). **Special museums** collect, preserve and present to public artifacts of a certain type – archaeological, ethnographical, historical, military, theatre, pedagogic, health-related, sacral and church history artifacts. Also, special museums are ones with a dominant orientation towards collecting artifacts of natural history (fossils, botany, zoology); science and techniques (railway, postal service, textile production, etc.); and arts (art galleries with fundus, museums of contemporary arts, museums of applied arts).

The Axis of museums' work is exhibitions (permanent and temporal) and special programs. Permanent exhibitions are exposed for longer, while temporal exhibitions last shorter but are organized regularly. Special programs are also regularly arranged about either permanent or temporary exhibitions. Permanent exhibitions can be defined as a set of exhibitions organized around a certain historical period (e.g. prehistory, the Middle Ages, the modern age) and about specific topics of socio-economic, artistic, technical and religious life (e.g. furniture, electricity, jewelry and accessories, religious artifacts, etc.). According to the basic criteria, permanent museum exhibitions can be either central, with the content conditioned by the nature of the museum and expressed by a greater or lesser degree of complexity, or more closely thematic, often presented in museum sections and departments (Krivošejev 2009).

Temporary exhibitions are time-limited presentations. Three types of temporary exhibitions can be distinguished. One is made up of periodical exhibitions of the museum itself - they are thematic presentations of artifacts from museum collections, which are not included in the permanent exhibition, but are important as an illustration of a certain theme or phenomenon from the socio-economic, artistic perspective and religious life. The second type is exhibitions created by curators in other museums or galleries invited for temporary representations of the chosen theme from their collections (so-called "visiting exhibitions"). The third type consists of creators from an art exhibition's close or the wider environment.

Special programs that are part of contemporary museums' practices are ones related to the content of both permanent and periodical exhibitions (thematic lectures, guided tours, animations, etc.), but also ones organized on occasions as part of the museum's perception of its role in the community (workshops, tribunes and lectures, music and drama programs, etc.) not necessarily connected with exhibited contents but still related to issues contained in local and national heritage (Krivošejev, Bjeljic, 2016, p. 915)

The general classification of the museum audience is on the local population and visitors from other parts of the country and abroad. In addition, museum audiences can be classified into individual visitors and group visitors - informal groups, family groups and educational groups (Woollard, 2004). Furthermore, museum audiences are classified as museum fans, who voluntarily choose to spend their free time in museums and organized social groups visiting the museum according to a particular program, regardless of the existence or absence of directly expressed interest. More detailed elaboration of these divisions reveals a significant heterogeneity of categories of a broad audience that, depending on the museum, can comprise tourists, school audiences, with subcategorization of children and adolescents, and learned admirers (Gob, Druge, 2009, p. 85). The museum audience can be graphically displayed in the form of

so-called audience pyramids. At the top, as the smallest target group, there are experts, and at the bottom of the pyramid, in its basis, the broadest, which is the entire population of a country. Further “building of the stairs” of this pyramid depends on the museum and its surroundings. With the possibility of permutations, from the base to the top, the stairs – segments of the audience’s pyramid would consist of: city population, tourists, schoolchildren and students, elderly people, special social groups, emigrant groups, people with disabilities, business elites, media professionals, professionals in the field of culture and professional museum activists (Molar, 2000; Dragičević-Šešić & Dragojević 2005; Krivošejev & Bjeljic 2016).

Also, the audience of museum programs can be classified on the “available” and “unavailable” (Digl, 1998, p. 27), which is real and potential (Woollard, 2004, p. 110). It is also helpful to have in mind non-audience. The real audience is citizens who visit museums, and potential ones who do not have that habit but still have positive attitudes towards museums, unlike non-audience who are not interested in museums and may even have negative attitudes or find museums boring (Jokić & Žeželj, 2013). A potential audience is the main resource for audience development since the real audience will visit museums anyway. At the same time, the non-audience is not interested in museums. Empirical findings show that museums’ festivals (in Serbia, for example, Museum Night and Museum for ten) attract real museums audiences, and also those who do not visit museums beyond the festival but come during the festival attracted by advertisements, more entertaining offers or to keep a company to someone - so they can be perceived as a potential audience of regular museums’ programs and specific actions can be created to motivate them to revisit museums after the festival (Jokić, 2016; Jokić & Mrdja, 2017).

During the last decades, museums have been public institutions that have been strongly emphasized in developing the new museology paradigm. Contemporary museology dominates the understanding that a museum exists to be visited by people who have decided to devote their free time to research and discover new or different knowledge. Accordingly, Lord argued that, rather than objects, The Visitors should be at the center of attention of museums (Lord, 2002). Reflecting and developing further on Lord’s argumentation, Šola (2011) suggested a formula: E (excellence) = m (museum) * c (c for capacity, that is the capacity of the exhibition to transfer the idea that artifacts document to visitors, as well as c for creativity, or creativity in terms of understanding the museum settings and visitors). The focus on heritage interpretation, implied in Šola’s “ c ” part of the formula, led to attentiveness toward different groups of visitors: curators began to create special programs for the local community so in the museum its members can learn about its past and heritage; for the tourists who can learn about local culture and its ties with wider surroundings in both national and local museums; for different generations – young and old have different interests, knowledge and experiences and museum offers them all opportunities to learn more.

Diversification of programs, particularly programs related to permanent exhibitions, included the usage of new information-communication technologies (ICT) recognized since the 1990s. Nowadays, video presentations, touchscreens, 3D holograms, and applications accessible via smartphones and tablets are widely spread in museums around the globe (Domazet, 2018). Also, museums in the world developed assertiveness in museums presentations on the Internet on museums’ websites and social media profiles, which proved helpful in 2020 when museums worldwide faced their greatest challenge of being closed to the public due to the Covid-19 pandemic. Quickness in going online with their programs and activities most certainly displays the resilience of contemporary museums (UNESCO 2020 Report “Museums around the world in the face of Covid-19”).

Having in mind the types of museums' work and their orientation toward visitors, MacManus (2006) emphasizes that the importance of versatile short-term thematic programs is primarily related to the permanent cultural and educational mission of the museum directed towards the local population, keeping their interest in museums and encouraging the return visit. When it comes to permanent museum exhibitions, besides their significance for an educational mission directed towards the domicile population, these exhibitions can have key importance for tourists to have a better understanding of the nature, history and population of the receptive area, adding value to the attractions of the destination and creating motivation for a tourist visit. (Krivošejev, Bjeljac, 2016). According to their content, special programs may target both locals (lectures, tribunes and presentations to debate issues important for the community) and tourists (concerts, plays, etc. that add to experiencing local culture).

4. MUSEUMS AND BRANDING DESTINATIONS – EXAMPLES FROM SERBIA

The museum's primary role is not to attract tourists but to serve the public by providing knowledge about the past and present and a better understanding of liaisons of the local community and the nation with its surroundings and the world. However, museums themselves have become brands of towns in the last decade's cities and regions by researching heritage, making acquisitions of objects, preserving artifacts, exhibiting and interpreting them by imploring various interpretative techniques (including ICT), local and national cultural heritage around the world.

In Eastern Europe, throughout the decades of socialism, museums were also a tool of propaganda, promoting the values of the communist fight against fascism (Krivošejev, 2008). Visiting museums was so-to-say obligatory for elementary and high school pupils, students, and workers (Niemczyk, 2013). Keeping in mind the role of museums as institutions that research and preserve movable cultural heritage and a constant flux of visitors, attentiveness towards interpretation was relatively insignificant. Hence, museums have developed a reputation as institutions whose "doors were hard to open" (Gavrilović, 2007). However, in the early 21st century in Serbia, it became clear that such, so-to-say bad reputation must be eliminated; that if the museum does not communicate heritage it cherishes as sort of the brand, the audience will form the brand of the museum at its discretion, which often may not come out as what the museum would want. To keep control over its identity and reputation, the museum must clearly define it and present it to the audience.

Domazet (2015) suggested reasons why museums should be branded:

1. *Economy and donations.* How the museum presents itself to the outside world significantly impacts financial support. A good brand will build or keep the audience, affecting various stakeholders' interest in investing in the museum.
2. *Image-vision-culture.* The brand makes it possible to merge three key points of each museum: an image of itself (how stakeholders perceive the museum), the vision (aspiration of the organization in the long-term), the culture of the organization (the way of work and the organization of the museum).
3. *Differentiation-competitiveness.* The unique brand of the museum allows the museum to be distinguished from other museums and other cultural institutions.
4. *Communication.* Formed visual identity, image and vision, key points about the museum make more accessible museums' communication with the audience. Accordingly, museums' staff will design various activities (from new exhibitions to touch on the website and social networks).

5. *Memory*. The audience remembers the constant and precise visual identity. Bright brand style: logo, accompanying materials, slogans, images and their use in traditional and new media, contributes to museums' ability to be memorable in the sea of information.
6. *Emotion*. The brand can be compared with a person. The institution acquires the brand with identity and "personality", name, vision, emotion, intelligence. People more easily relate to what is close to them, the "person" they feel and understand.
7. *Accessibility*. When a brand exists and communicates with the audience, it affects people's impression of the accessibility of the museum. The museum is no longer just an institution, but someone who can be trusted, responsibly justifying the trust, and attracting people to the museum in a unique voice.

Named reasons for branding were particularly important for Serbian museums at the beginning of the 21st century when the country opened to European and global markets after a decade of isolation. However, the greatest challenge for Serbian museums was positioning themselves in their communities as hubs of local socio-cultural life and national socio-economic growth. Implicitly, appreciation of the museum as representative of the community and its past by the locals was perceived as a viable option for positioning both the museum and the community on a national scale (increasing number of domestic tourists) as well as on the international tourism market (Domazet, 2013).

Regarding cultural tourism development, Serbian museums' challenges included remnants of the past "boring museums" and perceptions that the leisure time is family-related vacating on the mountain in the wintertime and on the seaside during the summer. By the end of the first decade of the 21st century, many Serbian museums started to re-evaluate their perspectives on museums' cultural, economic, and educational roles (Vukanović, 2009). An outcome was a slow but continuous increase in the visitors' number. Research conducted among museum visitors during the 2016 event "Museums for 10" showed that almost 40% of local museum visitors were there after a long time and were satisfied with their experiences (Jokić, Martinović & Mrdja 2017).

The latest data on the cultural participation of Serbian citizens shows that altogether 48,7% of Serbian citizens stated that they like visiting museums in their leisure time (Mrdja et al. 2020, p. 43). When it comes to frequency:

- 27,4% of Serbian citizens in 2019 visited a museum once;
- 14% of Serbian citizens visited a museum 3 to 5 times during that year and
- 5,9% of Serbian citizens have been at the museum more than five times in 2019 (Mrdja et al. 2020, p.106).

Compared with the data from 2006 showing that 74,3% of Serbian citizens not once during that year visited a museum (Cvetičanin, 2007, p.102), it is evident that museums in Serbia were doing an excellent job in changing the attitudes of Serbian citizens towards the museums.

Over the last ten years, many Serbian museums innovated their practices and became hubs of local cultural life attractive to locals and tourists (domestic and international). National Museum Valjevo and National Museum Kikinda were among the ones that ignited "the fire" and sat examples of how to meet the museology requirements to safeguard heritage, the needs of the community to interact with their heritage and the needs of visitors to easily understand and appreciate local heritage experiencing local culture.³

³ Statistical data used in following paragraphs on National Museum Valjevo and National Museum Kikinda

4.1. National Museum Valjevo

Situated in Western Serbia, 88 km South-West from Belgrade, the city of Valjevo is the capital of Kolubara District. The area was inhabited in neolith. The city was developed firstly as a town in Medieval Serbia, then under Ottoman rule, as the center of the administrative unit with the territory on the North up to the river Sava. It is one of the oldest towns in Serbia, the first time mentioned in historical sources in 1393. Valjevo area was a place of great significance in Serbian uprising against the Turkish government in 1804. After liberation from Turkish rule, Valjevo started to grow as a commercial and industrial center in the region. Nowadays, the old historic center, Tešnar, where many artisans have their workshops and many tradesmen their shops, is among the major city attractions.

National Museum Valjevo represents the city's heritage and attractions. Founded in 1951 museum is complex, having archaeological, ethnological and historical collections as well as art collections. The museum oversees the City of Valjevo and neighboring municipalities Ub, Osečina and Mionica. According to the 2019 statistical data, the Museum treasures 13.756 artifacts systematized in historical, archaeological, numismatic, ethnographic, artistic and other collections. The permanent exhibition currently displays 1.003 artifacts. It is sat in three buildings – the main Museum building, nearby *Muselimov konak* and *Kula Nenadovića*.

In 2007 Museum redefined its permanent exhibition keeping in mind that visiting the museum is about having an experience, that artifacts should communicate with visitors regardless of their origin and the place of residence, whether they are locals, from other parts of Serbia or abroad; and subtly playing with the general knowledge that visitors have had before coming to the museum. The entrance to the exhibition area in the main Museum building shows the game of associations on the understanding that visitors, from schoolchildren to the elderly, have. They first enter the cave, because it is widely known that prehistoric people lived in caves. At the same time, the passages from one era to another are associated with (city) gates characteristic of these epochs. At the table of the Duke Živojin Mišić, a native of Valjevo, the museum occasionally organizes a monodrama enacting the beginning of the 1915 Kolubara battle (later on in the 20th century studied at military academies over the world). At the time of our first visit in 2018, due to space limitations in the leading Museum building permanent exhibition, there was ending with the beginning of the 2nd World War. Eventually, the space problem was solved, and the opening of the 2nd World War room was planned for Veterans' Day 2021.

Nearby *Muselim's Billet* ("Muselimov konak"), the second Museum's venue, is dedicated to the First Serbian Uprising. In the basement, combining light sensors and audio recordings, Arch-priest Mateja Nenadovic and Ilija Birčanin, leaders of Serbs against Turkish rule. In *Nenadovic's Tower* ("Kula Nenadovića"), the third museum location, the introduction is made by the short film *Beheading of the Princes* – the slaughter of detained local leaders in the tower by the Turks. Due to the lack of a heating system in the over 200 years old building, this location is open for the public only from April to October.

The current permanent exhibition at three city's locations is created in a manner that meets the requirements of both "old" and "new" museology, or as Museum Counselor, Krivošejev put it

is provided by Centre for Study in Cultural Development who develops a platform e-Kultura annually feed according to the Agreement with the Statistical Office of the Republic of Serbia. Overall annual statistic is published in publication "Culture" available via website www.zaprokul.org.rs and platform e-kultura.net Specific data for museums is available upon request.

- the meeting of “His Majesty the Object” and “His Majesty the Visitor”. The idea resonated well among both museum experts and the wider public and the Museum was awarded for its efforts.⁴

National Museum Valjevo continuously keeps the statistics on visitors. The survey of visitors of the National Museum of Valjevo in the period from 1951 to 1961 and 2001-2011 showed that the most motivated tourists, depending on the type of programs, make up between 5% and 15% of tourists, while only 5% of the local population represents the primarily motivated audience of the program in their surroundings. On the other hand, while 30% of citizens are inspired by culture when traveling, only 15% are related to their surroundings. Depending on the type of offer, while 20% to 40% of tourists are accidentally motivated / attracted by culture, about 20% of the population belongs to this category regarding cultural events in their residence. These studies indicate that citizens in more significant numbers meet their needs for visiting museums during tourist trips, in their free time when they are relaxed and spend their time in leisure, then during regular working days in their place of permanent residence (Krivošejev & Bjeljac 2016)

According to recent data collected for annual statistic reports in 2019 National Museum Valjevo recorded 26.899 visitors. Among them 3.118 were individual visitors, 19.741 were visitors in groups (including schools' excursions and tourists' groups) and 4.310 were other visitors (academics, artists, fellow museologists, journalists, and experts). During that year museum organized five temporary exhibitions from its collections, recording 1.500 visitors who came to the Museum because of these exhibitions. Also, Museum organized 12 guesting exhibitions i.e. exhibitions of other Serbian museums and recorded 2.100 visitors to these exhibitions. Museum organized one exhibition in another Serbian town and one exhibition abroad.

Under the jurisdiction of the National Museum Valjevo is the school complex in the nearby village Brankovina where Archpriest Mateja Nenadovic opened the first school in Serbia. Also, Brankovina is the village where the schoolteacher was the father of Desanka Maksimovic, the famous Serbian poet. She grew up in this village and in her work also reflected on her childhood there.

Keeping in mind the educational role of the museum as well as the museum as a meeting point for the community, National Museum Valjevo regularly organizes special programs and workshops for children in kindergartens and schools. Also, on occasions, Museum organizes (for the adults) lectures, tribunes and panels related to exhibitions aimed to enhance better understanding of the past and present.

The importance of the Valjevo area in Serbian history and culture was the axis of the City's branding process in which the Museum has had an important role because the local community has already recognized the Museum as an important socio-cultural actor in the city. Hence, citizens of Valjevo easily and with pride direct visitors toward the museum.

⁴ National Museum Valjevo has received awards for the best museum in Serbia in 2005 and in 2008. The competition for the best museum in Serbia is annually organized by the National Committee of ICOM – ICOM Serbia. Also, National Committee of ICOM Serbia awards the best curator of the year and in 2012 Vladimir Krivošejev from the National Museum Valjevo won the award because he was the author of the exhibition in *Nenadovic Kula* that was accompanied with appropriate booklet about the tower as well as publication about Valjevo history. In the same year (2012) National Museum Valjevo has received the award “Turistički cvet” given by Tourist Organization of Serbia for the most prominent tourism destinations.

4.2. National Museum Kikinda

Located in the northern part of (Serbian) Banat, the town Kikinda is the capital of the North Banat Administrative District. Situated 100 km from Novi Sad and 130 km from Belgrade, the municipality of Kikinda is located 7.5 km from Romania and 60 km from the Hungarian border.

Kikinda area is rich in traces of old and extinct cultures and civilizations. Numerous archaeological findings testify that people here lived seven thousand years ago. The name Kikinda was first recorded at the beginning of the 15th century as Kokenyd. It likely signified, together with the name Ecehida, the name of several small settlements ruled by the Hungarian and then the Serbian despots. The history of contemporary Kikinda is meticulously recorded in the last 264 years - from 1751-to 1753 when the area which the city occupies today is inhabited. Modern Kikinda is a town with its square, wide streets and old buildings attracting the attention of both locals and guests. According to the 2011 census, the municipality Kikinda has 59,453 inhabitants. The abundance of flora and fauna is manifested in a special nature reserve *Pasture of the Great Bale* (“Pašnjaci velike droplje”), recognized as a natural heritage of exceptional significance. Towns’ Park “Park Blandas” created in the early 19th century and refreshed with planted species in English style in the 1930s, is recognized as a natural heritage site. It is protected because of its high aesthetic and decorative values, the richness of plant species, herbaceous and softwood plantations, and the large presence of bushy species. Kikinda is also known as an area where the owls have their biggest wintering place. They settle their winter habitats even in the very center of the town.

Throughout the former Yugoslavia, Kikinda was known for the factory “Toza Markovic” which produces clay bricks and tiles. While excavating new clay fields, on September 4th 1996 workers found bones that turned out to be the remains of mammoths. Paleontologists dated the remains to the geologic epoch Pleistocene (period from 1.8 million to 10,000 years ago). They established that *Mammuthus Trogontherii*, also known as Steppe Elephant or the Woolly Mammoth, for pronounced long hair. As 90% of bone mass is found (only a foot and blade bones are missing) the discovery of the Kikinda mammoth is remarkable on the world scale. Paleontology analyses showed that the skeleton was found at a place where the mammoth died, probably stuck in the mud and too old to get out.

In 2006 Mammoth remains were trusted to the National Museum Kikinda. In the same year, a project “Kikinda Mammoth” was launched, kicking off activities orientated towards the branding of Kikinda municipality. The project brought together all the actors of the socio-economic and cultural life of Kikinda – “Toza Markovic” AD, Kikinda National Museum, Kikinda Municipality Assembly, schools and preschool institutions, as well as institutions such as the Natural History Museum in Belgrade, the Centre for the Study of Cultural Development and the Department of Archeology at the Faculty of Philosophy, University of Belgrade. Representatives from institutions and organizations in the local community participated in workshops (guided by the experts from republic institutions) related to interpreting scientific facts and heritage. These workshops were also aimed to find other elements that would make Kikinda even more recognizable. From the beginning of the process, cultural tourism was recognized as viable. The rarity of mammoth skeletons on a world scale influenced the choice of the Kikinda brand core. Presenting paleontological facts, Kikinda Municipality and its National Museum organized the call for Kikinda citizens to choose the name of their mammoth and the name Kika was chosen to enable further development of the Kikinda brand including recognizable logo, slogans and

accompanying materials (both analog and digital). In the process, National Museum Kikinda built its reputation as community's hub, eventually growing to be one of the rare museums where children drag their parents and grandparents.

National Museum Kikinda was founded in 1946. It is situated in the building of the former Magistrates of the Great Kikinda District ("Kurija"). The museum comprises six departments: archaeological, ethnological, historical, natural history, artistic and pedagogical departments. The Museum has a library with over 6,000 titles of professional literature and a gallery dedicated to thematic exhibitions. National Museum Kikinda covers the territory of the municipalities of Kikinda, Čoka and Ada. According to 2019 statistical data, this Museum treasures 16.791 artifacts classified into the following collections: natural history, historical, archaeological, ethnographical, and other. Besides the complete Kika mammoth skeleton exhibited in a special room, 393 artifacts are shown as a permanent exhibition in rooms according to the type of collection.

Paleontological knowledge and archaeological findings provided materials for a 3D film about the life of Pannonian mammoths that were made. Watching 3D projection of the film marks the beginning of guided tours through the National Museum Kikinda. Guiding then continues in the room where geological findings are exhibited, leading to Kika's room; then continuing to the rooms dedicated to other Museum's collections: archaeological, ethnographic, natural history (flora and fauna from recent past and present) and modern Kikinda.

Recognizing that the educational dimension of the museum is the most important, curators put a lot of effort into creating unique programs for children (kindergarten and elementary school age) and youth in secondary schools and older. These programs relate to curriculums at all levels of education. Each room enables children and youth to learn more about a specific form of cultural expressions and natural environment, including various scientific disciplines. The adults are still mainly the audience of thematic temporary exhibitions and occasionally organized programs such as lectures and presentations. Natural history is the axis of the permanent collection; in conceptualizing temporary exhibitions accent is often placed onto artistic forms of expressions of Kikinda past and present.

Corresponding to the date when the skeleton of the Kika mammoth was excavated, at the beginning of September (i.e. the first weekend of September), the National Museum Kikinda organizes the celebration of the Kika mammoth "birthday" known as *Mammoth Fest* ("Mamutfest"). Targeting the youngest, the celebration includes a variety of games in the Museum's courtyard as well as a variety of workshops aimed to teach not just about geology, paleontology, biology, and natural history, but also archaeology, ethnology and arts.

As Kikinda is a place of micro migration of owls in wintertime from October to March, nesting in the Museum's yard, National Museum Kikinda annually organizes "Sovember" aimed to introduce kindergarten-aged children with the processes of migrations.

National Museum Kikinda in 2019 recorded 27.102 visitors. Among them 16.978 were individual visitors, 8.127 were visitors in groups (predominately school excursions) and 1.997 were other visitors (journalists, colleagues, academics, etc.). In all three categories (individual, group and other visitors) higher is the number of those who entered the museum free of charge than those who paid the ticket, which is important to note because such data manifests deep devotion

to the Museum as an institution which educates visitors of all generations about Kikinda's past and present. In 2019 museum organized four temporary exhibitions from its own collections recording 3.596 visitors who came to the Museum because of these exhibitions. Also, Museum organized seven guesting exhibitions i.e., exhibitions of other Serbian museums and recorded 5.536 visitors to these exhibitions.

Kikinda Municipality, in general, recognized the concept of events/festivals as a viable solution for the tourism development, so besides festivals and events organized by the National Museum Kikinda, Municipality and its tourism organization (re)defined the long-existing festival "Dani ludaje" ("Days of the Ludaja Pumpkin"). The central theme of this manifestation is a pumpkin traditionally grown in the area and called "ludaja" (a word in Serbian that corresponds with English "being mentally insane").⁵

"Dani Ludaje" festival was organized years before the mammoth skeleton was discovered. However, trusting Kika's remains to the National Museum Kikinda and launching "the Kikinda mammoth" project kicked off the interest of the local community to identify what else (other than unique paleontology finding and still-ongoing natural processes such as owls' migrations) makes them proud to be members of Kikinda local community and what they would want to present to all interested in visiting Kikinda as an experience that cannot be made/lived in any other place in the world.

5. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

Since the 1980s cultural tourism grew to become one of the leading branches of the tourism industry. The reason behind this is people's greater interest in spending their leisure time, both on vacation or while traveling for other purposes, to meet different local cultures and heritage of the world.⁶ Various cultural tourism products have contributed to the competitiveness of the tourism market, emphasizing that a destination holds qualities that make the experiences of visiting it unforgettable. Branding a destination emphasizes qualities, creating the cake icing we may call a destination.

Museums are institutions and organizations that research, conserve, and exhibit objects and artifacts representing the local communities and world heritage. The older museology paradigm emphasized research, conservation and exhibiting artifacts. The new museology paradigm that emerged in the late 1970s and early '80s shifted the latter: it keeps the importance of researching and conserving heritage and movable objects. Still, it sees exhibitions as presentational and more important communication tools. Such shift goes hand in hand with the developments in tourism, i.e. the development of cultural tourism emphasizing that communication is the basis of experiences. Hence, museums grew to become leading institutions and organizations in cultural tourism.

Museums in Serbia, sharing the country's bad times during the isolation in the 1990s, entered the 21st century by being labeled as "boring" places of propaganda. However, museum professionals soon started to adopt a new museology paradigm, creating new strategies for communicating their

⁵ There aren't official explanations how the pumpkins relate to being mentally insane but unofficial explanations include descriptions how insanely good is the taste of local pumpkin variety, pies and other gastronomic delights made from it and the blissful feeling after eating them in significant quantity.

⁶ *Cultural heritage tourism*. Partners for Livable Communities. Washington DC, 2014 Available at: <http://www.livable.org/livability-resources/reports-a-publications/770-cultural-heritage-tourism> (Accessed on January 15th 2021)

work on safeguarding heritage and heritage itself. They were becoming hubs of the cultural and socio-economic life of their communities. Two museums in Serbia, the National Museum Valjevo and the National Museum Kikinda are examples that show not just a shift in museology practices but also how the museum may trigger actions in creating brands. From these examples, it is possible to draw some conclusions on destination branding, but these conclusions also call for further research on making a museum a brand and the role of museums in branding places.

Both National Museum Valjevo and National Museum Kikinda represent one category in cultural tourism – museums. Each of these two museums since 2007 redefined its permanent exhibitions so they emphasize specific qualities of the areas in which they are situated. In the case of the National Museum Valjevo, historical events that are important on both local and national scales are identified as landmarks for creating a brand. In the case of the National Museum Kikinda, the branding axis is natural history from the Pleistocene up to the present days (e.g. owls' migrations). In either case, the museums themselves hold a leading role in deciding what would be emphasized as representative of the local community's life. As museums employ experts from various disciplines related to their work, they have a right to estimate possibilities for emphasizing qualities and feeding the branding processes. How experts' knowledge from the museums is implored in branding processes is one of the directions for further research.

In both cases, National Museum Valjevo and National Museum Kikinda strongly suggest the importance of the inclusion of local stakeholders in creating brands. In Kikinda, the local government entitled the Museum to lead the project "Kikinda Mammoth" to develop a brand that attracts domestic and foreign tourists. The Museum included both local stakeholders and experts from various republic institutions in the project. Together they created the Kika brand. Local stakeholders also suggested other content they find important to emphasize as the local specificity. In such a way Kika brand was enriched. In Valjevo, Museum's curators are active members of the community. Indirect contact with local stakeholders identified themes that their fellow citizens find important as representatives of their identity. Also, through constant communication with the local community, National Museum worked with Tourism organization Valjevo in identifying new content that enriches their brand of the city of history and culture (for example near-by Monastery Lelić, a place of pilgrimage for Orthodox Christians).

These notions indicate important issues for further research on destination branding. Firstly, as one of the main questions in contemporary discussions on tourism is how local communities benefit from tourism, the cases of the National Museum Kikinda and National Museum Valjevo show two approaches to including local communities in branding processes. The success of these approaches and other possible approaches in including local communities indicate avenues for further research on branding destinations. Concerning that is the issue of the involvement of the community in expanding brands.

Serbia is a small country. Hence, from a tourism perspective, it is often seen as one destination. However, given the diverse nature (to name just examples of our case Vojvodina plain where Kikinda is situated, hills and mountains in Valjevo region), rich and diverse material culture and different mentalities, there are many places to explore and experience the country and its people. Such diversity enables the variety of brands. As branding is about positioning destinations on the market, it is inevitably connected with public policies (both local and national) in the domains of economy/tourism and culture. How policies in these domains are connected on local and national levels to support branding processes is also a question that requires further research into destination branding.

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REFERENCES

- Anđelković Ž., & Dragin A. (2014). Interpretation of heritage in museums: Museums and Cultural Tourism – connecting differences. In Proceedings of the Regional Conference of the National Committees of ICOM, Zlatibor 8-10th September 2014, Belgrade.
- Capstick, B. (1985). Museums and tourism. *The International Journal of Museum Management and Curatorship*, 4, 365–372.
- Cvetičanin P. (2007) *Kulturne potrebe, navike i ukusi građana Srbije i Makedonije / Cultural needs, habits and tastes of citizens of Serbia and Macedonia*. Niš: Odbor za građanske inicijative
- Cvjetičanin, B. (2008). *Connecting Croatia: Javni, privatni i civilni sektor kulture u virtualnom prostoru*. Zagreb: Institut za međunarodne odnose.
- Digl, K. (1998). *Marketing umetnosti*. Beograd: CLIO.
- Doering, Z. (2004). *Results of the 2004 Smithsonian – wide survey of museums visitors*. Washington DC: Smithsonian Institution, Office for Policy and Analysis.
- Domazet, I. (2016). Improving Competitiveness through National Branding. *Primenjena psihologija*, 62-81.
- Domazet, I., Vukanović, M., Jokić, B. & Todorović, M. (2018) *Muzeji Srbije kao deo kulturno turističke ponude za porodice sa decom*. Institut ekonomskih nauka, Beograd.
- Domazet, I. (2015) *Nacionalni brend Srbije kao faktor unapređenja konkurentnosti zemlje*. In: Strukturne promene u Srbiji - dosadašnji rezultati i perspektive. Institut ekonomskih nauka, Beograd, Beograd, pp. 482-496.
- Domazet, I. (2013). Positioning of Serbian national brand, in I. Stosić (Ed.) *Economic Sciences on the Crossroads*. Belgrade: Institute of Economic Sciences.
- Dragičević-Šešić, M., & Dragojević S. (2005). *Menadžment umetnosti u turbulentnim okolnostima*. Beograd: CLIO.
- Gavrilović, Lj. (2007). *Kultura u izlogu: ka novoj muzeologiji*, Beograd: Posebna izdanja Etnografskog instituta SANU.
- Gob, A., & Druge N. (2009). *Muzeologija – istorija, razvoj i savremeni izazovi*. Beograd: CLIO.
- Herreman, Y. (1998). Museums and tourism: culture and consumption. *Museum International*, 50, 4-12. ICOM Statutes. Retrieved: April 15, 2021, from http://icom.museum/fileadmin/user_upload/pdf/Statuts/statutes_eng.pdf
- <http://www.tramresearch.com/atlas/ATLAS%20Cultural%20Tourism%20Survey%202007.PDF>
- Jelinčić, D. A. (2009). *Abeceda kulturnog turizma*. Zagreb: Meandarmedia.
- Jokić, B. & Žeželj, I. (2013). Why festival museum attendance cannot predict regular museum attendance: examining the attitude-behavior relationship [Zašto posećenost Noći muzeja ne predviđa posećenost muzeja tokom godine: odnos stavova i ponašanja]. *Culture/Kultura*, 140, 445–469. DOI 10.5937/kultura1340445J
- Jokić, B. (2016). Predictors of intentions and behavior: can museums' festivals increase the popularity of museums? [Prediktori namera i ponašanja: mogu li muzejski festivali povećati popularnost muzeja?]. *Culture/Kultura*, 152, 331–349. DOI 10.5937/kultura1652331J
- Jokić, B. & Mrđa, S. (2017). The attitude-behavior relationship in the domain of cultural consumption: A case of museums' festivals [Odnos stavova i ponašanja u domenu kulturne

- potrošnje: slučaj muzejskih festivala]. *Sociological Review/Sociološki pregled*, 51, 255–275. DOI: 10.5937/socpreg1702255J
- Krivošejev, V. (2009). *Muzeji, publika, marketing – stalne muzejske postavke i Njegova Visost Posetilac*. Valjevo: Narodni muzej Valjevo.
- Krivošejev, V., & Bjeljac, Ž. (2016). Stalne muzejske postavke: od alternativne učionice do turističke atrakcije: uporedna analiza posete postavkama Narodnog muzeja Valjevo u periodima 1951–1961. i 2001–2011. *Etnološko-antropološki problemi n.s.* 11(3), 913-933.
- Le Glatin, M. (2007). *Internet: un seisme dans la culture?* Toulouse: Editions de l'attribut.
- Lord, B. (2002). *Cultural tourism and museums*. LORD Cultural Resources Planning & Management Inc.
- Lord, B., & Lord, G.D. (1982). *Planning our national museums of Canada*. Ottawa: National Museums of Canada.
- McKercher, B., & Du Cros, H. (2002). *Cultural tourism: The partnership between tourism and cultural heritage management*. New York: The Haworth Hospitality Press.
- McManus, G. (2006). Community facility or tourism product – Managing the multiple identities of a small museum. In: *New Roles and Missions for Museums*. Taipei: ICOM-INTERCOM, Retrieved April 17, 2021, from www.intercom.museum/documents/2-2McManus.pdf.
- Molar, K. (2000). *Kulturni inženjering*. Beograd: CLIO.
- Mrdja S. & Milankov M. (2020). *Kulturna participacija gradjana Srbije*. Beograd: Zavod za proucavanje kulturnog razvitka.
- Niemczyk, A. (2013). Cultural tourists: 'An attempt to classify them'. *Tourism Management Perspectives*, 5, 26–29.
- Paunović, I. (2014). Branding Serbia as a Tourist Destination on the Global Market. *Turizam*. 18(2), 59-71.
- Shore, S. (2010). Cultural and heritage tourism – international. *Travel & Tourism Analyst*, 8, 20.
- Smith, M. K. (2003). *Issues in cultural tourism studies*. London: Routledge.
- Šola, T. (2011). *Prema totalnom muzeju*. Beograd: Centar za muzeologiju i heritologiju, Filozofski fakultet.
- UNESCO "Museums around the world in the face of Covid-19" <https://unesdoc.unesco.org/ark:/48223/pf0000373530?posInSet=7&queryId=N-b0ed0ac3-17b2-4ff2-8829-40910f877942> accessed in October 2020.
- Vukanović, M. (2009) Muzeji Srbije – aktuelno stanje *Kultura - Časopis za teoriju i sociologiju kulture i kulturnu politiku* 124, 243-257
- Wickens E. (2017). The Consumption of cultural experiences in city tourism. *Tourism and Hospitality Research*, 17, 264–271.
- Woollard, V. (2004). Caring for the Visitor. In P. Boylan (Ed.), In: *Running a Museum: A Practical Handbook*, 105–118. Paris: ICOM.
- Wright, S. (1998). The Politicization of 'Culture'. *Anthropology Today*, 14(1), 7-15.



Film Industry in the Function of Destination Branding

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Abstract: *The subject of this paper is the influence of the film industry on destination branding, where we imply the creation of a positive image and economic aspect. The paper points out the growing influence of the film industry as an attractive marketing tool, which increases the recognizability and image of the destination, which results in a significant increase in the number of tourists. Film tourism offers destinations the opportunity to generate significant incremental revenues, tourist visits and economic development, thriving where traditional marketing efforts cannot or yield poor results.*

1. INTRODUCTION

Despite the growing number of articles on the impact of film on destination branding, especially in recent times, this phenomenon is still in its infancy and each new work makes significant progress in the development of destination branding with the help of the film industry as a scientific discipline and its popularization. Every country in the world, whether big or small, with great or small tourist potential, financially powerful or not, is almost constantly competing for the best place on the world market. Increasing competition and more frequent economic crises and stagnation of the global economy are largely the reason for the increasing “competition” of many destinations, in order to attract as many investors, consumers or tourists (Prnjat, 2019; Dašić et al., 2020). The destination brand is a set of perceptions that a person has about a place, and a strategic approach to destination branding is a necessity with a holistic observation of the impact of the destination brand on various spheres, not only on tourism (Dašić, 2016).

The tourism industry is an extremely complex and competitive market in which many stakeholders face the challenge of developing successful techniques to reach target markets. It is known that conventional tourism marketing media, such as television promotion and brochures, have become inefficient and increasingly financially demanding. Tourists who visit a destination after seeing the location in a movie or television series is an emerging phenomenon, due to the growing marketing potential. (Pennacchia, 2015).

Once a destination becomes recognizable as a tourist destination owing to the film, it is very easy to integrate it into appropriate marketing strategies and destination branding plans, which will help create a sustainable tourism product. Films are often shot at famous historical locations or heritage sites, such as castles, and are gaining more popularity as tourist destinations

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after the films' release. In fact, it is quite certain that some of these locations are becoming popular tourist attractions just because of the film that was made there. It is also important to note that film tourism does not take place exclusively in recognizable film locations; that is, the places where the films were made, but also in purpose-built, commercialized locations (with tickets) such as Hollywood. It is the event that can be the initiator, i.e., the motive for arriving at a certain time in a certain destination. Well-designed events allow the destination global promotion because they attract a lot of media attention. Events can also play a significant role in creating the image of the destination, positively affect the valorization of intangible and tangible heritage, and the development of *hallmark* events affects the creation of the theme of the tourist destination (Vrtiprah & Sentić, 2018). With the development of technology and cinematography, the role of the film industry in tourism is increasing. The impact that the film industry has on the image of the destination and the creation of film-related attractions can increase the number of tourists, and a chance for underdeveloped destinations, even in unpredictable and difficult times, such as the Covid-19 pandemic (Radanov & Lešević, 2020). Further, a destination can profit directly when it becomes a place for shooting a certain film, which develops film business tourism. In order for a place to become a film tourism destination, it must have communicative and receptive factors and its attractiveness must be related to a certain film, i.e., its production, its elements (story, actors, etc.), the final product, its derived attractions (real or fictional) and/or with a movie event. The boundaries of such destinations were determined by the motives of the visit, which were basically initiated by an act of the film industry (Đorđević & Milićević 2018).

Given the global framework characterized by multiple tensions, crises and instability in many countries, tourism is increasingly a means of economic recovery in line with its ability to create employment and wealth (Cardoso et al., 2017). Considering that tourism is a very important factor in the global economy, as well as the growing and significant positive economic results of this branch of industry, it is quite clear that there is a great chance for the economic prosperity of every country on the planet. (Mirović, et al., 2020, 48). In one study (Pjanić & Mitrašević, 2020) the obtained results confirmed that tourism has a positive impact on the growth of gross domestic product (GDP) in EU countries. Of course, the tourism industry is not one or the only industry, and its progress or stagnation affects others because it is directly or indirectly largely related to many other industries. So, as an example, we can mention the connection of the transport system with accommodation capacities or the construction of accommodation capacities with the construction industry, entertainment industry, etc. (Deb & Nafi, 2020).

2. LITERATURE REVIEW

Although this scientific field is still full of unknowns, studying the connection between film and tourism, points us to some new potentials in understanding the modern tourist and its impact on the economy of destinations that are shown in the film. Of course, the film is not the first art that shows us destinations, but the film is a particularly suitable form for media storytelling because film narration can be presented dynamically and interestingly, so the story told in the film can be more easily adopted. (Puleo, 2015). Bolan (2009) highlights many key points that the film industry contributes to tourist destination branding, which are reflected in greater recognition and acceptance of film tourism, closer cooperation between tourism and film organizations, greater efforts to develop and promote film location as a story to mark the destination, keeping the destination authentic in promotional activities and as similar as possible to the one shown in the film, and thus greater use of qualitative research. Macionis (2004) categorizes film tourists - tourists who visit film destinations - into three groups: random film tourists who happen

to be in locations shown in films, general film tourists who are not attracted to a film destination but have participated in various film tourist destinations activities and specific film tourists who regularly search for destinations they have seen in a film.

The phenomena of the relationship between tourism and motion movies have been referred to by a variety of terms. Different authors give different definitions and terms, each starting from his own premise, so in the literature, we have the following terms: film-induced tourism, media-induced tourism, movie-induced tourism, cinematographic tourism, screen tourism, and even “media pilgrimage”, media pilgrim (Beeton, 2005; Hudson & Brent, 2006; Horrigan, 2009, Beric et al., 2013; Nizol, 2015). The growing popularity of television and film has also influenced the great potential of film tourism. It often happens that the film creates an artificial reality, far from the real authenticity of the destination. However, as we mentioned, the great popularity of film and television can greatly affect the attendance and image of a particular destination. „People participate in film tourism because they want to visit a certain location because they saw that place in a movie and they find it so interesting that they want to see this place with their own eyes or want to see the location in reality and compare and find differences between reality and the way it is shown in the film“ (Jusufovic-Karisik, 2014).

An earlier study in 1999 (Riley, et al., 1998), which included twelve films, found that the increase in visits to certain destinations shown in films became teachable only five years after the distribution of these films and by 54%. Further empirical evidence on how films can change a destination can be found in Kim and Richardson’s (2003) study, which looked at how watching a particular film affected the cognitive and emotive impressions of the place it portrayed in experimental subjects. They discovered that the 1995 film *Before Sunrise* had a considerable impact on some of the image component’s locations and desire in visiting Vienna, Austria.

In the paper “*Branding and opportunities provided by films: Australia*”, by Bill Baker (2015), it is stated that a visit to certain destinations is more certain if that destination is shown in films. He cites the movie “*Crocodile Dundee*” or the movie “*Australia*” as an example, which has been seen by over 23 million people around the world. It is believed that a holistic approach to branding with the distribution of films will increase visits to Australia. The film can be used for other purposes, such as “*Top Gun*”, which, in SFRY, became a role model among pilots in terms of the protagonist style, and was launched at a time of declining popularity of the White House and interest in the US military. The film was a real hit, and the main role was played by the then idol of teenagers in the USA and around the world - Tom Cruise. Interest in the US military has jumped, especially in aviation. (Dašić, 2014).

In any case, the promotional power of the film has been the subject of scientific interest for decades, and in recent decades most papers have been published on the role of film in tourism promotion of individual countries, given the proven causal link between the success of a film and destination popularity, i.e., an increase in the number of visitors to the destination seen in the film (Skoko, et al., 2012). Turkish film serials as a “soft power element,” and stated that those serials effectively create a feeling of identification among viewers who see the modern life traditions in which they want to live and, furthermore, identify similar characters with themselves. It is widely recognized that tourism is an essential factor in the economic development of the regions (Rosário, et al., 2020). In previous years, Russia was the primary supplier of tourists visiting Turkey. However, due to political tensions with Russia, Turkey experienced a tourism crisis in 2016, with dramatic drops in the number of Russian tourists arriving. Since then, Turkish

tourism operators have recognized that they must enlarge their tourism market to other countries. They believe that there is a great potential for attracting Arabian tourists, especially since the transfer of Turkish film serials depicting a country and culture similar to their own (Güzel & Güzel, 2017).

3. METHODOLOGY

Tourism and film are without a doubt, two industries in constant growth, and therefore have a greater and greater impact on the consumer, on a daily basis. In the imaginary middle of these industries is film tourism. Despite the fact that the vast majority of films are not made for the purpose of promoting a destination (to be visited), the participants in the film, and the impressions it leaves on the viewers, are indisputable. Showing a destination in a film serves as a unique form of product placement on the market to segmented customers, who are willing to spend their money to see and experience the destination shown in the film. The possibility of presenting destinations around the world to a large number of people in the same way has been recognized in films and television series. In preparing this paper, the authors used secondary data sources, relevant and contemporary literature on destination branding, data on the Internet, as well as analysis and synthesis in correlation with descriptive statistics.

Film-induced tourism as a process consists of several key subjects of consideration that we can present in relation: *Movie – Marketing instruments – Image – Commercial effects*. From the presented relations arises the basic hypotheses:

HO: *The film and film industry can significantly contribute to a positive destination image;*

H1: *The film and film industry are influencing the increase in the number of visitors (tourists) to the destination;*

H2: *Film and the film industry directly affect the increase in the gross domestic product of a certain destination.*

4. RESULTS

Films are autonomous sources of information, which in theory are not related to the interests of the tourism market, but the information they convey is considered more reliable than conventional advertising. As a result, film works directly on the organic image, which is unaffected by advertising, forming and maintaining associations with the places depicted in communal images. (Araujo, 2012).

Based on the foregoing, it can be stated that film-induced tourism is becoming a global phenomenon, with people visiting sites or attractions as a result of the film fact that the destinations are shown on television, video or cinema screen. Considering the above, it is quite understandable why most destination marketing organizations are increasingly promoting vacations at movie locations, vacations at movie destinations, movie walks, and movie tours. This is confirmed by the results obtained in one study (Bagarić, et al. 2018), where it is claimed that watching movies is connected with the decision to choose a tourist destination. The results of the study show that the beauty of the landscape depicted in the film, as well as natural beauty in general, are the most important factors in deciding on a tourist destination, with regional uniqueness and diversity of cultural and historical landmarks also being important factors. The film's scenography and lifestyle are slightly weaker incentives, while the film's story, marketing campaign, and cast are among the factors that have a smaller impact on the decision to visit a tourist site. The

frequency with which people watch movies is linked to their decision to visit a tourist location, therefore those who watch movies more frequently have a stronger desire and intention to visit the places depicted in the movies. Incentives for film and television productions have exploded in recent years, resulting in a boom in film tourism in Croatia, which is critical for the country's future tourism development and promotion as a film tourist destination.

In terms of film tourism and the image of a destination: Film tourism is a postmodern tourism marketing practice that influences a tourist's perception of a site as well as his behavior when visiting it. (Dašić & Dašić, 2021; Dašić, 2013). Because the use of traditional elements and aspects in destination image development is no longer sufficient, marketers are turning to new tactics and expanding their strategies to include elements from the film industry. Basic definitions of film tourism indicate that it is a niche and alternative kind of tourism, but it has the potential to grow and attract a large audience, ranging from fans to professional filmmakers. The differences in film tourism include not only distinct forms and characteristics of the phenomenon but also different sorts of tourists (Juškelytė, 2016).

The film has the ability to have a profound impact on its viewers. According to a growing amount of data, cinematic film and television drama productions may affect people's travel decisions and drive them to visit areas they've seen on a screen. An investigation of social media information linked to the 2015 Star Wars film and the Irish island setting of Skellig Michael was augmented with global internet research (netnography) with the Game of Thrones fan base. The findings reveal large fan communities in each case, as well as a significant desire to visit Ireland. (Bolan & Kearney, 2017).

Pavković and a group of authors (2015), thought that the film is one of the most important instruments of media communications that aim to create a positive perception of a particular tourist destination. The film is a globally popular medium, and taking advantage of its promotional prospects necessitates a proactive mindset and continual work on the part of media specialists. Different film genres can influence the advertising of a destination in a variety of ways. A feature film shot in a specific location can help it gain worldwide recognition and success.

After the shooting of the film, numerous attractions are created that aimed to increase the interest of tourists in a certain destination. This is, above all, about the locations where the scenes from the film were made. In order to valorize them for tourism, numerous agencies and tour operators organize and realize tourist tours that include visits to these attractions. Because it is often understood as the medium that is closest to a true portrayal of reality, as well as because of its accessibility to a wider audience, film can have a significant impact on shaping public opinion on a particular topic. In addition to feature films, documentaries and tourist reports also play a significant role in the promotion of a tourist destination. Documentaries have an even greater impact because they are considered a cultural and historical value, which claims to veracity. Interesting stories about the destination, its natural and cultural features, culture and customs, but also the gastronomic offer have significant potential to make tourist interested in visiting it. Here, too, the importance of the role of public relations and marketing experts can be noticed. The proactive approach of these professionals entails ongoing engagement, such as the establishment of special events or study tours for media representatives, places, or a story about it, which is then published in the media and therefore reaches the intended audience. Tourist films that promote a destination play an important part in promoting a favorable public perception of that destination. These films come in a variety of styles,

from traditional to contemporary. The classic form of promotional tourism film entails an audio-visual depiction of a destination’s natural and cultural wonders. Modern promotional tourist films radically alter the way communications are delivered to the intended audience. Instead of showing tourist attractions, this film strives to strengthen the memory of the message and enhance its effect by using, above all, humor, but also other elements such as art and animation (Pavković, et al., 2015).

For example, at the beginning of the distribution of “The Lord of the Rings” trilogy, the public was unaware that it was filmed in New Zealand, in part because the government and the tourism sector were unaware of the marketing potential of film tourism (Table 1). The Australian government has encouraged stars and film directors to tell their stories from filming, in order to encourage tourists to visit Australia. Messages from the films were placed in various media contents, which resulted in a large representation in the print and broadcast media and on the Internet. Well-known journalists were allowed to visit the filming locations and report on sites relevant to the film and understand its theme. The film Australia, which has been seen by more than 23 million people worldwide since April 2009, earned more than 211 million US dollars by the end of next year, making it the most profitable film in Australia of all time ... (Baker, 2015). Leading film destinations such as the United Kingdom, the United States, New Zealand, and Australia have effectively implemented film tourism marketing tactics. Many places that plan to employ films to advertise existing or new attractions can profit from the lessons acquired in these countries. The success of films is dependent on the success of film locations. Some filming sites are far more interesting than others (Tuclea & Nistoreanu, 2011).

Table 1. Film tourism impacts

Film or TV Series	Location	Impact on Visitor Numbers or Tourist Revenue
Braveheart	Scotland	300% increase in visitors year after release
Deliverance Rayburn County	Georgia	20,000 film tourists a year Gross revenues \$2 to 3 m.
The Lord of the Rings	New Zealand	10% increase every year 1998 to 2003 from UK
Last of the Mohicans	North Carolina	25% increase year after release
Harry Potter	Various locations in U.K.	All locations saw an increase of 50% or more
Mission: Impossible 2	National parks in Sydney	200% increase in 2000
Crocodile Dundee	Australia	20.5% increase in U.S. visitors 1981 to 1988
Saving Private Ryan	Normandy, France	40% increase in American tourists
Miami Vice	Miami	150% increase in German visitors 1985 to 1988
Troy	Canakkale, Turkey	73% increase in tourism

Source: Own compilations and calculations based on Hudson, Brent, 2006 and Di Cesare, et al. 2009.

More significant considerations include how a film will change the image (positively or adversely), how much it will affect the image (a little or a lot), and whether the effect will drive tourism. Because there is so much reliance on the film and the audience’s interpretation, the usage of film for marketing must be carefully regulated. Because of this, some authors (Croy, 2010) caution that film tourism, like all types of tourism, must be controlled to ensure the most effective and long-term utilization of the location and its communities. The implication is that, if properly controlled, all films and other types of fictional media can have good effects on the destination and community. What do location managers need to focus on specifically in the context of film-induced tourism and past studies? What are the critical roles that cinema plays in attracting tourists to a location, and how can this knowledge be leveraged to ensure the destination’s long-term viability? The film plays a critical part in the creation of images of locations, including knowledge, motivations, expectations, familiarity, and complex imagery, in the overall visitor experience.

Although films have numerous good effects on a destination's economy, cultural values, destination awareness, and image, the film's negatives should be carefully examined. This could have unfavorable repercussions such as a loss of privacy and trouble accessing local facilities for local residents, as well as traffic congestion and environmental degradation (Hudson & Brent, 2006). Another key issue is how locals feel about the inflow of film crews and the enormous number of visitors who visit the shooting locations. (Tucea & Nistoreanu, 2011; Cardoso et al., 2017).

Hollywood films and television are two of the most important sources of information for today's customers. Viewers may be more motivated to visit the destination if the story of the Hollywood film/TV show totally embraces the destination. In 1995, Hollywood films accounted for 75% of all movie tickets sold in Europe. Because of the expansion of satellite and cable television, this percentage has risen in recent years. Today, Hollywood films account for over 70% of all films broadcast on European television. It's worth noting that the distribution of Hollywood films and television shows is pretty comparable in other regions of the world, even in culturally diverse countries. The explanation for this could be that Hollywood is better able to invest in elaborate sets, greater production values, well-known performers, and cutting-edge technology because of its vast and rich consumer base in the United States. As a result, as compared to films made in other nations, Hollywood films are immensely popular globally. (Spears et al., 2013). In modern conditions, the film industry is one of the very important types of branding of nations and states. With the help of "Hollywood" productions, it is possible to present one nation positively or negatively to the rest of the world, but also to increase the interest of tourists in certain destinations that are shown in commercial films (Dašić, 2015). In one study (Justus et al., 2018), the impact of stereotypes formed by Movie Induced Tourism (MIT) on the satisfaction of tourists who visited Kenya after seeing two films, *Out of Africa* and *The White Maasai*, was studied; a conclusion was reached, that stereotypes contributed negatively to tourist satisfaction. This is due to the fact that most of the expectations the tourists had were not met. For instance, most information about the Maasai was not true as depicted in the movie *Out of Africa* and *The White Maasai*. The Maasai community is depicted in the film as a medieval society that has yet to be Westernized. This is not the case, as a number of community members are up to date on current events. In this regard, a paradigm shift in thinking about the Maasai is required in order to accurately portray them when marketing tourism sites.

Each original film or television series has an impact on the allure of a location. Cinema has a direct influence on how tourists see destinations and suggests a genuine willingness to learn about future trends. The need for novelty among visitors and destinations for innovation has resulted in a shift in how travel is portrayed. It is the next stage of the tourism experience, as it becomes a source of spiritual and physical change. It is no longer enough for a tourist to simply view a destination; he must take hold of it, drawing inspiration from it to create a new vision of his daily life. The characteristics of a destination depicted in a film will influence travel decisions and the territory's overall desirability. (Gupta et al., 2018; Blanchet & Fabry, 2020).

As we mentioned, film festivals are also an exceptional form of destination branding. One of the most famous such festivals is the Cannes Film Festival in France, which attracts more than thirty thousand visitors each year. It is the most prestigious European and world film festival, which gathers the film elite from all over the world in one place and is therefore inaccessible to the general public. Nevertheless, extra-festival programs are available for film lovers and visitors who have the opportunity to watch films outside the official selection, as well as the best films of previous years. The Edinburgh International Film Festival hosts a large number of visitors every year.

International Film and Music Festival Küstendorf, founded in 2008, is a film and music festival that is organized every year in the ethno-village Drvengrad on the hill Mećavnik near Mokra Gora in Serbia. The founder and director of the festival is film director Emir Kusturica.

5. ECONOMIC ASPECTS OF FILM-INDUCED TOURISM

The beneficial economic impact of movie-induced tourism can be evident in the purchases and expenditures of visitors, or film tourists, who may create direct revenue for the settlement's residents. Central and municipal governments gain from these earnings as well, thanks to various levies. Products found in tourism-related commerce can frequently be sold for more than the export price, resulting in a higher overall profit. This is especially true of souvenirs, as their nature adds an emotional component to the product's value, which will be appreciated in the tourist's home nation as well (while it could be a less attractive purchase as an imported product on its own). Furthermore, the requirement to accommodate movie-induced tourists leads to an increase in job creation, lowering local unemployment. Film tourism's catalytic effect can have a significant beneficial economic impact, potentially leading to an improvement in quality of life through economic growth. (Urbánné, et al., 2018).

Film tourism is becoming more popular around the world, thanks to the expansion of the entertainment sector and the increase in international travel. The earnings of some countries largely depend on tourism, so they have developed a sophisticated tourist infrastructure. Many countries for which the least could be said rely heavily on tourism. For example, New Zealand is realizing its largest foreign exchange inflow from tourism. The modern tourist market is characterized by fierce competition among countries, particularly those whose economies are bolstered to a significant degree by tourism. All countries use a variety of marketing tactics to promote their tourism offerings. International experience has shown that movies are a significant marketing tool that may effectively support a tourism promotion strategy. Landscapes, significant heritage sites, festivals, attractions and historical monuments have quite often been selected as film shooting locations. Evidence shows that such films may, under certain circumstances, induce "film tourism", a phenomenon where local economies eventually enjoy an increase in visitor numbers and related benefits after the circulation of the relevant movie (Vagionis & Loumioti, 2011).

The great majority of today's films were not developed to lure viewers to certain locations. It can, however, portray a specific location as a type of commercial placement in which viewers are prepared to pay money to see and experience it. The possibility of presenting destinations around the world has been recognized in films and television series. The audience can enjoy the view of places, people, stories and other attributes of the film from the comfort of their own home or cinema. Emphasizing the attribute can be a strong enough stimulus to create an attractive force in the viewer that will motivate him to travel to the place of filming in order to see or experience the attribute in reality (Sellgren, 2011, 2).

The film business is a global phenomenon that is credited with spurring tourism growth in numerous areas. This is the case, for example, with Iceland, which has become a famous film setting in recent years, resulting in an increase in the number of visitors to the nation. Iceland is a film site, according to both primary and secondary research, and local companies have a favorable attitude toward filming in the country. Tourism undoubtedly affects a state's economy. As Iceland is becoming an increasingly popular tourist destination, the economic impacts of tourism on the Icelandic economy are becoming more noticeable from year to year. Almost 2.2 million tourists

visited Iceland in 2017, which meant an increase of 24% compared to the previous year. Interestingly, more than 42% of the total increase was in the winter season (Červová & Pavlů, 2018).

For decades, countries, regions, cities, and their tourist communities have offered numerous incentives to the world's top film production companies to make their films in their locales or to choose topics that promote their people, lifestyles, great individuals, events, and so on. Since the founding of the Serbian Film Association (independent, non-profit, professional association), it has been working to ensure that foreign film projects use Serbian locations, services, equipment and teams, thus attracting foreign direct investment and contributing to job creation in Serbia. The goal of this association is for Serbia to be internationally recognized as a dynamic, creative and cost-effective destination for the production of all types of entertainment media products; the film industry contributes significantly to the Serbian economy through job creation, economic growth, professional skills development and tourism promotion (Simić, 2015). Before the Covid-19 pandemic, Serbia generated significant financial resources from making films on its territory. The World Association of Managers based in Los Angeles has nominated Belgrade as one of the best locations for shooting commercials. Footage of the beautiful Gruža and the village of Borač can be seen on small screens throughout Serbia every day, because it was here, in the center of Šumadija, that the TV series "My cousin from the village", one of the most popular domestic series, was filmed. A large number of tourists came to see the house of the main actor, Colonel Vranić. In addition to domestic guests, there is a large number of visitors from the surrounding countries. Those visitors are interested in everything, they want to see the interior of the house, as well as the whole yard, everyone must have a little possession at that famous table under the walnut tree, where most of the scenes of the TV series were filmed. Giving incentives to productions in a format, such as commercials and post-production, enabled Serbia not to have to compete in the film market, because in this segment the competitive set exceeds the capacities of Serbia ... Direct return on investment that the state directly realizes through subsidies is almost 50% of the invested funds. For every 1 unit of paid incentives for the production of commercials, films and series, on average 50% of the units are returned directly to the budget by the fact that the project is being implemented. Further, for every 1 unit of paid incentives for the production of commercials, films and series, an average of 5.38 units are directly included in the Serbian economy (Kovačević, et al. 2020). While various studies have suggested that a large proportion of potential visitors will seek out areas they have seen in movie theatres or on television, it has also become clear that film tourism success is dependent on a number of factors. In one study of the impact of a television drama on tourist motivation and behavior at a heritage attraction, 92.4 percent of visitors said that watching *Downton Abbey* was the main reason for visiting the heritage attraction, which is located at Highclere Castle in the United Kingdom, which is the setting of the television series *Downton Abbey*. These visitors could be categorized as "TV drama-induced tourists." Special screenings of the film or television drama series could be held in the grounds of heritage attractions and other tourist attractions that are used as film locations, or on a special event, such as an anniversary. This would increase tourism demand and give audiences another method to enhance their tourism/viewing experience. Given the lengthier and repeated exposure, as well as the viewing experience of television dramas, the influence of television drama on audiences may differ from that of a film. In comparison to films, television dramas have a larger influence in inducing audiences' travel behavior. (Liu & Prat, 2019).

It is believed that countries that want to increase their image through film, should strategically invest in the film sector, both through the financing of domestic content and through economic incentives for foreign projects because it is considered that more than half of its film money goes to other industries that the film employs. This is merely the first step in using cinema to promote

their nations because achieving these aims is largely dependent on the quality and commercial success of the film itself, as well as the state's attempts to exploit the film's presence in tourism, culture, and other areas. The Lord of the Rings trilogy (2001-2003) and New Zealand, the television series "Sex and the City" (1998) and New York, or a series of James Bond films (from 1962 to the present) and the marketing of Great Britain and numerous exotic destinations are all good instances of such promotion. A survey conducted in the UK found that eight out of ten respondents opt for film-based travel. At the same time, every fifth respondent chooses a trip to the location where their favorite film was shot (Skoko, 2014).

Film tourism is a growing phenomenon in the world, driven by the growth of the entertainment industry as well as the increase in international travel. Film as the seventh art and as one of the most popular forms of entertainment in the 21st century has also influenced the development of tourism and some of its special or specific forms. Tourist demand in today's conditions has taken on global characteristics, and as such is recording a steady increase, with competitive relations between individual destinations becoming more intense. Therefore, promoting a tourist destination and creating a favorable image that will be actively transmitted to potential tourists whose desires, preferences, needs and motives are extremely heterogeneous in the market of tourist demand is crucial and role in developing and creating a competitive advantage for a tourist destination (Hudson & Brent, 2006).

Transylvania (commonly written Transylvania in English literature) is well-known and branded in both modern literary/film studies and tourist studies, thanks to its genuine link with Dracula - a fictional character who has been ingrained in Western popular culture for over a century. Transylvania has tremendous tourism potential, bringing more than a third of all visitors to Romania. In the previous ten years, Transylvania has seen an increase in tourist arrivals (Table 2). Dracula was mentioned in both the cultural section and the marketing and promotion section of the Romanian Master Plan for the Development of National Tourism 2007–2026 as one of the country's strengths as a tourist destination, alongside Transylvania, in both the cultural and marketing and promotion sections of the document as a Romanian tourism brand (Liu, et al. 2020).

Table 2. Tourist arrivals in Transylvania 2010–2019.

Year	Total	Share of total tourist arrivals in Romania	Year	Total	Share of total tourist arrivals in Romania
2010	1,494,191	25.00%	2015	2,992,527	30.00%
2011	1,862,651	27.00%	2016	3,322,548	31.00%
2012	2,106,814	28.00%	2017	3,771,851	31.00%
2013	2,359,123	30.00%	2018	4,017,596	31.00%
2014	2,489,308	30.00%	2019	4,156,067	31.00%

Source: Customized according to: Romanian National Institute of Statistics, www.insse.ro

Between 2010 and 2015, the number of Western visitors visiting Japan increased by 50%. Many of these visitors are drawn to Japan by films that are associated with the country in some way. We believe that, despite the fact that the bulk of incoming tourists in Japan are Chinese and Koreans, the marketing potential of film-induced tourism in Japan is unexplored. Shopping visits to Japan may give way to cultural trips inspired by contemporary films and popular culture as China's GDP per capita soars and the country's quality of life and well-being improves. A number of recent Western films can be blamed for the rise in popularity of Japan as a tourist destination. (Strielkowski, 2007, 202).

However, according to certain scholars (Mandi, et al., 2017), the film business contributes not just to the economy of the domicile, but also to the economies of the town and state where the film is produced. The creation of films has a “cascading” influence on the host economy. It all starts with the filmmakers, who have a direct (mainly financial) and indirect (primarily promotional) impact on society. Direct financial impacts refer to a variety of (business and non-business) expenditures made by filmmakers in the host community, such as payments of service concessions and permissions to public sector institutions (primarily local ones), payments for equipment rental, spending on food and lodging, souvenirs, and so on, all of which are primarily made to local business subjects. All of these expenditures generate direct revenues for the host community. Additionally, the filmmakers’ temporary employment and payments to production firms, local actors and performers, and craftsmen engaged in film production are viewed as a direct financial gift to the host community, resulting in many multiplicative effects at the local level.

There are opinions that in addition to the positive effects, there are also negative effects of film tourism on a particular destination (table 3).

Table 3. Positive and Negative Impacts of Film Tourism

Positive Impacts of Film Tourism	Negative Impacts of Film Tourism
Virtual Promotion of Destination	The primary motivation for seeing a film is never to see the scenes; nevertheless, this could be a secondary one. The tale, the performers, and their roles/acting are the primary motivations.
Creates Distinct Image of Destination	The success of film tourism is determined by the star cast and whether the film is a hit or a flop. No one wants to watch a flop film, regardless of where it was shot.
Facilitates Occupation and employment opportunities (while shooting)	Although not a long-term source of revenue, the administration needed to take precautions to ensure the safety and security of the entire film crew. Expenditures must be made for a variety of additional reasons both before and during the shoot, as well as after the shoot is completed at a certain location.
Enhance number of tourists	Repeating the location of the shot will not appeal to viewers, particularly visitors.
Encourage youngsters to be a part of tourism and films	Young people become enthralled and begin to fantasize about becoming actors.
Open up opportunities to start courses in Tourism and Acting	Because the film and tourism industries are so competitive, it’s not easy to develop and manage new courses successfully.
The community as a whole is part of film tourism	Locals open shops in the hopes of attracting tourists, but it’s all for naught if the film fails.

Source: Sharma, A., 2017.

There are also examples when a positive image was achieved due to the screening of a film, which attracted a lot of tourist visitors, but at the same time had a negative impact on the economy. One study (Pratt, 2015), analyzed the economic impact of increasing tourism in Kazakhstan as a result of the film *Borat: Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan*, released in 2006. The film was controversial because it depicted Kazakhstan in a poor light, but it did enhance awareness of Kazakhstan as a tourist destination. Despite Kazakhstan’s poor image, worldwide tourist spending climbed by 6.4 percent. However, the increase in tourism is expected to have a negative impact on the economy as a whole. The negative impact on the rest of the economy eclipsed tourism’s favorable aspects.

The ultimate purpose of film tourism is to create a destination’s identity in order to attract tourists. This benefits the visited destination financially. However, this is solely dependent on the celebrity cast and the film’s success or failure. Film tourism cannot guarantee how many people will view the film and how many of them will travel to the location where the filming took place as

tourists. Rather than diving right into film tourism at the destination, it is critical to concentrate on the resources, infrastructure, and cost calculation (what are we spending and what will the returns be?). It's a significant deal to invite and maintain all of the film crew's requirements. A good location is defined by a number of factors, including solid infrastructure, high-quality food, adequate lodging, a sanitary atmosphere, and cleanliness, among others. (Sharma, 2017, 124).

In addition to events, destinations can have attractions created based on the film. A large amusement park based on Harry Potter movies has been built in London. This amusement park covers almost 50.000 m² and during one day this park is visited by up to 6.000 visitors. That the film's tourist attractions contribute to the increase in economic profit is also shown by the fact that in 2016, this amusement park generated revenue of 126.6 million British pounds (Sylt, 2017).

6. CONCLUSION

The paper presents data that confirm that films and film series have a positive impact on branding, tourism and destination marketing. In an era of growing consumer indifference, increasing competition, and increasing financial outlay for traditional promotional marketing tools, the film industry is becoming crucial to fostering the emotional need for tourists to visit destinations featured in movies or movie series. In addition to the initial lack of interest, film tourism is becoming an increasingly international subject of academic research. The benefits of tourism caused by the film are becoming more and more noticeable. The film industry realizes various positive influences on the development of tourism in the destination. First of all, this industry can affect the image of the destination, contribute to the creation of additional attractions in the destination and the development of film business tourism, which all together affect the greater competitiveness of the destination in the tourism market. This phenomenon has seen significant growth and represents a significant opportunity for many destinations to use filming locations, as seen in popular movies and/or TV series, to attract additional visitors and potential new tourists. In recent times, film tourism has become one of the fastest growing tourist niches in the world.

Film tourism is becoming increasingly popular in the global tourism market, competition among host destinations is increasing, so great efforts are being made to attract film sets, and film localities play a significant role in planning the marketing activities of tourist destinations. More importantly, a whole range of industries can benefit from the connection between tourism and film. Numerous analyses at the global level concluded that the production of audio-visual content (a sector often referred to as the film industry) is a significant driver of economic growth, with the impact on the economy much greater in countries where the state stands behind this industry through the implementation of fiscal incentives. Destinations that manage to "sell" their comparative advantages to foreign productions can be considered successful and we can say that they are attractive. The cost aspect is dominant today because productions are forced to record quality content with continuous cost reduction. And, finally, destinations that enable foreign productions to increase the efficiency of content production will be positively perceived. In relation to the above three aspects, every destination in the world strives to position itself on the global market (Kovačević, 2019).

7. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The study has some limitations. A limitation of this study is the lack of primary data sources. Further research should compare data from multiple sources and try to find the links between cause and effect.

REFERENCES

- Araujo, A. F. (2012). The role of cinema on the tourist destination image formation process: opportunities and challenges for the tourism stakeholders. <https://www.researchgate.net/publication/265208118>.
- Bagarić, L., Jelić, A. & Meštrović D. (2018). Filmska industrija kao promotor turističke destinacije za mlađu populaciju. *Zbornik Veleučilišta u Rijeci*, Vol. 6, No.1, pp. 113-126
- Beeton, S. (2005). *Film --Induced Tourism*. Clavedon, Channel View Publications.
- Berić, D., Kovacevic, M. Simat, K., & Božić, S. (2013). Film tourism: A contemporary resource for promoting Serbia, *Turizam*, 17(1), 18-28. DOI: 10.5937/Turizam1301018B
- Bejker, B. (2015). Brendiranje i mogućnosti koje pružaju filmovi: Australija. U: Morgan N., Pritchard A., Prajd R., (ed.), *Destinacija kao brend: upravljanje reputacijom mesta*, Clivo, Beograd, 171-185.
- Blanchet, C., & Fabry, N. (2020). Influence of new cinematographic and television operators on the attractiveness of tourist destinations. *Journal of Tourism Futures*, Vol. 6 No. 3, pp. 219-222. <https://doi.org/10.1108/JTF-11-2019-0127>
- Bolan, P. (2009) „Displacement Theory – Probing New Ground in Film-Induced Tourism“, available at: <http://www.shannoncollege.com/wp-content/uploads/2009/12/THRIC-2010-Full-Paper-P.-Bolan.pdf> (22. 10. 2021.)
- Bolan P. & Kearney, M. (2017). Exploring film tourism potential in Ireland: from Game of Thrones to Star Wars. *Revista Turismo e Desenvolvimento*, Vol 27/28, 2149-2156.
- Červová, L. & Pavlu K., (2018). Film tourism as a destination promotion instrument: a case study of Iceland. In: Vuk Bevanda, Snežana Štetić (ed), *Modern Management Tools and Economy of Tourism Sector in Present Era*, Beograd. Association of Economists and Managers of the Balkans in cooperation with the Faculty of Tourism and Hospitality, Ohrid, Macedonia, 179-192. DOI: <https://doi.org/10.31410/tmt.2018.179>
- Cardoso, L., Estevão, C., Fernandes, F., & Alves, H., (2017). Film-induced Tourism: A Systematic Literature Review. *Tourism & Management Studies*, 13(3) 23-30. DOI: 10.18089/tms.2017.13303
- Croy W. G. (2010). Planning for Film Tourism: Active Destination Image Management. *Tourism and Hospitality Planning & Development*, 7:1, 21-30, DOI:10.1080/14790530903522598
- Dašić, D. (2013). Brendiranje država i nacija. *Kultura*, (139), 396-415. doi: 10.5937/kultural339396D
- Dašić, D. (2015). Kinematografija kao sredstvo kreiranja negativnih stereotipima o Srbima. *Sociološki pregled*, 49(1), 25-46. doi: 10.5937/socpreg1501025D
- Dašić, D. (2016). Brendiranje mesta i/ili destinacija. *Kultura*, (152), 377-393. doi: 10.5937/kultural652377D
- Dašić, D., Živković, D. & Vujić, T. (2020). Rural tourism in development function of rural areas in Serbia. *Ekonomika poljoprivrede*, 67(3), 719-733. doi: 10.5937/ekoPolj2003719D
- Dašić, D. & Dašić, B. (2021). Branding of states and nations in (post) Covid 19 era. in: D. Cvijanović. et al. (eds), *Tourism challenges amid Covid-19*, 161-179. Vrnjačka Banja: Faculty of hotel management and tourism. doi:10.52370/TSC21162DD
- Di Cesare, F., D'Angelo, L., & Rech, G. (2009). Films and tourism: understanding the nature and intensity of their cause-effect relationship. *Tourism Review International*, 13(2), 103-111. DOI : 10.3727/154427209789604606
- Deb, S.K., & Nafi, S.M. (2020). Impact of Covid-19 pandemic on tourism: recovery proposal for future tourism. *GeoJournal of Tourism and Geosites*, 33(4spl), 1486–1492. <https://doi.org/10.30892/gtg.334spl06-597>

- Dorđević, N. & Milićević S. (2018). Uticaj filmske industrije na turističke destinacije, *SITCON 2018, Kultura, nasleđe i razvoj turizma*, 180-185.
- Güzel Ö. & Güzel, B. (2017). The Influence of Films on Destination Attributes (DAs)for Arabian Tourists in Turkey. *International Journal of Business and Information*, Volume 12, Number 3,209-242; DOI: 10.6702/ijbi.2017.12.3.1
- Horrigan, D. (2009). Branded content: A new model for driving tourism via film and branding strategies. *Tourismos: An International Multidisciplinary Journal of Tourism* 4(3), 51-65. https://mpr.aub.uni-muenchen.de/25419/1/MPRA_paper_25419.pdf
- Hudson, S. & Brent, J. R., (2006) Promoting Destinations via Film Tourism: An Empirical Identification of Supporting Marketing Initiatives. *Journal of Travel Research*, Vol. 44., No. 4.,387-396. <https://journals.sagepub.com/doi/10.1177/0047287506286720>
- Justus M M, Kieti M. D, Nthiga W. R (2018). Effect of Stereotypes Created by Movies on the Satisfaction of Tourists with Movie Induced Tourism (MIT). *African Journal of Hospitality, Tourism and Leisure*, Volume 7 (4) <http://www.ajhtl.com/>
- Juškelytė, D., (2016). Film induced tourism: destination image formation and development. *Regional Formation and Development Studies*, No. 2 (19), 54-67. <http://journals.ku.lt/index.php/RFDS/article/view/1283/pdf>.
- Jusufovic-Karisik, V. (2014). 20 Years of Research on Product Placement in Movie, Television and Video Game Media. *Journal of Economic and Social Studies*, 4(2), pp. 98-108. <https://core.ac.uk/download/pdf/153449005.pdf>
- Kim, H., & Richardson, S. L. (2003). Motion Picture Impacts on Destination Images. *Annals of Tourism Research*, 30 (1): 216-37. doi:10.1016/S0160-7383(02)00062-2
- Kovačević, I. (rukovodilac projekta) (2019). *Analiza ekonomskih efekata sektora audiovizuelne produkcije i efikasnosti podsticaja - finalni izveštaj*. Ekonomski fakultet Beograd.<https://www.filminserbia.com/wp-content/uploads/2020/01/Analiza-Ekonomskih-efekata-audio-vizuelne-produkcije-SFA-web.pdf>
- Kovačević, I., Anić, A., & Ribić, M. (2020). Film tourism, influence on employment and analysis of the economic effects of government incentives on the case of Serbia. *Marketing*, 51(3), 159-169.DOI: 10.5937/markt2003159K
- Liu, X. & Prat, S. (2019). The Downton Abbey Effect in Film-Induced Tourism: An Empirical Examination of TV Drama-Induced Tourism Motivation at Heritage Attractions. *Tourism Analysis*, Vol. 24, pp. 497–515 DOI: <https://doi.org/10.3727/108354219X15652651367505>
- Liu Y., Chin W. L., Nechita F. &Candrea A. N. (2020). Framing Film-Induced Tourism into a Sustainable Perspective from Romania, Indonesia and Malaysia. *Sustainability*, 12, 9910; doi:10.3390/su12239910
- Macionis, N. (2004). Understanding the Film-Induced Tourist. In W. Frost, G. Croy and S. Beeton (Eds.) *International Tourism and Media Conference Proceedings*, 86-97, Melbourne: Tourism Research Unit, Monash University.
- Mirović V., Kalaš, B. & Pavlović N. (2020) An empirical analysis of relationship between tourism and economic growth: panel evidence from Western Balkan countries. In: Bevanda, V., Štetić, S. (eds), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era*, Belgrade, 39 – 52. DOI: <https://doi.org/10.31410/tmt.2020.39>
- Mandić, A., Petrić, L. & Pivčević, S. (2017). Film as a creative industry constituent and its impacts on tourism development: evidence from Croatia. In: (Ed) Marković, S., Smolčić Jurdana, D., *Tourism and Creative Industries: Trends and Challenges*, Opatija, Croatia, 4-6 May 2017. 335-348; https://antemandic.files.wordpress.com/2017/09/f16_mandic_petric_pivcevic-revised.pdf

- Nizol, A. (2015). Film tourism as a new way to market a destination. *Scientific Review of Physical Culture*, vol. 5, issue 4, 149-156. <http://62.93.45.40/srpc/Articles/Volume-5/Issue-4/23.aspx>
- Pratt, S. (2015). The Borat effect: film-induced tourism gone wrong. *Tourism Economics*, 21 (5), 977–993 doi: 10.5367/te.2014.0394
- Pennacchia, M. (2015). Adaptation-induced tourism for consumers of literature on screen: the experience of Jane Austen fans. *Almatourism - Journal of Tourism Culture and Territorial Development*, 6(4, SI), 261–268.
- Prnjat, A. (2019). Xenophobia and Identitarian Nationalism. In: (eds.). Milisavljević, V, Mićunović, N. *Xenophobia, Identity and New Forms of Nationalism*. Belgrade: Institute of Social Sciences, 240-251. <https://philpapers.org/rec/PRNXAI>
- Pavković, V., Filipović, V. & Vlastelica Bakić, T. (2015). Uloga filma kao instrumenta medijskih komunikacija u strategiji promocije turističke destinacije. *Turističko poslovanje*, Br. 16, 75-88 <https://scindeks-clanci.ceon.rs/data/pdf/0354-3099/2015/0354-30991516075P.pdf>
- Puleo, T. J. (2015). American Perceptions of Sicily as a Tourist Destination as Experienced Through Film. *Almatourism - Journal of Tourism, Culture and Territorial Development*, 6(4), 195-212. <https://doi.org/10.6092/issn.2036-5195/4961>
- Pjanić, M. & Mitrašević, M. (2020) The impact of tourism on GDP growth in the European Union countries. In: Bevanda, V., Štetić, S. (eds), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era*, Belgrade, 53 – 66. DOI: <https://doi.org/10.31410/tmt.2020.53>
- Riley R., Baker, D. & Van Doren, C. S. (1998) Movie induced tourism. *Annals of Tourism Research*, 25 (4), 919-935.
- Radanov P. & Lešević, I. (2020) Rural tourism in the age of the Coronavirus epidemic. In: Bevanda, V., Štetić, S. (eds), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era*, Belgrade, 393 – 408. DOI: <https://doi.org/10.31410/tmt.2020.393>
- Rosário C., da Silva A. L. & Costa, A. A. (2020) Impact of tourism on Portugal' s regional development. In: Bevanda, V., Štetić, S. (eds), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era*, Belgrade, 53 – 66. DOI: <https://doi.org/10.31410/tmt.2020.81>
- Sylt, C. (2017). *Harry Potter Tour Conjures Up \$435 Million Of Revenue For Time Warner*. <https://www.forbes.com/sites/csylt/2017/12/06/harry-potter-tour-conjures-up-435-million-of-revenuefor-time-warner/>
- Sellgren, E. (2011). *Film-induced tourism: The effect films have on destination image formation, motivation and travel behaviour*. LAP LAMBERT Academic Publishing.
- Strielkowski, W., (2017). Promoting tourism destination through film-induced tourism: the case of Japan. *Market-Tržište*, Vol. 29, No. 2. 193-203. DOI <http://dx.doi.org/10.22598/mt/2017.29.2.193>
- Skoko, B., Brčić, T. & Gluvačević, D., (2012). Uloga igranog filma u brendiranju država, regija i gradova, *Međunarodne studije*, god. 12, br. 3-4, 9-36.
- Skoko, B., (2014). Mogućnosti i načini jačanja brenda Dubrovnika uz pomoć filmske industrije i organiziranja događaja. *Zbornik Sveučilišta u Dubrovniku*, god. 1., br. 1.,175-191. <https://hrcak.srce.hr/136527>
- Simić, V. (2015). Analysis of organizational and managerial structure on the case of Serbian film association. *Ekonomija: teorija i praksa*, 8(4), 28-46. DOI: 10.5937/etp1504028S
- Sharma, A. (2017). Destination marketing and promotion through film tourism: an empirical study of Hadoti region of Rajasthan. *Journal of applied Management and Investments*, Vol. 6, No 2, 118-129. http://www.jami.org.ua/Papers/JAMI_6_2_118-129.pdf

- Spears, D. L., Josiam, B. M., Kinley, T. & Pookulangara, S. (2013). Tourist See Tourist Do: The Influence of Hollywood Movies and Television on Tourism Motivation and Activity Behavior. *Hospitality Review*: Vol. 30: Iss. 1, Article 4., 53-74. Available at: <https://digital-commons.fiu.edu/hospitalityreview/vol30/iss1/4>
- Țuclea, C. E. & Nistoreanu P., (2011). How film and television programs can promote tourism and increase the competitiveness of tourist destinations. *Cactus Tourism Journal* Vol. 2, Issue 2/2011, 25-30. <https://www.cactus-journal-of-tourism.ase.ro/Pdf/vol4/3%20Tuclea&Nistoreanu.pdf>
- Urbánné T. Á., Horváth Á., Gyenge B. & Szabó Z. (2018). Movie Induced Tourism and Its Effects on Settlements, A Literature Study. *Socio Economic Challenges*, Volume 2 (3), 26-36. DOI: 10.21272/sec.3(2).26-36.2018
- Vrtiprah, V. & Sentić, S (2018). Događaji u funkciji boljeg plasmana turističke destinacije, primjer Dubrovnika. *Ekonomska misao i praksa*, God. XXVII. Br. 1., 267-284. <https://hrcak.srce.hr/202284>
- Vagionis, N. & Loumioti M., (2011). Movies as a tool modern tourist marketing. *Tourismos: an international multidisciplinary journal of tourism*, Volume 6, Number 2, 353-362. http://www.chios.aegean.gr/tourism/VOLUME_6_No2_art20.pdf



Online Tools for Tourism Recovery – IT Perspectives, Legal, Economic and Management Aspects

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Abstract: *The problem we addressed in the paper included an analysis of the state of the tourism sector during the two years of the COVID-19 pandemic. In addition to international tourism, one of the main goals was the economic analysis of tourism in the Republic of Serbia. The COVID-19 pandemic changed the everyday life and work of people and disturbed the order in almost all economic branches, so tourism was not spared either. In addition to the economic analysis of today's tourism sector, the paper provides an analysis of the use of available online tools in order to better position in the market and better visibility of the tourist offer to potential tourists. By using the available online tools, the contact between the interested tourist and the hotelier of a certain area is realized much faster. Their application is especially important for small rural households and tourist places that base their offer on untouched nature.*

1. INTRODUCTION

Over the past two years, life as we have known it has almost changed radically. Everything unusual became every day, while many human habits, regular activities, travel, and social gatherings had to be set aside. The COVID-19 pandemic affected almost all cities in the world, whether it was companies where it is possible to organize work from home, or it was a heavy industry where it is impossible to move production to the home conditions of their employees. Precisely because of its specifics, as well as its rapid spread, the pandemic found humanity unprepared (Putra, et. al. 2021). Therefore, the pandemic has greatly endangered world tourism, as one of the very profitable branches of the economy. The impact of the pandemic on the tourism sector is particularly great given the fact that a large number of countries around the world base their economic benefits on tourism, which is engaged by the majority of the population. By closing borders and making travel impossible, the economies of many countries have been severely disrupted.

Research shows that 2019 was the year in which tourism at the global level reached its maximum in terms of the number of overnight stays, the number of flights, as well as income from both domestic and foreign tourists. 2019 was extremely successful for tourism on a global level. This is supported by the fact that 10.3% of global GDP was realized on the account of tourism, which amounts to an incredible 8.9 trillion dollars. 330 million jobs were realized in this sector. 44 countries of the world are considered dependent on tourism, and the criterion for that was the fact that 15% of their GDP comes from tourism. The top 10 countries on the list that ranks countries according to the number of employees in tourism are exotic islands such as Antigua and Barbuda, Aruba, Saint Lucia, the Virgin Islands and the Maldives (Muritala, et. al. 2019). European countries appear on the list after the 20th place, and among them, Montenegro

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is in the 22nd place, where a third of the population has a job in this activity. Next is Georgia with 28% of employees in tourism. The list also includes Croatia with a quarter of the population (about 383,000 people) who are employed in tourism (25% or 26th place on the list). In 2019, this country generated revenues from tourism of 13 billion dollars. Albania, Iceland, and Greece each have 22% of employees in tourism, followed by Malta with 21%. Of the European countries, Portugal is on the list with 18%. Apart from the number of employees in the tourism sector, the contribution of tourism to GDP also appears as an indicator of the importance of this sector to the economy of a country. In that respect, Mexico has the highest percentage of participation with 15.5%, while Spain is in the first place among European countries with 14.3%. Just behind Spain is Italy with 13%. Of the European countries on the list are Germany (9.1%), France (8.5%), and the Netherlands (5.7%) (<https://www.visualcapitalist.com/countries-reliant-tourism/>).

After an unprecedented 73% drop in international tourism during 2020 due to the COVID-19 pandemic, demand for international travel remained very weak in the early months of 2021 (UNWTO, 2021). The report of the United Nations World Tourism Organization also illustrates the dramatic situation, stating that tourism has declined by three decades due to the coronavirus pandemic. It is generally known that tourism as an economic branch is largely dependent on various parameters such as geopolitical situations in the countries to which tourist destinations belong, natural disasters, epidemics, as well as situations that would endanger the safety of tourists. Precisely for these reasons, it cannot be said that there were no problems when it comes to tourism, that there were no interruptions in work or the closure of certain tourist destinations. However, the fact is that there has never been an interruption in the provision of tourist services worldwide. In contrast to destinations that often have problems when it comes to tourist offers due to unstable political situations, interpersonal conflicts, or bad climate, some destinations number millions of tourists annually, and thus closing their tourist destinations, the impact on their economy is very large. It is a particularly important fact that popular tourist destinations are also characterized by the fact that the population has been oriented towards tourism as a basic economic branch over the years. The trend that was present in global tourism before 2020, i.e. before the beginning of the COVID-19 pandemic, was marked as sustainable tourism. This trend occurred as a consequence of recognizing the negative impact of tourism (and not only tourism) on the environment. To that end, the residents of certain tourist destinations opposed the excessive number of tourists (Jovic Bogdanovic, et. al. 2021, p. 247).

As already mentioned, tourism in Serbia in the years before the pandemic recorded a significant boom, which was especially evident in 2019. In that year, a record number of tourist arrivals in Serbia of as much as 3.7 million was recorded, which is 84.4% more than in 2010. Then, for the first time, an almost equal number of arrivals of domestic and foreign tourists was recorded, with an increase in domestic tourist nights of 57.1% compared to 2010 and an incredible percentage increase in the number of foreign tourist nights of as much as 176.2% (Radivojević, 2020, p. 9). The virus has affected supply chains in the service delivery channels of almost all countries in the world. The impact of canceled events, indoor accommodation and closed attractions was immediately felt in other parts of the supply chain, such as catering, food preparation and delivery, renting out halls for various purposes, and laundry services. Restaurants also had to close, although in some countries the move to take away/delivery sales allowed some to continue operating.

2. LITERATURE REVIEW

As the impact of the COVID-19 pandemic on both international and domestic tourism cannot be ignored, scientists around the world are analyzing the state of tourism during the pandemic with the aim of finding solutions for the economic improvement of this sector.

In one of the researches, the authors analyzed the impact of the COVID-19 pandemic on rural tourism in the Republic of Serbia. The research aimed to look at the damage caused by the COVID-19 pandemic to rural tourism in our region from the economic, social and legal aspects. Rural tourism is observed from the point of view of visitors, more precisely tourists, as well as from the point of view of the local population, who, in addition to engaging in agriculture, is one of the types of income in rural areas where they live and engage in tourism. Empirical research was conducted using a questionnaire survey by service providers in rural tourism. Based on the conducted research, the authors defined guidelines for the recovery of rural tourism in the Republic of Serbia based on the challenges of further development of world tourism (Batricevic, et. al., 2021). In the conclusion, the authors defined some of the basic problems of rural tourism development during the pandemic. The authors also defined recommendations for the development of tourism in the Republic of Serbia.

One of the researches included the impact of the COVID-19 pandemic on tourism on the territory of the Zlatibor mountain in the Republic of Serbia. This research showed that the pandemic had a huge impact on rural tourism in the area of Western Serbia, especially the area of the Zlatibor region. Based on the results of the study, the authors gave some of the main conclusions that should contribute to the recovery of tourism in this part of the Republic of Serbia. Also, the results of the research provide instructions for the further course of tourism development in eco-rural environments on Zlatibor with sustainable development. The results confirm certain differences in Zlatibor's rural destinations in the pre-pandemic period and in times of challenges caused by the corona pandemic virus. The findings suggest that one can move from the survival phase to the phase of accelerated development of tourism in eco-rural tourism destinations. In fact, this crisis may improve the development of domestic tourism by improving the quality of tourist services in the countryside (Bozovic, et. al., 2021, p. 2015).

In one of the researches, the main conclusions of the authors refer to the fact that the impact of COVID-19 on the tourism sector, as well as the economic situation of some countries, is still an insufficiently researched topic. Research has shown that the impact of the COVID-19 pandemic on tourism is far greater in developing countries than in developed countries. For example, in countries whose GDP is based on tourism, the pandemic has affected the population in the domain of daily activities. The big problem of the population of these countries is the dependence of their earnings on tourism. The authors of the research concluded that in the field of research it would be important to make a comparative analysis of the consequences on the economy that arose under the influence of the COVID-19 pandemic and the global economic crisis in 2008 (Lukovic, et. al., 2020).

In addition to scientific research papers on the impact of COVID -19 on the world economy in a broader sense and the tourism sector in a narrower sense, a large number of organizations also deal with this topic. One of the researches was created by people employed in the Dinarides Parks - a network of protected areas of the Dinarides in cooperation with WWF Adria. The effects of a pandemic on protected areas before all represent the consequences of

the implementation of health and safety measures in order to control and suppress the epidemic. Restrictions movements introduced by the governments of the countries in the region from March 2019, as expected, had a large impact on protected areas because they made it difficult operation of the steering wheel and disabling visiting and attending people in shelters areas. One of the most noticeable influences is certainly economic consequences due to restrictions on tourist activities in protected areas. Such effects are most affected by the protected areas that are primarily oriented to income from tourism (Parkovi, 2021). The research also lamented the positive effects on protected areas. A positive example of the impact of a pandemic is reflected through the impact on the protected good itself; increased attendance influenced the promotion of the area, its values and contents. The increased attendance also affected the larger budget local population engaged in tourism and by issuing accommodation units, because all the facilities were maximally filled.

Agritourism as one of the most popular forms of tourist offer is certainly affected by the new situation. It is for these reasons that the impact of the COVID-19 pandemic on agritourism has been the subject of many studies. Authors in one of the research assess the impacts and management strategies of agritourism in Brunei. Of course, the main goal was to assess the state of agritourism during the COVID -19 pandemic. The authors also focused on creating a study in which they can observe the implication and contingency plans to divert crises, as pandemics. Research has shown that farmers involved in agritourism offer in order to overcome the losses incurred by fewer tourists turned to innovation in agricultural production to reduce the cost of the same. On the other hand, many people tried to attract tourists in different ways. Some of the methods included the use of applications that provide better visibility of their online accommodation. Some of them used social media to promote agritourism as tourism with a reduced risk of infection. The author's research has shown that it is necessary to encourage continuous improvement and training of local farmers in order to create a new agritourism offer, as well as constant training to increase the area of activity, which aims to create new jobs (Chin, et. al., 2021).

One of the researches included the tourist plans of the people in Poland during the COVID-19 pandemic. Special emphasis was placed on the plans of Poles to spend their holidays on agritourism farms. The research showed that a large number of tourists decided on this type of vacation, so this was a good choice during the pandemic. The authors concluded that agritourism farms must take adequate measures in order to provide all the conditions for a smooth and safe stay. Some of the measures relate to the current epidemiological situation, such as limiting the number of people in the rooms, installing hand sanitizers and regularly disinfecting the rooms (Wojcieszak-Zbierska, 2020).

In one of the researches, the authors observe the situation in tourism in Slovakia from the perspective of domestic and foreign tourists and the perspective of overnight stays during one visit to the country. Specifically, they looked at the online communication of selected agritourism facilities from the popular travel portal. As part of the analysis they observe active communication of accommodation facilities and restaurants on social media, focusing on Facebook and Instagram. They conclude that given the negative effects of the pandemic on tourism, the closure of borders gave the possibility for domestic tourists to travel around Slovakia. Also, they note that the area of online communication is one of the most significant (Supekova, 2021).

3. ANALYSIS OF THE CURRENT STATE OF TOURISM

The years behind us spent in the COVID-19 pandemic are new to each of us. Life under masks, closed borders, state of emergency, curfew, are just some of the measures that have influenced the way of life of a large number of people. Restrictions on travel both within the territory of some countries and on travel to other countries have greatly influenced the further development of tourism. Tourism as a branch of the economy had a kind of upward trajectory of growth until the end of 2019. This growth trend was interrupted by the COVID-19 pandemic. During 2020 and 2021, tourism at the global level experienced a large decline in the number of arrivals of foreign tourists, and in general in terms of the number of overnight stays.

According to the available data from the World Tourism Organization, we performed an analysis of the current state of the world and domestic tourism. The analysis within the research covers the period from 2019 to 2021. The goal was to compare the number of international arrivals as well as the number of overnight stays realized during 2020 and 2021 in relation to 2019. Based on the available data for international tourist arrivals in 2020. year, and for the nine months in 2021. year the diagram shown in Figure 1 was created. Based on the diagram, a small decrease can be seen during the first months of 2020, while in other months the decrease is significantly higher. If we look at the data for 2021, it is evident that the decline in the number of international arrivals at the global level continues, as was the case with the number of arrivals in the last months of 2020. It is also evident from the data that the decline in the number of arrivals during 2021 is decreasing as the end of the year approaches. This trend coincides with the reduction in the number of infected people daily, as well as with the measures that countries around the world have introduced in order to enable people who have been immunized to travel. If we compare the percentage of tourist arrivals in 2020 and 2021 with the percentage of arrivals in 2019, the data show that despite all measures taken to improve conditions for tourism recovery, as well as increase the number of arrivals, the number of arrivals is far below that which was in 2019.



Figure 1. International tourist arrivals on global level in 2020 and first nine months of 2021 [%]

Source: <https://www.unwto.org/>

If we look at international tourist arrivals by region, the largest losses for 2020. were recorded in the Asia-Pacific region, as can be seen in Figure 2. This region also suffered the biggest drop in the number of arrivals in 2021, even more than in 2020.

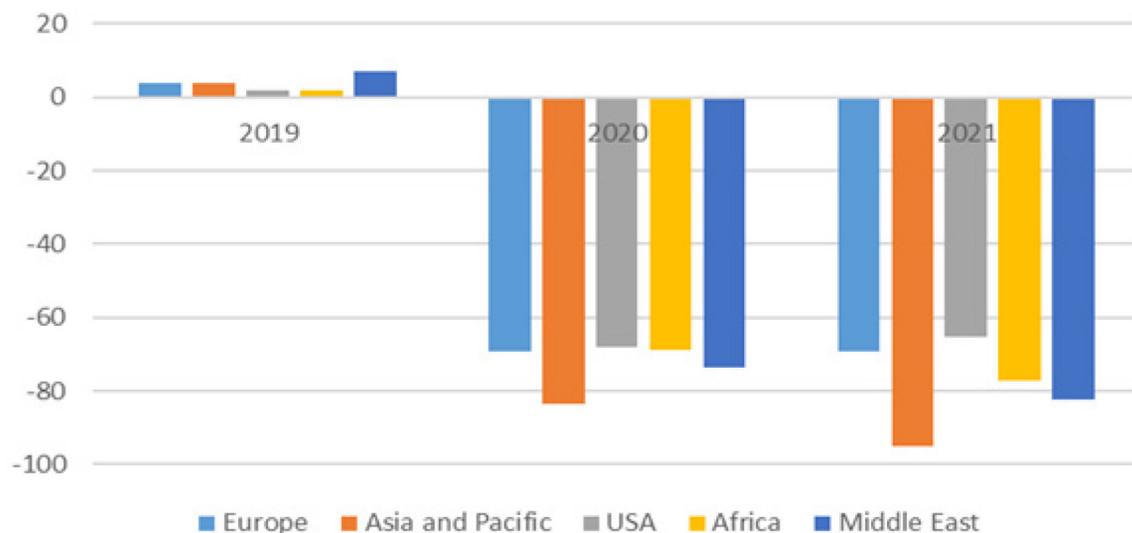


Figure 2. International tourist arrivals on regional level in 2019, 2020, and first nine months of 2021. [%]

Source: <https://www.unwto.org/>

Looking at other regions of the world covered by the survey, it is noticeable that for most regions there was a percentage drop close to that of 2020. A slightly smaller decline in international tourist arrivals was recorded in the USA region. The fact that the survey for 2021 is based on the data available for the first nine months must certainly be taken into account. The percentage of international tourist arrivals based on regional levels during 2020 and 2021 is far below the knowledge that was in 2019. And as in 2019, each of the regions recorded an increase in the number of international arrivals, over the next two years due to the COVID-19 pandemic, each of these regions recorded a large decline. During 2020, such a large decline was certainly something that people engaged in tourism did not expect, while the decline in the number of arrivals during 2021 is something that could be expected.

Following its tourist offer, the Republic of Serbia attracts a certain number of both domestic and international tourists. Like other countries in the region, the goal is to achieve the largest possible number of international tourists who would primarily visit the tourist destinations of the Republic of Serbia. Revenues of hoteliers and others in the chain of tourist offers are directly related to the number of tourists who visit a place. During the previous two years, the Republic of Serbia was very often in a lockdown, which caused a smaller number of international tourists. In practice, it can be said that the situation in the Republic of Serbia regarding the COVID-19 virus has passed from one pandemic wave to another. On the one hand, the pandemic caused the Republic of Serbia to close its borders in one period so that there would be no influx of people from abroad and the spread of the pandemic. This practice especially dominated during 2020. On the other hand, due to the increased number of patients in the Republic of Serbia, its citizens are often put on the red list, so there was a recommendation that foreign nationals should not choose their vacation or recreation tourist destination of Serbia. Precisely for these reasons, there were few days when citizens of the Republic of Serbia were able to travel or receive visits from foreign nationals.

If we compare the data on the number of international tourist arrivals for 2019, 2020, and 2021. available by the World Tourism Organization, it shows a decrease in the number of arrivals during 2020 and 2021 compared to 2019, which can be seen in Figure 3. It can also be noticed that

the number of arrivals during the first months of 2020 is almost the same as the number of arrivals during 2019, after which there is a decline. However, during 2021, the decline in the number of arrivals begins in January. If we compare this with the data at the world level, it can be concluded that the decline in the number of tourists in the Republic of Serbia follows the world trend.

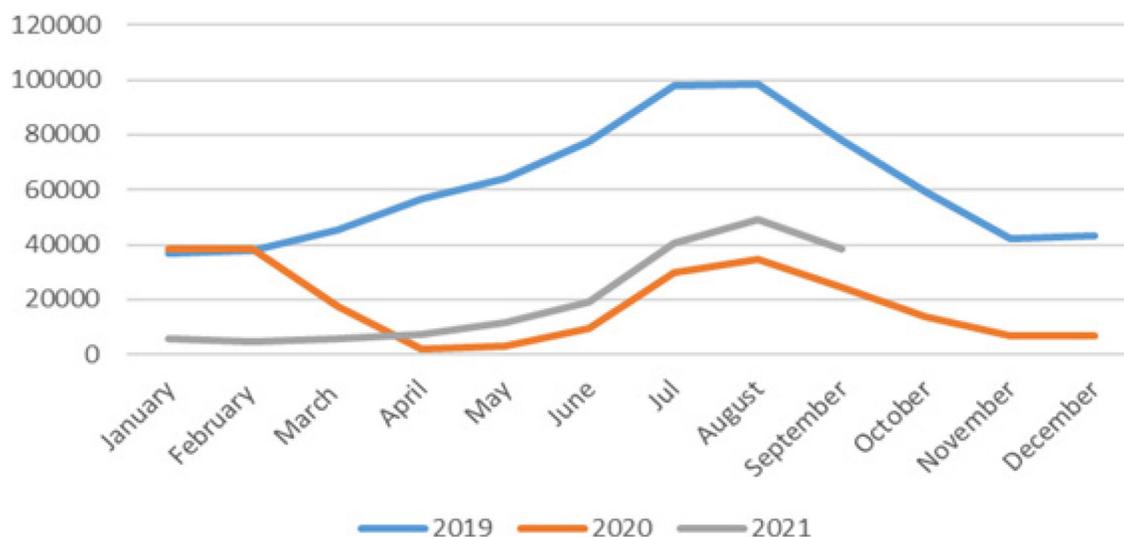


Figure 3. Comparison of number of international tourist arrivals (thousands) for Republic of Serbia in 2019., 2020. and 2021.

Source: <https://www.unwto.org/>

The situation in the field of tourism at the world level due to the COVID-19 pandemic also affected the structure of tourists visiting the Republic of Serbia. In this regard, the number of foreign tourists who came to visit the Republic of Serbia is significantly lower than in the years before the pandemic. Data from the World Tourism Organization show that in May 2020, the share of foreign tourists was 11%, which is 23% less than the share of foreign tourists in 2019. During June, the share of foreign tourists was 10%, which is 29% less than in the same period in 2019. If we compare July, the share of foreign tourists is lower by 31% compared to July 2019. The number of foreign tourists and overnight stays that they realized during 2021 is almost the same as in 2020. Tourism entrepreneurs have responded to falling demand by reducing the prices of accommodation in the observed period but not to the appropriate extent. The number of nights in March 2020. in the Republic of Serbia fell by 46% compared to 2019. year, to which the accommodation service providers responded by reducing the price by 7.3%. Not looking at April, which cannot be a real indicator of market movements tourist services because a state of emergency lasted throughout the month; a decline of 83% in the number of overnight stays in May was accompanied by a decline of 8% in accommodation prices. Current trends in the tourism services market are good an indicator of the readiness of tourist places and providers' service to changing conditions and an indicator of their flexibility. Stara Planina already in June recorded a higher number of overnight stays than in the same month the previous year, while in July it achieved a number overnight stays of over 10 thousand, compared to just over 3 thousand from the same month in 2019. With these results in the period from the declaration of the state of emergency until the end of July Stara Planina achieved the lowest cumulative decline in the number of overnight stays in the Republic of Serbia (for only 13%). Significant results and an increase in the number of overnight stays in July 2020 (Radivojevic, 2020). compared to the previous year are both Sokobanja and Banja Palić (both spas noted a cumulative drop of 27%).

4. ONLINE TOOLS TO SUPPORT TOURISM RECOVERY

The rapid advancement of information and communication technologies (ICT) and the dynamic development of tourism have been correlated for years. Since the end of the eighties of the 20th century, software applications and solutions applied in tourism, often called e-tourism, have been emerging. Information technologies improve the process of connecting the tourist offer and the tourist demand on the market, thus giving a completely new dimension to the distribution of package deals. The global tourism market implies the expansion of business to the global level, and thus the establishment of wider distribution channels that would allow more efficient product placement (Viduka, et. al., 2013). In the tourism industry, there are more and more services provided to tourists, and they are based on the use of the Internet as the main communication channel. The use of specialized software applications compatible with modern electronic devices, as well as the interaction between tourists and tourist destinations open a new dimension in tourism. In order to interact between tourists and tourist destinations, a large number of different applications are in use. One of the types of applications is applications for obtaining the necessary information about a specific tourist destination (Labanauskaite, et. al. 2020). The user can download the application from the Internet with the help of which he will receive all the necessary information. In most cases, this information contains information about sights, attractions, hotels and restaurants, the best way to travel to the destination, etc. The advantages of such applications are multiple, especially due to the fact that in most cases such applications offer the ability to search for information related to many other destinations. In this way, the user has the latest information about a destination at his disposal at all times. Also, in addition to information about existing destinations, applications are updated with information about new destinations that have been added to the system database since the last update (Bendon, et. al., 2010).

Very important services within e-tourism are also applications for searching and booking flights, accommodation, and tickets for various tourist attractions and sights. Previously, the process of finding the desired hotel in many cases was at least exhausting and time-consuming. The transition from the traditional way of booking accommodation to booking using online applications has brought great benefits to both potential tourists and specific service providers. The fact that a large number of hotels have electronic booking systems within their web portals also shows how popular online accommodation booking has become. In addition, there is a growing presence of independent services that provide services for finding and booking accommodation. Standalone online services are a link between hoteliers and potential guests. Through these services, hoteliers are offered only the possibility of advertising (Chamboko-Mpotaringa, 2021). The entire process of searching between accommodation facilities that meet the requirements of system users as well as the reservation itself is performed independently of the hotelier. The introduction of online accommodation reservations has reduced the problems that occur under the influence of the human factor and increased the accuracy, consistency and up-to-dateness of the information.

In the area of marketing communication, the service providers' website plays an extremely important role, as it is still the most-used channel following online booking sites (Dodova & Soviar, 2021). Service providers also need to pay close attention to online reviews, consumers are reluctant to write lengthy reviews, they are happy to score and most of them are looking at the reviews of others before making their travel decisions.

The mentioned online tools and services are in constant use both by people who live from tourism and by tourists. The practice of using online tools has increased with the development of

tourism, increasing the number of tourists and increasing the tourist offer. The COVID-19 pandemic has caused a decrease in tourists worldwide, which has only led to greater competition both between individual regions and between people and organizations in those regions. The current situation highlights the need to reach tourists as easily and quickly as possible. More precisely, the problem of the reduced number of tourists has caused hoteliers, tourist organizations, private accommodation, tourist attractions and all those who live in tourism to work on improving their marketing. Work on marketing improvement is based on online services and social networks. The main goal of their use is the rapid availability of all necessary information to interested tourists. It is also necessary to constantly improve and increase their ranking within search engines so that tourists get information about a particular accommodation or destination as one of the ten highest-ranked.

Having in mind the COVID-19 pandemic, tourist organizations must point out the key facts that set them apart from other destinations in terms of security. In this regard, each individual hotelier or issuer of accommodation in the information about their accommodation should highlight the security measures that are taken daily in order to achieve greater safety of their guests. Also, some of the very important information can be the distance from the hospital, the equipment of human pharmacies, etc. In cooperation with local self-governments, tourists can also be provided with information on whether and in what number there are infected people in the territory of the city or municipality in which they plan their stay (Reyes-Menendez, et. al., 2019). Of course, tourists will prefer to choose a place that offers them security and fewer opportunities than infection. For example, the agritourism offered in the time of pandemics can offer much more than is the case with urban environments. This is supported by the data that during the pandemic, tourists opted for an offer that includes more time in untouched nature, outside cafes, restaurants, and crowds, as well as enjoying the rural idyll and cuisine. Thanks to online tools and social networks, such small tourist complexes are attracting more and more tourists every day. Information about their offer becomes easily accessible to everyone. Also, this type of information is easy to spread among people, more precisely far easier than it was before.

The use of online services and social networks, unlike before the pandemic COVID-19, should not be just one of the possibilities or desires of an individual (Linnes, et. al. 2021). The application of such services should enable the rapid economic recovery of today's tourism sector. It is practically necessary to use the offered services, habits and needs of people to use online services and social networks in order to fight and attract every potential tourist under their roof. Living in a pandemic, people have become accustomed to working from home, they have become accustomed to trying to find everything online for everything they need, and to get what they want using the appropriate service. It is for these reasons that tourism organizations and all those around them need to take advantage of the newly acquired habits of the human population in order to sell them as much as possible what they offer.

5. LEGAL FRAMEWORKS OF TOURISM

Every society has its habits, and tourism as one of them is a massive socio-economic phenomenon with many positive effects. The modern tourist market is in constant need of new forms of spending free time, in the most diverse way possible. Tourism is often seen as a targeted, planned and motivated behavior, where the most important role in making a travel decision is played by the expectations of the person traveling. That is why the needs, attitudes and motives of tourists are crucial (Walland, 2006). Precisely because of the mentioned characteristics of

tourism, we can, to a certain extent, see it as a point of connection between urban and less urban areas. Tourism is one of the most efficient ways to preserve the preserved nature of the whole (lakes, rivers, mountain lookouts and landscapes, etc.), but also cultural heritage (archaeological sites, monasteries, etc.) can be valorized (Matijasevic-Obradovic & Bingulac, 2015). Bearing in mind that tourism is a kind of user of space, and it is not an irreversible consumer of natural elements, with the controlled development of tourism, the development of a certain area can be achieved (Jovicic, 2000).

The current state of tourism in the world and the Republic of Serbia requires changes in legal regulations so that on the one hand tourists can be provided with unhindered travel and enjoyment of the tourist offer, while on the other hand, it is necessary to ensure the safety of all. If we observe the application of online tools in tourism, it is necessary to pay special attention to the protection of the personal data of users of these tools. As in most cases, the users of these tools are natural persons, they need to be provided with legal protection in case of unauthorized use of their data left to the service provider after logging in to the system. In 1981 the Council of Europe adopted the first international treaty to address the right of individuals to the protection of their personal data: Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, known as “Convention 108”. The treaty was drafted in a technologically neutral style, which enables its provisions to be fully valid today, regardless of technological developments. In 2018, the treaty was updated by an amending protocol, not yet in force, aimed at ensuring that its data protection principles are still adapted to new tools and new practices. To this day, “Convention 108” still remains the only legally binding international instrument with a worldwide scope of application, open to any country, and with the potential to become a global standard. The treaty establishes many principles for states to transpose into their domestic legislation to ensure that data is collected and processed fairly and through procedures established by law, for a specific purpose, that it is stored for no longer than is required for this purpose, and that individuals have a right to have access to, rectify or erase their data. An additional protocol requires each party to establish an independent authority to ensure compliance with data protection principles and lays down rules on transborder data flows. So far, 55 countries have ratified “Convention 108” and many others have used it as a model for new data protection legislation.

On the other hand, during a pandemic, personal data protection cannot come first. Specifically, the protection of personal data is a lower priority than public health. For example, if a guest is found to be positive, his or her personal data must be provided to the competent authorities in order for him or her to be adequately cared for. Also, each of the hoteliers, if he has information about the movement of a positive person, must submit his personal data. It is for these reasons that some countries have enacted legal regulations governing cases in which an employer or legal entity is allowed to disclose the personal data of its employees or its guests.

According to GDPR Article 6, the processing of personal data is illegal unless it can be justified. In the following cases, processing of subject data is justified. The data subject has given for one or more processing activities, unambiguous consent to process his data. The permission must be freely given, clear, and easy to withdraw. The data processing activity is necessary to execute or to enter into a contract to which the data subject is a party. Legitimate interest is used as a legal basis for data processing. That is processing necessary for compliance of a company with a legal obligation. The vital interests of the data subject have to be protected through data processing. This is can take place in emergency and medical care situations. A data processing

activity has to take place on behalf of a government entity. Processing is necessary for a legal obligation. Finally, the legal basis for data processing needs to be documented and the data subject to be informed. Additionally, in case of a change in the legal basis, the data subject has to be notified. In case of a data leak, the data subjects must be informed within 72 hours. Otherwise, a company will face penalties. According to GDPR Article 25, the protection of personal data has a central role in a company. In their whole life cycle, data must be protected. This means that the concept of data protection by design and by default will apply in any data processing stage (Chatzopoulou, 2021).

In order to respond to the challenges posed by the COVID-19 pandemic in terms of personal data protection, the EU Directive on Privacy and Electronic Communications was adopted (Coronavirus/COVID-19 Data Privacy Guidance). The adopted directive stipulates that the processing of personal data with regard to location may be carried out only in cases of anonymous data collection or in the case of consent obtained from the data subject. The directive authorizes the EU Member States to prescribe special measures in national law to protect national and public security (Rikhsibaevna, et. al. 2019).

The opportunity provided by the Directive has been used by many European countries, as well as some parts of Asia. For example, The Italian government has developed cooperation with mobile operators, who submit the collected location data to the Ministry of Health, thus providing them with information on the number of citizens who have disobeyed the prescribed measures of restriction of movement. This dictatorship has been adopted by many countries across the European Union. The directive was also implemented by some Asian countries. If we look at the countries of the European Union, Italy stands out, whose government, in cooperation with mobile operators, collected data on the location of mobile phone users. These data served the Ministry of Health in order to record the number of citizens who turned a deaf ear to the prescribed measures to ban movement. Polish authorities have launched the use of an application intended for citizens who are in quarantine. A citizen who is in quarantine is obliged to take a selfie with geolocation from time to time. In this way, by using a given application, the authorities can be sure that the citizen is really in quarantine. Special measures for foreign nationals have been introduced in China. Namely, upon arrival in the country, every foreign citizen would receive a bracelet that records his movements. In this way, the authorities have an insight into whether the isolation measure was violated or not. In Singapore, all data on infected people was made public, after which an application was launched that allows tracking the location of the victims of the coronavirus. Needless to say - the legality of this measure is definitely questionable (Zunic Maric & Djukanovic, 2020).

If we look at the laws and bylaws of the European Union, it can be seen that the Personal Data Protection Act (GDPR) categorizes medical data as a special category of data. Practically, the personal data of the patient are treated as special data whose privacy must be taken into account. Viewed from the point of view of companies and employers, security of communication must be ensured, in order to avoid the possibility of finding information about the health reasons for the employee's absence in any form of communication. Thus, for example, care must be taken in which case the information about the employee must be considered secret or it can be revealed which employee it is (Bradford et. al. 2020). Transferred to the state of the pandemic, and in order to protect the personal data on the health condition of the employee, the team is obliged to take all measures to protect the employee when the presence of the virus is confirmed. This practically means that measures should be aimed at avoiding revealing the identity of a worker

who has health problems. However, how health data is considered a special group of personal data, and how, on the other hand, a pandemic state is in itself a state that requires changes to the GDPR, prescribes in which cases an exception may be made. Some of the special categories of personal data that may be collected are, for example, data distributed by Union or Member State law; In cases when data are used to protect personal data or other fundamental rights, as well as in cases where it is in the public interest or interest in public health, including the prevention or control of infectious diseases and other serious health threats. Such derogations are permitted for health purposes, including public health and health system management (Gecic & Okiljevic, 2020).

In this regard, Art. 6 and 9 of the GDPR provide a legal basis to allow employers and competent public health authorities to process personal data in the context of an epidemic, without the obligation to obtain the consent of the data subject. This applies, for example, when it is necessary for employers to process the data in question in accordance with the public interest in the field of public health, as well as to protect vital interests or fulfill a legal obligation. As more and more cases of coronavirus positives are detected daily, employers are obliged to monitor the spread of the epidemic and, if necessary, take steps to protect their employees. However, the exchange of information for these purposes must be proportionate to the risk and need for exchange, which should be assessed regularly and carefully. It is up to employers to decide what steps should be taken to ensure employee safety (EDPD, Statement of the EDPB Chair on the processing of personal data in the context of the COVID-19 outbreak).

The protection of personal data and the protection of patients' medical data must be carried out in accordance with all applicable legal norms. However, in a time of the pandemic, protecting this data is becoming a real challenge. It is for these reasons that all entities involved in the process of using data should work on data protection so that they remain personal in the end. In this regard, all online tools used to enter or transfer such data must have appropriate security mechanisms, and encryption mechanisms to prevent malicious use of this data.

6. CONCLUSION

Tourism as an economic branch of each of the countries contributes to the increase of income of people who have found their employment in the tourism sector, as well as the state in general. Observed from the point of view of income generation and economy, tourism is directly conditioned by the free movement of people as well as social interaction. Over the past two years, tourism has suffered huge losses due to the COVID-19 pandemic. The decline in the number of international tourist arrivals worldwide has almost never been so great. If the decline in the number of tourists is compared to the crises that have befallen the world in the recent past, such as the global economic crisis, it can be concluded that the decline in the number of tourist arrivals during the pandemic is unimaginably greater. The decline at the world level is almost equally reflected in the Republic of Serbia and the surrounding countries.

In order to mitigate the economic consequences of the COVID-19 pandemic on the tourism sector and its employment, tourism organizations, local government, government, non-governmental organizations and people whose livelihoods depend on potential tourists must make an effort and contribute. One of the ways to fight for the recovery of tourism is the use of information and communication technologies in terms of their application through various management and marketing services as well as online services and social networks. The main goal of

the application of these services is better advertising of everything that is the tourists offer in a region. By applying these services, multimedia information can be transmitted around the world in a very short time, which enables easier and faster acquaintance of tourists with the offer of a region. The available information should be based on all the facts concerning the safety of tourists during their stay. In this way, if all individual actors work together to increase the number of tourist arrivals, an increase in revenues in this area can be expected.

REFERENCES

- Batricevic, A., & Stankovic, V. (2021). Is COVID-19 pandemic affecting rural tourism in Serbia. *Quaestus Multidisciplinary Research Journal*. *Iss. 18*, 118-135.
- Bendon, G., & Hundson, S. (2010). *Our mobile future: how smartphones will transform visiting experiences*, London: Horizon Digital Economy Research.
- Bozovic, S., Kosic, K., & Vukoicic D. (2021). Developing Ecotourism in a time of pandemic: The Case of the Zlatibor Mountain, Serbia. *Ecologica*, *28(102)*, 215-222.
- Chamboko-Mpotaringa, M. (2021). Tourism Digital Marketing Tools and Views on Future Trends: A Systematic Review of Literature. *African Journal of Hospitality, Tourism and Leisure*, *10(2)*. 712-726.
- Chatzopoulou, I. (2021). GDPR and tourism: legal framework, compliance and implications for the tourism industry. *Journal of International Scientific Publications-Economy & Business*. *15*, 125-133.
- Chin, W., Musa, S. & Coetzee, W. (2021). Agritourism resilience against COVID-19: Impacts and management strategies. *Cogent Social Sciences*, *7(1)*, 1-19.
- Coronavirus/COVID-19 Data Privacy Guidance, Retrieved on October 12, 2020, from: <https://www.cov.com/-/media/files/corporate/publications/2020/03/overview-of-COVID-19-data-privacy-guidance.pdf>
- Dodova, I., & Soviar, J. (2021). The application of online marketing tools in marketing communication of the entities with the tourism offer in 2020 in Slovakia, *Transportation Research Procedia*. *55*, 1791-1799.
- EDPD, Statement of the EDPB Chair on the processing of personal data in the context of the COVID-19 outbreak, Retrieved on August 12, 2020, from: https://edpb.europa.eu/sites/edpb/files/files/news/edpb_COVID-19_20200316_press_statement_en.pdf
- Gecic, G. & Okiljevic, M. (2020). Virus COVID-19 does not care about the protection of personal data, Gecic Law, Retrieved on October 12, 2020, from: <https://www.coronavirus.geciclaw.com/sr/virus-COVID-19-ne-mari-za-zastitu-podataka-o-licnosti/>
- Jovic Bogdanovic, A., Pajic, S., & Jovanovic, M. (2021). Uticaj pandemije COVID-19 na turizam u Evropi. In Radosavljevic, Z. (Ed.), *Pravo, ekonomija i menadzment u savremenim uslovima*, Presented at 7th international conference LEMIMA 2021, Belgrade.
- Jovičić, D. (2000), *Turizam i životna sredina*, Beograd, Zadužbina Andrejevic
- Labanauskaite, D., Fiore, M., & Stasys, R. (2020). Use of E-marketing tools as communication management in the tourism industry. *Tourism Management Perspectives*. *34*.
- Linnes, C., Itoga, H., Argusa, J., & Lema, J. (2021). Sustainable Tourism Empowered by Social Network Analysis to Gain a Competitive Edge at a Historic Site. *Tourism and Hospitality*, *2(4)*, 332-346.
- Lukovic, S., & Stojkovic, D. (2020). COVID-19 pandemic and global tourism. *Hotel and Tourism Management*. *8(2)*, 79-88.
- Matijasevic-Obradovic, J., & Bingulac N. (2015). Pravni aspekti ruralnog razvoja i agroturizma u Srbiji. *Agroekonomika*, Univerzitet u Novom Sadu, *44(66)*, 82-91.

- Muritala, B., Sanchez-Rebull, M., & Harnandez-Lara A. (2020). A Bibliometric Analysis of Online Reviews Research in Tourism and Hospitality. *Sustainability*, 12(23).
- Parkovi (2021). Uticaj pandemije COVID-19 na stanje zasticenih podrucja u region Dinara, Regionalni pregled, Parkovi Dinara, Podgorica.
- Putra, A., Dona, Akhirianto, P., & Aisyah, N. (2021). Designing A Virtual Jakarta Tourism Application On Android OS And Virtual Reality Tools. *International Journal Of Science Technology & Management*. 2(5), 1460-1467.
- Radivojević, A. (2020). Turistički sektor u Republici Srbiji tokom trajanja pandemije. Kvartalni monitor, Faculty of Economics, University of Belgrade, (Fondacija za razvoj ekonomske nauke), Belgrade.
- Reyes-Menendez, A., Saura, J., & Ferrao, F. (2019). The importance of behavioral data to identify online fake reviews for tourism businesses: a systematic review. *PeerJ Computer Science*. 1-22.
- Rikhsibaevna, S., Aleksandrovna, D., Abduvohidovna, N., & Evgenievna, O. (2019). Economic and Legal Aspects of Tourism Regulation in the New Economy: International Practice. *Journal of Environmental Management and Tourism*, 2(34), 460-465.
- Supekova, S. (2021). Social Networks Communication of agritourism facilities under the influence of the COVID -19 pandemic. Faculty of Economics and Business Pan-European University in Bratislava Slovakia, 1-6.
- Viduka, D., Bašić, A., & Lavrnić, I. (2013). *Cloud Computing Kao Potencijalno Rešenje U Elektronskom Poslovanju*, Časopis iz oblasti ekonomije, menadžmenta i informatike - Biz-Info, 4(2), p. 79-85
- Wall, G. & Mathison, A. (2006), *Tourism: change, impacts and opportunities*, Pearson Education Limited, Harlow.
- Wojcieszak-Zbierska, M., Jęczmyk, A., Zawadka, J., & Uglis, J. (2020). Agritourism in the Era of the Coronavirus (COVID-19): A Rapid Assessment from Poland. *Agriculture*, 10(9), 1-19.
- Zunic Maric, T., & Djukanovic, J. (2020). Personal data protection (not) stayed because of COVID-19. Retrieved on October 12, 2020, from: <https://zuniclaw.com/COVID-19-zastita-podataka/>



The Impact of Information Technology and Software Tools on Improvement of Business of Tourism Sector in the Sarajevo Canton

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Abstract: *The Internet is undoubtedly the world's most important social phenomenon, which today is a matter of great interest and research. According to statistics on Internet use, in 2019 the number of Internet users in the world was more than 4 billion. Rise of the Internet, as well as the development of other information and communication technologies, changed significantly modern ways of communication and business in the tourism sector. The analysis of tourist demand arising from the use of information and communication technologies, software, the Internet and social networks is becoming a key element in forecasting future values given the increasingly present new trends based on the use of information and communication technologies.*

This paper aims to present the impact of IT and software tools on improving the business of the tourism sector in Sarajevo Canton.

1. INTRODUCTION

Due to the strong development of information and communication technologies (ICT) (Pradhan et al., 2021; Fernández-Portillo et al., 2020; Doong & Ho, 2012), the tourism sector has undergone several significant changes in the last few decades (Kaushal & Srivastava, 2021). The technological revolution caused by the development of the Internet has dramatically changed the market conditions of all tourism organizations. ICT is evolving rapidly, providing new tools for redirecting and developing tourism (Masaki et al., 2021; Ali & Frew, 2010).

Information technology (IT) has become a strategic weapon for the identification, presentation, distribution of tourism products and achieving sustainable competitive advantage. Tourism management is the most important candidate for using IT with the need for gathering information in large quantities and diffusion of tourism management (Inkson & Minnaert, 2018).

As we are in the information age today, it is believed that competition in the information and communication technology market has led to the accelerated development of tourism, and information and communication technologies themselves offer travel agencies opportunities to build quality relationships with their clients and partners at lower costs. Sarajevo Canton is increasingly using information and communication technologies that affect the organizational structure, culture and interpersonal relationships within travel agencies.

This paper confirms the assumption that the use of the Internet (as an important part of information and communication technology) increases the demand for tourism products in Sarajevo Canton. On the other hand, it gave tourist entities a better insight into the needs and wishes of guests.

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2. INFORMATION TECHNOLOGIES AND SOFTWARE TOOLS IN THE BUSINESS OF THE TOURISM SECTOR

The World Economic Outlook Update (IMF, 2021, p1) predicts the global economy will grow 5.5 percent in 2021 and 4.2 percent in 2022 (Jaganjac et al., 2021).

In order to highlight the essence of competitiveness in the field of tourism, the concept of tourism should first be taken into consideration, taking into account the fact that, as a phenomenon, it depends on a very wide range of factors and significantly influences the direction of the overall development of space and society in general. Tourism is a very complex economic sector, whose development has a crucial impact on the progress and prosperity of a national economy (Ilić & Nikolić, 2017).

The development and advancement of information technology has had a major impact on tourism. Internet technology is important as it can drive security and effectiveness (<https://www.e-spin-corp.com/impact-information-technology-on-tourism-and-hospitality>, September 15, 2021).

The use of information and communication technologies has the resource to transform the market from local to global and in crisis situations companies may have a better chance of surviving and improving their market position, especially in tourism where the number of competitors in the market increases almost daily (Baldigara et al., 2013).

Tourism has become a key branch of the economy in the world economy. With the advent of the Internet, there have been strong changes in tourism, as follows (Croes et al., 2021; Calero & Turner, 2020):

- the disappearance of intermediaries was encouraged,
- new intermediaries are emerging on the Internet, and traditional intermediaries have to change roles,
- direct access to end users, i.e. consumers, is provided,
- instant transmission of reliable information is ensured,
- it is possible to display the state of business in real time,
- organizational and distribution costs are reduced,
- convenience and flexibility are increased (Zekanović – Korona, Klarin, 2012).

Despite major changes in the business of travel agencies affected by information and communication technology, travel agencies are responsible for 77% of the total booking for cruising, 55% for booking air transport and 73% for booking travel packages or arrangements, which indicates that travel agencies continue to operate successfully (Buhalis, 2020).

According to market experts, the application of information and communication technology has improved communication, adaptability, productivity and speed of business deals and marketing activities. The biggest change that travel agencies have experienced under the influence of information and communication technology is the speed and availability of communication with clients precisely because of the availability of various high - tech devices. Technology will constantly grow and develop, but the success of travel agencies in the future will be reflected in the fact that it is developing towards the IT sector and including it in its future business.

Technology is revolutionizing the tourism sector and determining the strategy and competitiveness of tourism organizations and destinations (Abdulla et al., 2020). Many organizations were

predicted to be forced to transform their management and marketing strategies and redesign implementation practices to benefit from changes in technology. Technological innovations are a catalyst for development and competitiveness in tourism.

Technologies such as artificial intelligence, robotics, cashless payment, augmented (AR) or virtual (VR) reality are already used to a greater or lesser extent in various industries and countries around the world, bringing about changes that change the business of travel agencies. Smartphones and mobile devices have changed the way people communicate and interact, and therefore towards travel services. All providers, intermediaries and users of tourism services become interconnected dynamically, which ultimately creates added value for all those connected within that ecosystem (Buhalis, 2020).

In addition to the clear benefits of ICT implementation in tourism, there are negative effects such as protection of personal data and privacy, inefficient systems and system scheduling, digital isolation of a certain percentage of the population, loss of knowledge and information, endangering certain languages and cultures, lack of personal communication and even survival of the human species.

Innovations can sometimes be ahead of their time, as in the example of robotic hotels in Japan where they had to withdraw most of their robots from use due to high cost and unpopularity with users. This points to the need for further research into the advantages and disadvantages of personal and computer interaction, as well as ethical and personal data protection issues. It is very important to actively include advanced technology in all phases of performing the intermediary and tourist activity of the travel agency itself, in order to make the business more efficient and effective.

External factors are those that are outside the organization and include factors such as economic, political - legal, social, technological and environmental (Gavrić et al., 2020).

What is also important is that human resources should certainly be exposed to the greatest possible influence of information and communication technology, because in this way they expand their knowledge, gain experience and the work of the travel agency can be significantly improved.

2.1. Investing in information and communication technology

Business-oriented people often have a completely different vision of what information technology represents for a company and how information technology can be fully utilized. On the other hand, there is management in companies which in many cases does not know enough about modern information technologies, their possibilities and limitations.

People who are oriented towards information technology often do not have enough sense for the everyday needs that arise in business, the needs related to customers and users who are oriented to business processes.

Today, investing in information technology represents the largest part of every company's investment (Tang et al., 2020). In a business where the importance of information technology is growing rapidly, it represents a constant presence in modern business, and information

technology is being given increasing importance, especially when it comes to investing. By investing in information technologies, a certain competitive advantage can be gained, through which the strongest competition that appears on the modern market can be greatly suppressed.

Information and communication technology has changed the operational and strategic management of tourism in at least four important segments:

- marketing,
- strategic management,
- Internet security,
- web design and services provided to guests (Law et al., 2013).

Without successful digital marketing, today's tourism can practically not function. Social networks are an indispensable tool for promotion, and today almost 80% of hotel guests use the Internet to search for hotels, while less than 5% of them use travel agencies. Also, according to research, guests believe that the Internet is the best source of cheap arrangements.

It is estimated that Facebook currently stores about 300 PB of data. The number of new comments and likes on Facebook is around 3 billion a day. The number of video views on YouTube exceeds one billion per day. Twitter users post over 500 million tweets a day. All this data needs to be stored somewhere and enabled to be processed quickly and easily (Vinčević & Zajmović, 2021).

Table 1. Data on new actions on the Internet in one second

Data source	Number of actions in 1 sec	Data type
Instagram	754	New photos
Skype	2367	Calls
Twitter	7428	Tweets sent
Google	57511	Searched queries
YouTube	136677	Videos viewed
Email	2544176	Sent emails

Source: Vinčević & Zajmović, 2021

Today, the most widespread method for making business decisions for investing in information technology is certainly cost-benefit analysis. The biggest problem with this analysis is what benefits can be directly measurable. This makes it almost impossible to accurately quantify any business investment decision to the end (Alaei, et al., 2017).

Criteria for evaluation of investment projects in information technology can be:

- Net present value (NPV) = benefit in a given period - discounted costs in a given period,
- Internal rate of return (IRR) = NPV / discounted costs,
- Return on investment - usually in addition to the two criteria mentioned.

In order to properly analyze the investment made in information technology, managers must have information about the total value of ownership that information technology can represent. In addition to cost analysis, it is certainly extremely important to analyze the qualitative advantages and benefits that occur in the company when investing in information technology. As the increasing complexity of information technology occurs today, there are a number of situations in which it is almost impossible to predict the long-term effects of any information technology.

There are some definitions that set out common principles shared by companies with highly efficient use of information technology:

- Information technology needs to be done as a business-driven line activity;
- Information technology is the area of the greatest management that occurs in a company;
- Decisions related to information technology and funds must be made on the basis of the produced activity;
- Simplicity and flexibility need to be introduced in the technological environment;
- Continuous annual improvements in operational productivity and efficiency need to be introduced;
- It is necessary to build business-smart information organizational departments in the company (Law, et al., 2013).

What is certainly common is that it is necessary to analyze business needs and analyze the opportunities that information technology provides in solving everyday business processes and problems.

The rapid development of the Internet, information technology and e-business certainly adds even more complexity when managing information technology in companies, but these elements do not change the facts that are becoming increasingly important for the successful operation of modern companies (Bayram, 2020).

2.2. The impact of information and communication technology on the business of modern travel agencies

Today's sophisticated technology only accelerates the dive into the already existing information society which is part of the economic reality, and in which information and knowledge, as practically usable, are the decisive factor in economic and social life. The new information technology „as a high technology whose application enabled the massification of material production, the formation of the global economy“, did not create a new information society (Baletić, 1995).

Information and Communication Technology (ICT) has changed the global business environment through a wide range of tools, methodologies and functions, facilitating the strategic management and supporting firms to achieve a long-term competitive advantage (Nikoli & Lazakidou, 2019).

Information and communication technology „enables the transmission and use of all types of information and is the most natural generic technology today, and the foundation of the economy of 21st-century society. Bearing in mind the need for a successful business to be based on knowledge and experience, whose assumptions are an innovative attitude to problem-solving, and the premise for fast and reliable obtaining of information in digital form (transformation of analog information into digital), it is logical to argue that institutions, economic activities and possible relationships between companies take on the characteristics of the virtual.

The discrepancy between the temporal and spatial dimension of tourist supply and demand gives additional responsibility to intermediaries regarding the reliability of the quality of services they guarantee, contracting services with selected service providers in the destination, whose integrated content of services will be through the positive experience of tourists. “It pays off in the long run for all participants in this process. Increasing accountability reduces risk” (Cleary & Malleret, 2006).

The term „high tech to high touch“ gets its true meaning here by having an insight into the immateriality of the service and the experience provided by the space in which it is simultaneously produced and consumed. It has been proven that the positive experience that a tourist has experienced in the recent past related to the quality of the offered tourist product or simply service or even recommendation (information), influences positive aspirations and trust in relation to the product of a particular subject, thus strengthening its reputation and image (image, i.e. idea of it).

By investing time and money in the much desired experience in the destination and due to the time lag from the moment of purchase to the moment of realization, uncertainty increases for the tourist, and thus tension and emotional criticism in relation to the quality of service in the tourist destination. Information and communication progress certainly affects the competitiveness of subjects and emphasizes „intolerance“ in relation to the length and duration of the dialogue in the form of shortening the time required to respond and adapt to the increasingly demanding client (Cleary & Malleret, 2006).

In the search for greater profitability and taking on a greater global market advantage in the last three decades, „many technologies are continuously shaped, improved and changed, including reservation systems, online, interactive, video and computer reservation systems.“

The following are examples of ICT technology that have contributed to travel agencies making a significant step forward in their business and enabling them to keep up with rapidly growing new tourism trends. Here we primarily mean the use of the Internet and everything around it.

Use of the World Wide Web (WWW) system: As stated, this system allows the design of Web pages that contain various types of content, and are located on web servers and are available to all users of web systems in the world.

In the travel agency WWW system is used in several ways:

- By creating its own website and putting it on the network, the agency presents itself to potential users. On the page, it gives them information about the narrow field of tourism in which it is engaged, the services it offers, previous references. Such a site also serves to promote the agency itself, and it must be attractive so that in the “forest of agencies” that offer similar services, the customer chooses it. That is why web design has become a specialty, an occupation of some IT professionals.
- By reviewing Web sites that present interesting tourist destinations and various tourist boards online, then a Web site from accommodation, transport service providers... The agency selects destinations to offer to users, such as accommodation, entertainment, transportation, learning services. The fact that Booking.com has a database of more than 660,000 hotels worldwide and Airbnb more than a million accommodation units in 191 countries, in more than 34,000 cities, speaks about the volume of big numbers in databases.

The World Wide Web has pushed all boundaries and turned out to be a unique bridge between tourist supply and demand that easily, quickly and continuously, bidirectionally exchanges information, regardless of geographical distance and language barriers. It is a fair relationship: one-on-one communication, as opposed to traditional marketing communication using print and electronic media („one-to-many“).

More precisely, on the Internet, the consumer chooses when and what information wants to access. The customer is not just a passive recipient of a message prepared in advance by the agency, such as in an advertisement on television or radio.

Furthermore, in addition to this significant improvement in customer relations for the agency, it is especially important that the ratio of the scope and price of the promotional message on the Website is far more favorable than in advertising in print or electronic media (Dzia-Uddin et al., 2018).

There is no limit to the number of letters and seconds. The costs of advertising through the Website are reduced to the cost of creating the site itself and are negligible in relation to the fact that the agency is present online in the Internet space, so it can be said that advertising through the Website significantly reduces the agency's operating costs.

The advantage of this „Internet presence“ is that the message is addressed to the global, unlimited market, i.e. to everyone in the world who uses the Internet for 24 hours. The problem of time zones is eliminated, while the user connects to the network and opens the Web page when it suits him.

The results of such promotional activities are easier to measure than before - from the simple fact that an agency can track how many users have opened its website, to the faster response of users to messages from the website. Today, the tourism sector has to pay a lot of attention to the content generated by the tourists themselves because this feedback has an almost crucial influence in creating the offer. The reasons why users give more importance to the ratings of other users are:

- quality of assessment and suitability of such comments,
- risk reduction,
- objectivity of such assessments,
- getting recommendations,
- price optimization (Law et al., 2013).

Due to the small volume of business and high financial costs that this technology required in the very beginning, travel agencies became involved in this process relatively late, only in the 1990s. Interest and need for use are growing, especially in Europe, which is evident by the inclusion of already existing reservation systems or service providers (airlines and hotel chains) or integrated systems with multiple input-output connections of unified service providers.

Today, prominent communication technologies represent a business framework that is especially supported by European travel agencies. Therefore, according to Rayman and Molina, modern information technology will contribute to:

- reduction of transaction costs,
- realization of e-commerce by increasing the speed of exchange of goods for mutual benefit (Rayman et al., 2001).

The efficiency of the business of tourist intermediaries is based on the rapid identification of the wishes of tourists, in adapting the content and manner of their offer to the requirements of tourists, and in adapting communication (Zhang et al., 2020). For tourists, the availability of information plays a very important role when making a travel decision, with the application of ICT not only reducing uncertainty and potential risk, but further increasing the quality of travel.

According to many authors, tourism is considered an „information-rich industry“. This phenomenon is interwoven with the value of information from the initial idea to visit the destination to valuable information related to travel decisions, technical reservations, payments, whereby the overall value of the highlighted activities will be valorized by going on a trip and experiencing it (Khan, 2018).

Direct and friendly contact with employees in tourism in general cannot be underestimated, and they instill confidence in the customer that they will receive the requested service. The classic elements of the marketing mix (product, price, promotion and distribution) are also influenced by modern information and communication technology. The application of ICT has enabled the development of electronic distribution channels such as global distribution systems (GDS), central reservation systems (CRS) or online travel agencies (OTA), which are characterized by a high degree of flexibility and allow connecting tourism supply and demand globally.

The application of ICT in promotion has enabled the personalization of promotional messages, a greater degree of flexibility in promotional activities, a greater degree of interaction with end users, better public relations and improved care for end users (Mulyana et al., 2020).

The application of ICT enables the creation of prices („dynamic pricing“), as well as the creation of products („dynamic packaging“) in real time. In the promotional activities of tourist companies and destinations, Internet sites are irreplaceable today. However, unlike the situation ten years ago, when websites mostly served as electronic versions of printed promotional materials, today they have a whole range of new functionality options. The most important feature of modern Internet sites in the function of tourist promotion is the intensive use of multimedia content and the high degree of interactivity achieved through the implementation of the so-called WEB 2.035 functionality.

WEB 2.0, in addition to a high degree of interactivity, is characterized by openness, user cooperation and the ability of end users to generate content that is published on Internet sites (so-called UGC - User Generated Content).

The influence of ICT is crucial, that the competitive work of a modern travel agency without the strong support of ICT technologies would not be possible at all. It has been shown that operating costs have been reduced, with less modern technologies by reducing the number of employees and required branches, reducing office costs (telephony, photocopying ...) and advertising costs.

2.3. Importance of electronic reservation systems for travel agencies

Nowadays, when tourists are limited in time and physically often dislocated from travel agencies, the advantages of new technologies are contained in the possibilities of direct communication of users, in overcoming temporal and spatial obstacles by encouraging efficiency contained in direct contact with service providers in the destination (Nikoli & Lazakidou, 2019).

When it comes to organizing travel through a travel agency, the services incorporated in the travel arrangement are used, while the advantages of the manner and conditions of using such related services in a single tourist product are not negligible (Mihajlović, 2013).

The best known and most used global online booking systems are:

- Booking.com,
- TripAdvisor.com,
- Expedia.com.

Among Sarajevo's online reservation systems, <https://sarajevo.travel/ba> stands out the most (<https://sarajevo.travel/ba/gdje-odsjesti/hoteli>). A tourist, resource client agency, planning a trip or vacation today via the Internet can view the entire offer, as well as the offer of the competition, make a reservation, read what to expect from the hotel, where he/she can eat and drink and finally pay online. All this without seeing or directly contacting anyone from the agency. When agencies established close contact with consumers via the Internet, they no longer need so many proverbs. A large part of the work can be done from one place in the new conditions, so the agency can close most branches and thus reduce operating costs (labor, rent of space, office equipment and materials).

For the rest, the necessary part of the staff is open to ideas without borders and creativity in solving the demands of never more numerous, but also never more demanding clients. Yet large international agencies, given global coverage, retain branches in key cities as customer service. For example, Booking.com has over 70 networked branches, on all continents.

In order to place the object on the Booking.com page, in order to be available for rent, the landlord must, guided by a very well-programmed and set protocol, enter the required data and provide answers to a number of logical questions. Thus, with a series of photographs of the facility he intends to rent, the landlord gives the interested user, the potential guest, information needed to decide whether or not he or she wants to rent the offered accommodation unit.

In the process of registration of the object, the landlord receives a number of useful tips, such as how to prepare and in what standard the object for rent and the like. On the other hand, the agency attracts the guest with its pages because they are at the same time attractive, and conceived clearly and functionally, which enables the guest a pleasant search and long-term planning.

For ease of search, registered facilities are classified according to several criteria: apartments, cottages, villas, the most attractive destinations, etc. with a number of standardized information such as location, distance from the sea and beach, proximity to other facilities, parking, etc. and also rental prices.

If the guest decides to rent one of the offered facilities, the reservation performs the following steps of a simple protocol. He/she receives a booking confirmation from the agency, and the landlord receives a notification about the confirmation of the appointment. The guest pays for the use of the rented accommodation unit electronically to the agency, and the agency pays the landlord, retaining his commission. A very important part of the Internet communication between the guest, the agency and the landlord is the evaluation of the satisfaction of the guest, who is obliged to write a review after leaving the accommodation unit:

- assessment of their satisfaction with the consumed,
- assessment of the ratio between the announced and actual quality of service, equipment and cleanliness of the facility,
- kindness of the host when receiving and leaving guests,
- and according to several given criteria, to give a numerical rating of satisfaction from 1 - 10.

Since the reviews are public and go with each accommodation unit and are available to new interested parties, this has a very encouraging effect on renters to adhere to high standards of equipment of accommodation units and quality of service, to eliminate any omissions. In addition, the agency automatically updates the position of the accommodation unit on offer: at the top of the offer pages are the best rated ones. All of the above takes place with the help of ICT technology, without any physical contact of the agency with renters or guests at minimal cost to the agency. At the same time, we should not forget the sociological and psychological aspects of the previously described procedure - personal human contact has completely disappeared.

ICT allows the agency to simultaneously mediate in renting a huge number of facilities with a minimum of errors. The agency is constantly updating its databases on rental facilities and users, and they are used for all types of marketing analysis. Considering the amount of the commission of 25% and the large traffic, it can be concluded that this is a very lucrative business, which on the other hand is constantly looking for new investments in the most modern equipment. The development of ICT affects the entire tourism system and, at the same time, results in changes on the side of the tourist offer as well as on the side of the tourist demand (Rayman et al., 2001).

Thanks to the opportunities provided by ICT, tourists today are able to get more information about the destination and have more freedom of choice when choosing a destination. In this way, the disparity between the expectations of tourists and the real tourist product is reduced. Based on the information provided by ICT, tourist destinations as well as tourist companies can react quickly to changes in the tourist market by adapting existing tourist products and creating new specialized tourist products, and are also able to promote and distribute these products more efficiently.

In order to optimally adjust the reservation system, travel agencies must take into account various parameters:

- Connecting and setting up automatic updates of tourist products and their descriptions. Data may include name, brief description, product category, location, images, videos, and the like.
- Setting the method of synchronization of available capacities and availability of tourist products and their prices.
- Adjusting the layout of the booking form and the data required for booking entry. This determines which data the agency collects when booking such as customer personal information, payment information and other necessary information.
- Setting notifications to all participants in the process: customers, agency, tourist product, etc.

Notifications must be short, clear and with the necessary information such as all details of the booking confirmation, cancellation procedures, next steps and all other necessary information. Online and integrated reservation systems have their advantages and some disadvantages.

Among the advantages are the constant availability of the system and the possibility of selling 24 hours a day, saving time and human resources, increasing the efficiency of the travel agency and customer feedback. Some of the disadvantages may be a slightly longer period of the system setup itself and additional training of workers for the maintenance, use and analysis of online system data (<https://www.checkfront.com/how-to-setup-your-booking-system>, September 15, 2021).

Electronic distribution channels often have additional functionalities that allow interaction between visitors and the exchange of their opinions on various aspects of staying in an accommodation facility. These interactive functionalities are very important because they represent one of the forms of promotion through oral recommendation („WOM - word of mouth“), which is one of the most effective and credible promotional activities. In addition to independent online booking systems, a very important electronic distribution channel for small tourism businesses can be their own websites.

Compared to online booking systems, owning websites has certain advantages and disadvantages. Their main advantage is the complete control of the owners over the content published on the website, which is not the case with the content published on the online reservation systems.

2.4. Use of applications and software solutions in the business of travel agencies

Due to the fact that today's work of travel agencies is especially based on modern information and communication technology, it is important to mention the leading applications that have definitely accelerated the way of agency business, especially in the segment of the reservation process. The leading applications used in the world and recently used in the tourism of Sarajevo Canton will be further defined.

Channel manager is a service provider that connects PMS (a facility management system used by travel agencies to manage prices and units) with online channels such as Booking.com. Channel manager allows automatic updating of prices, availability and reservations on several platforms/channels at once. If a travel agency does not use PMS in its regular business, some channel managers may assign it to travel agencies.

Caesar Booking Engine is also one of the intermediaries that allows travel agencies to receive instant bookings, directly from the website easily and securely. Access to the guest is very simple: the guest simply selects dates, accommodation units, enters their personal data and clicks Complete Booking - after which the reservation comes directly to the Caesar application and synchronizes with other portals such as Booking.com, Expedia and Airbnb.

Caesar Booking Engine offers various booking payment options through Booking Engine such as taking a deposit and free cancellation deadlines.

Also, it is important to mention the leading software for travel agencies that serves to run an unlimited number of apartments combined in one place - Megabrooker.com. The main features of this software are as follows:

- Software for travel agencies has only one reservation calendar for all accommodation units - keep all descriptions, pictures, prices and availability of accommodation in one place,
- Two-way synchronization - automatic synchronization (confirmations, cancellations, reservation modifications),
- Export calendars in iCal format - the ability to export calendars in iCal format to connect calendars with numerous web portals that support this form of integration,
- Instant update of information - without the possibility of overlapping reservations because all inquiries, cancellations, modifications of reservations are automatically updated.

Megabrooker.com also has special agency functions that serve to facilitate business, and they are as follows:

- Possibility to export prices to PDF price list;
- Multilingual setting of accommodation unit descriptions;
- Receive updates or cancellations of reservations and other modifications directly to one central e-mail;
- Multi-login user interface - the travel agency can independently provide renters with login information;
- „Masterfile“ option - easier import of a large number of accommodation capacities both in MegaBooker and on online booking portals;
- Quick and easy filter - at any time the travel agency can have insight into absolutely all reservations and all possible modifications related to accommodation or renters, etc.

2.5. The impact of IT and software tools on the improvement of the tourism sector in Sarajevo Canton

Back in early 2019, the Los Angeles Times made a list of the top ten countries that should be visited in 2020. Bosnia and Herzegovina is also on the mentioned list, which is arranged in alphabetical order, more precisely, a visit to Sarajevo, Mostar and Medjugorje is recommended. Describing Sarajevo as an Olympic city, Mostar as a place of summer festival and popular for summer jumps from the Old Bridge, and Medjugorje as a popular destination for believers. It was also stressed that when visiting one of the countries, they consult the State Department website and check the security recommendations for that country.

One such recommendation is really a confirmation that Bosnia and Herzegovina has an extremely great potential in tourism, but it is still necessary to work on improving the promotion, and also the investment in infrastructure related to tourism and hospitality.

Global Analitika marked 2019 as a year in which one of the activities was the promotion of the tourist potential of Sarajevo Canton. Affordable tourism, i.e. tourism for all, enables everyone, without exceptions, to use the tourist services of Sarajevo Canton in a dignified manner.

Like other metropolises, many hotels, motels, travel agencies, and the tourism sector in general in Sarajevo Canton have recently been investing heavily in IT and software tools to improve their business. According to the survey, of the 25 respondents working in tourism, 17 have their own IT or use external staff. However, due to the complexity of technical expertise, many hotel companies choose to outsource at least part or all of their IT management.

Of the 25 respondents, as many as 20 believe that IT fully contributes to the promotion process, while 5 respondents believe that IT mainly contributes to the promotion process. None of the respondents thinks that IT does not contribute to the promotion process. However, when we look at the frequency of use of certain forms of promotion, we can point out that hotels most often use e-mail as a form of promotion (rating 4.2), followed by social networks (rating 3.7), while Google ads (rating 2.8) are used occasionally. When it comes to using their own websites, the majority of respondents or 21 (84%) believe that websites reduce the cost of promotion.

What is important to point out is that all hotels and travel agencies covered by this research, i.e. 100% of respondents answered that they use software to manage the booking process. However,

52% believe that the software for managing the reservation process fully contributes to the optimal use of accommodation capacity, while 48% state that this is not the case.

Large part of respondents, more precisely 84% of them use IT to network with partners. On the other hand, a total of 10 respondents, or 40% of respondents believe that the use of IT fully helps to achieve competitive advantage, 15 (60%) respondents believe that IT mainly helps to achieve competitive advantage.

The research was conducted where the factors that have an impact on tourism and its offer in Sarajevo Canton as information technologies were taken into account. Tourists were asked about the degree of satisfaction with information technologies in the tourist offer of Sarajevo Canton. The variables that were analyzed are the website, which means accessibility, information and up-to-dateness. Respondents assessed the extent to which they were satisfied with it, and whether it met their needs. Respondents also answered about its content and the extent to which it corresponds to the actual situation.

In addition to the mentioned variable, the surveyed tourists answered about the promotion through social networks, where they evaluated the same parameters as with the previous variable. Finally, the third independent variable, which is related exclusively to information technologies, is digital information and its accessibility for tourists.

The analysis of these three variables is based on the model of their impact on the tourist offer in Sarajevo Canton. The conclusion of this model will go in the direction of how important these variables are, and how much they affect the tourist offer in Sarajevo Canton, with precisely defined coefficients for each of them. In addition to the model, all three independent variables will be descriptively presented.

Table 2. Cronbach Alpha IT variables that affect the tourist offer in Sarajevo Canton

Financial indicators of bankruptcy proceedings	Cronbach Alpha
Website	0,682
Promotion on social networks	0,667
Digital information	0,814

Source: Author's processing

The degree of agreement of independent variables, since each indicator has more questions, was done separately, and what can be concluded is that the variables are digital information, highly compatible, while the website and promotion on social networks are somewhat less compatible between the sub-questions.

Table 3. Descriptive statistics

Financial indicators of bankruptcy proceedings	Mean	Std. Deviation	N
Website	2.7879	.68672	330
Promotion on social networks	2.5152	1.13312	330
Digital information	2.6061	.98436	330

Source: Author's processing

This model provides the best possible prediction of the value of the dependent variable based on the value of the independent variables if all assumptions are met. Based on the magnitude of the regression coefficients, we can conclude what is the relative influence or importance of each

independent variable, if these coefficients are converted into beta coefficients β . These coefficients are obtained when all values of variables are standardized.

The data from the previous table show the satisfaction of tourists with independent variables that reflect the state of the tourist offer in Sarajevo Canton. According to the analysis, it can be concluded that tourists are not satisfied with certain information technologies offered by Sarajevo Canton.

The average rating of the respondents is slightly above 2, for all three independent variables, on the offered scale from 1 to 5. The best ranked rating of all three offered is the website, which obviously provides some information, but far from necessary.

The following table analyzes the parameters of the model, which show the representativeness and reliability of the same. The model itself depends on the analyzed parameters, as well as its accuracy and reliability, in order to draw certain conclusions.

Table 4. Model parameters

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.637 ^a	.701	.571	0,4913	.309	37.954	5	324	.000	1.791

a. Predictors: (Constant), Website, Promotion on social networks, Digital information

b. Dependent Variable: Tourist satisfaction with IT technologies

Source: Author's processing

Analyzing the model, one can conclude an extremely high correlation between the variables. The coefficient of determination is 0.701, which is also the representativeness of the model, so this model explains 70.1% of the variables, while the rest is influenced by some factors unknown to us.

The adjusted coefficient of determination is slightly lower, and it is 0.571. The standard error of the model is significantly smaller than the standard deviation ($0.4913 < 1.44$), which shows that this model reduces the deviation from the descriptive statistics. The Durbin - Watson test shows a small negative autocorrelation, which is 1,831, since this test value is approximately 2, so it can be concluded that the degree of autocorrelation is acceptable.

Table 5. ANOVA test model

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	217.862	5	40.322	27.954	.001 ^b
	Residual	491.835	324	1.567		
	Total	709.697	329			

a. Dependent Variable: Tourist satisfaction with IT technologies

b. Predictors: (Constant), Website, Promotion on social networks, Digital information

Source: Author's processing

The quotient of the square and the average of the residuals give the empirical value of the F test. Based on the sample size and the empirical value of the F test, we obtain the significance value, which in the case of multiple regression is 0.001. ANOVA test tests dependent and independent variables in order to determine the relationship between the mentioned variables.

In this case, the analysis showed that there is a compatibility of dependent and independent variables, and that it is statistically significant. Based on the above, it can be concluded that these variables have a high degree of dependence. Therefore, the hypothesis is proven, i.e. there is a significant relationship between dependent and independent variables, and the coefficient of determination is significant, because $p = 0.001 < 0.05$.

Table 6. Model coefficients

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.039	.516		4.224	.000		
	Website	.630	.119	.540	5.995	.001	.807	1.201
	Promotion on social networks	.712	.165	.617	9.987	.000	.812	1.214
	Digital information	.818	.071	.290	.807	.039	.887	1.036

a. Dependent Variable: Tourist satisfaction with IT technologies

Source: Author's processing

Based on the previous table, it can be concluded that the multiple regression model, i.e. the function looks like this:

$$Y = 2,039 + 0,63X_1 + 0,712X_2 + 0,818X_3$$

Where is:

X_1 – Website,

X_2 – Promotion on social networks,

X_3 – Digital information.

Based on the previous function of the multiple regression model, it can be concluded that the greatest impact on tourist satisfaction in Sarajevo Canton, and when it comes to information technology have digital information and the least impact of websites. According to the above, it can be concluded that the management of Sarajevo Canton should pay special attention to digital information, if it wants to improve information technology within the tourist offer, and thus increase tourist satisfaction and create conditions for increasing the number of visits in the future.

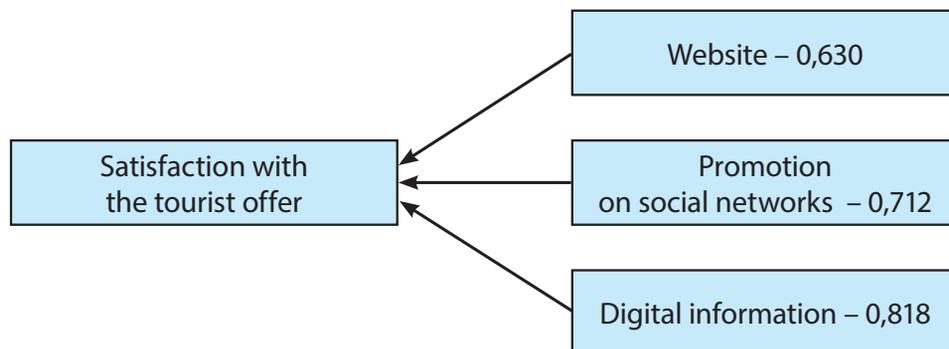


Figure 1. Model of the influence of independent variables on the dependent variable

Source: Author's processing

3. CONCLUSION

The presence of computers is one of the basic characteristics of today's modern business in tourism, and thus in the tourism sector of Sarajevo Canton. In business conditions, which are characterized by increasingly demanding customers, frequent and rapid changes in the market, intense competition, the application of new information technologies is of strategic importance to every hotel company, travel agency and the like.

Information technologies enable the exchange of knowledge, information, capital and services and enable the tourism sector to offer its services 24 hours a day, which is very important since they operate in a global market that does not know the borders of countries and different time zones.

Management must respond quickly and adequately if it wants to maintain its position in the market, and for this reason they are increasingly using information technology to better and more easily exchange information and resources between their departments and between themselves and partners, manage human resources and choose those who need additional education, maintain and improve connections with clients and attract new clients, and make work more enjoyable, efficient and successful. One of the key factors with technology is the human factor because without it, technology alone does not bring much.

REFERENCES

- Abdulla, S. A. M., Khalifa, G. S., Abuelhassan, A. E., Nordin, B. B., Ghosh, A., & Bhaumik, A. (2020). Advancement of Destination Service Quality Management Technology in Tourism industry. *Journal of Critical Reviews*, 7(11), 2317-2324.
- Alaei, A. R., Becken, S., Stantic, B. (2017). Sentiment analysis in tourism: Capitalising on Big Data. *Journal of Travel Research*, Vol.58.
- Ali, A., & Frew, A. J. (2010). *ICT and its role in sustainable tourism development*. In Information and communication technologies in tourism 2010 (pp. 479-491). Springer, Vienna.
- Baldigara, T., Štambuk, A., & Mamula, M. (2013) Doprinos modeliranju e-turističke potražnje. *Fakultet za menadžment u turizmu i ugostiteljstvu*. Opatija.
- Baletić, Z. (1995). Ekonomski leksikon. Zagreb: *Leksikografski zavod „Miroslav Krleža“ i Masmedia*.
- Bayram, G.E. (2020). Impact of Information Technology on Tourism. *The Emerald Handbook of ICT in Tourism and Hospitality*.
- Buhalis, D. (2020). Technology in tourism-from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article. *Tourism review*.
- Calero, C., & Turner, L. W. (2020). Regional economic development and tourism: A literature review to highlight future directions for regional tourism research. *Tourism Economics*, 26(1), 3-26.
- Cheng, C. Y., Chien, M. S., & Lee, C. C. (2021). ICT diffusion, financial development, and economic growth: An international cross-country analysis. *Economic modelling*, 94, 662-671.
- Cleary, S., Malleret, T., Risques: Perception, Evaluation, Gestion, Maxima, Paris, 2006.
- Croes, R., Ridderstaat, J., Bąk, M., & Zientara, P. (2021). Tourism specialization, economic growth, human development and transition economies: The case of Poland. *Tourism Management*, 82, 104181.
- Doong, S. H., & Ho, S. C. (2012). The impact of ICT development on the global digital divide. *Electronic Commerce Research and Applications*, 11(5), 518-533.
- Dzia-Uddin, D. N., Hashim, S.A., & Mohd Isa, Z. (2018). Self-Service Technologies Influencing Guest Satisfaction In Hotel Industry. *Journal of Hospitality and Networks*.

- Fernández-Portillo, A., Almodóvar-González, M., & Hernández-Mogollón, R. (2020). Impact of ICT development on economic growth. A study of OECD European union countries. *Technology in Society*, 63, 101420.
- Gavrić, T., Obhodaš, I., & Jakupović, E. (2020). Prepreke za implementaciju korona zakona na sektor malog i srednje poduzetništva u Bosni i Hercegovini. *Časopis za ekonomiju i tržište komunikacije*. <https://partner.booking.com/hr/pomoc/channel-managerom/što-je-channel-manager-i-koje-su-njegove-prednosti>, Retrieved September 1, 2021
- <https://sarajevo.travel/ba/gdje-odsjeti/hoteli>, Retrieved August 28, 2021
- <https://www.checkfront.com/how-to-setup-your-booking-system>, Retrieved September 1, 2021
- <https://www.e-spincorp.com/impact-information-technology-on-tourism-and-hospitality/>, Retrieved September 8, 2021
- <https://www.springer.com/journal/40558>, Retrieved September 8, 2021
- Ilić, I., Nikolić, A. (2017). Implications of modern technology development for the tourism of the Republic of Serbia. *University of Niš*, Niš.
- Inkson, C., & Minnaert, L. (2018). *Tourism management: An introduction*. Sage.
- Jaganjac, J., Obhodaš, I., & Zajmović, M. (2020) Forecast of The Impact of Covid-19 on Consumption and Employment in Bosnia and Herzegovina Using the Trend Method. *International Journal of Sales, Retailing & Marketing*.
- Kaushal, V., & Srivastava, S. (2021). Hospitality and tourism industry amid COVID-19 pandemic: Perspectives on challenges and learnings from India. *International Journal of Hospitality Management*, 92, 102707.
- Khan, Y.H. (2018). The Effects of ICT Application on the Tourism and Hospitality Industries in London. *Comilla University*.
- Law, R., Buhalis, D., & Cobanoglu, C. (2013). Progress on information and communication technologies in hospitality and tourism. *International Journal of Contemporary Hospitality Management*.
- Masaki, E. A., John, M. W. F., & Abel, M. C. (2021). Impact of ICT tools and apps on tourism destination marketing. a case of RDB and Marriot hotels, Kigali, Rwanda. *International Journal of Social Science and Economic Research*, 6(4), 1232-1249.
- Mihajlović, I. (2013). Dinamika utjecaja novih trendova u turizmu primjenom ICT-a i posljedice transformacijskih procesa na poslovanje turističkih agencija. *Poslovna izvrsnost*.
- Mulyana, A., Briandana, R., & Rekarti, E. (2020). ICT and social media as a marketing communication platform in facilitating social engagement in the digital era. *International Journal of Innovation, Creativity and Change*, 13(5), 1-16.
- Nikoli, G., Lazakidou, A. (2019). The Impact of Information and Communication Technology on the Tourism Sector. *University of Peloponnese*.
- Pradhan, R. P., Arvin, M. B., Nair, M. S., Hall, J. H., & Bennett, S. E. (2021). Sustainable economic development in India: The dynamics between financial inclusion, ICT development, and economic growth. *Technological Forecasting and Social Change*, 169, 120758.
- Rayman–Bacchus, L., Molina, A. (2001). Internet-based tourism services: business issues and trends. *Futures*.
- Tang, J., Wang, W., & Yu, Z. (2020). Globalisation, ICT investment and firm dynamism. *Transnational Corporations Review*, 12(2), 193-202.
- Vinčević, V., Zajmović, M. (2021). Big Data Concept and Usage in Modern Crisis Businesses. *SKEI 2021*.
- Zekanović-Korona, Lj., Klarin, T. (2012). Internet: informacijsko-komunikacijska platforma za nove načine putovanja. *Medijska istraživanja: znanstveno-stručni časopis za novinarstvo i medije*.
- Zhang, D., Tu, J., Zhou, L., & Yu, Z. (2020). Higher tourism specialization, better hotel industry efficiency?. *International journal of hospitality management*, 87, 102509.



Integrated Approach to Developing a Parking Model in Tourist Destinations

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Abstract: *Parking is becoming a problem of equal importance for hotels and hotel guests in car-travel tourist destinations as well as in air-travel tourist destinations. This paper examines the problems that tourists encounter when seeking to park their own or rented passenger cars, and it explores the importance and modes of parking within the passenger transport chain in tourism. The primary aim of this paper is to underscore the importance of a holistic approach to building a parking model in tourist destinations. The research results are based on the method of interview, descriptive statistics and ANOVA test. The main finding of this paper indicates that parking areas become an essential part of passenger transport logistics chains in tourism.*

1. INTRODUCTION

The hotel industry of the twenty-first century finds itself in the same situation as tourism, with regard to dynamic and sweeping changes focused on continuously improving the quality of the hotel product. By opening up to their environments, hotel business systems are developing logistics chains and networks (Stipanović & Rudan, 2016) in collaboration with stakeholders (air and bus transporters, taxi services, rent-a-car agencies...) based on shared business objectives. Contemporary trends in tourism are characterised by the huge role of cars in travel (Juan, et al., 2016). Understandably, therefore, the parking service – providing spaces for hotel guests' cars when not in use - is an element of the hotel product (Jeong & Jeon, 2008), because car usage alternates between periods when cars are in motion and periods when they are stationary (Christiansen, et al., 2017). Despite this fact, parking is rarely the subject of scientific research; when it is, though, a traditional approach seems to prevail in studies that completely fail to take modern development concepts in the environment into consideration or does so only marginally (Knoflacher, H., 2006). Satisfying the traffic and tourism demand for movement and immobility, in qualitative as well as quantitative terms, is a crucial determinant of the broader context of mobility in tourist destinations (Asero et al., 2013). This makes it all the more important to replace the traditional approach to parking (Barter, 2014), based on isolated research of the phenomenon, with a holistic approach (Remoaldo & Ribeiro, 2015) that can help to identify and suggest parking models from the perspective of the entire tourist destination (Paul & Eagles, 2002), as a precondition to ensuring tourists' quality and speed of movement thus enabling them to better consume the tourism offering (Marsanic & Mrnjavac, 2015).

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Studies on parking capacities (Roig, 2011) in Croatian tourist destinations and on the satisfaction of tourists with parking services indicate that capacities are insufficient and the level of satisfaction with this service is low (Rudancic-Lugaric, 2014). Hotels and tourist destinations are expected to provide parking spaces for their guests' cars during their stay (Parmar, Das & Dave, 2020); otherwise, failure to provide such services may result in dissatisfaction with the hotel product and the tourist destination as a whole (Manhas, Manrai, Manrai, 2016).

The Republic of Croatia belongs to the group of Mediterranean tourist destinations. Fully 79% of tourists arrive by road, 64% of the total number arrive in passenger cars, 85% of all tourist traffic takes place in coastal areas, and 39% of tourists use hotel accommodations (Čorak & Marušić, 2019).

In coastal destinations, traffic congestion is caused by inadequate traffic infrastructure, outdated conceptions, poor organization, and incompetent traffic management. The same is true for stationary traffic (Litman, 2016).

Destinations differ not only in terms of tourism attractions, but also in terms of how they approach the parking issue (Muñuzuri, Alho, Silva 2020). In the majority of the tourist destinations this problem is solved with public parking lots (Eran, 2012) that charge motorists for parking. Given that seasonality is a major feature of Croatian tourism, such an approach is reasonable. Only a few tourist destinations try to solve the parking problem with constructing parking garages. Such destinations are typically cities with a bigger population, which produces year-round demand for parking services.

In the summer season when the hotels are fully booked, few hotels are able to supply enough parking spaces, hence car parking places shortages are common in almost all of the hotels surveyed. Parking garages are common in newly built or extensively remodelled hotels, and they typically offer a larger parking capacity.

Hence, this paper investigates the parking issue in two tourist destinations in Croatia – Istria County and Primorje-Gorski Kotar County – that are distinctly car-travel destinations.

2. THEORETICAL FRAMEWORK AND RESEARCH PROBLEM

Most hotels recognise their guests' needs for parking space and see this service as part of their hotel product (Mrnjavac & Maršanić 2018). Depending on the availability of parking capacities, parking management can differ significantly from one hotel to another. Hotels possessing their own parking capacities have a great advantage because they can dispose of them in accordance with the occupancy of their accommodation capacities. By charging for parking space (Mingardo, 2011) by the hour and employing people to handle parking, parking capacities can be managed in a way that can ensure maximal usage while satisfying demand (Latinopoulou, et al., 2012).

Hotels of the highest categories that have their own parking garages (which is the highest standard of car parking), as a rule, do not have a sufficient number of parking spaces relative to the number of accommodation units they possess. The reasons for this may vary, ranging from location and availability of space (Jakle & Sculle, 2004) for building a parking garage, across architectural feasibility and construction costs, to the structure of guests with regard to transportation

means, the profile of guests, the usual activities of guests during their stay in a hotel that entail using a car, and others. Clearly, good knowledge of demand (Hyeonup, et al, 2017) contributes to the efficient management of parking capacities and the related logistics chains. Nevertheless, the need to use public car parks may arise occasionally.

The below section provides an overview of an integrated parking model with related passenger transport logistics chains (Christopher, 2011) for ensuring tourists' quality and speed of movement within tourist destinations (Figure 1).

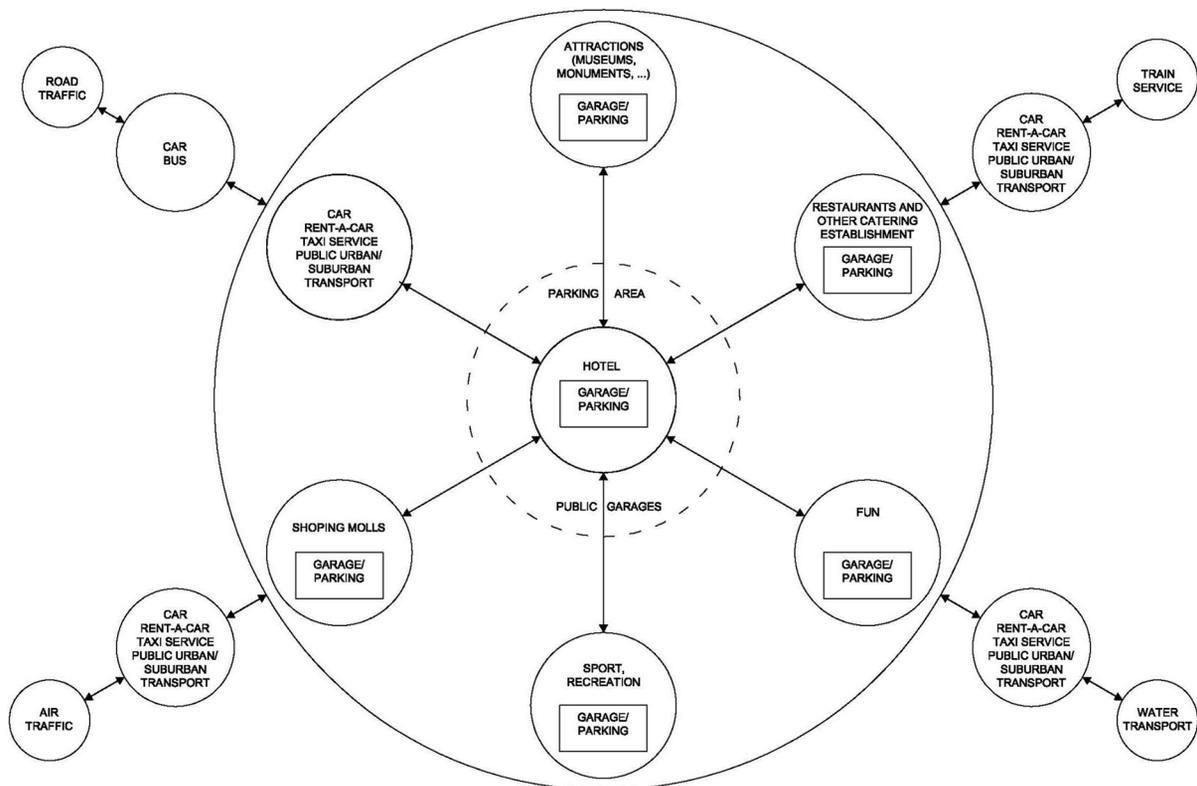


Figure 1. Integrated parking model with related passenger transport logistics chains

Source: Authors

Networking at the destination level is essential to ensure the efficient flow of passengers within the logistics chain needed to provide parking spaces to hotel guests (Asero, Gozzo, Tomaselli, 2015). Accordingly, the integrated parking model comprises three basic links of a tourist destination's passenger transport logistics chain. The first link is the hotel and its garage capacity (hotel's own parking garage or car park). The second link represents public car park capacities that hotel guests may or may not necessarily use, while the third link refers to the parking capacities of other providers in the tourism offering.

The mutual relationship between the links of the passenger transport logistics chains within a tourist destination (Honggang, Zhenying, Xingyu, 2016) and the environment is made up of different types of transport: road traffic (private and public), air traffic, rail traffic, and water traffic. The relationship between the external environment and the passenger transport logistics chain is based on the level of development of infrastructure, upon which the accessibility of a tourist destination depends. The movement of tourists from one service/facility in the tourism offering to another is based on the local infrastructure that increasingly includes environmentally-friendly

forms of traffic (bicycles, mini tourist trains, funicular railways, small free-of-charge natural gas-fuelled tourist buses, electric scooters, etc.) as well as walking. The offering of additional ways for tourists to get around within a tourist destination is aimed at increasing the accessibility of tourism services/facilities, while eliminating or minimising the movement of passenger cars within the tourist destination (Le-Klähn, et al., 2015).

Stakeholders participating in this are destination management organisations (that develop a well-designed integrated product for the destination), local government and self-government (that provide good traffic organisation, primarily to ensure better quality of life and facilitate economic activities) and enterprises as parking service providers (that seek to generate as much revenue as possible from parking services). In spite of the fact, mentioned earlier, of tourism being subject to very dynamic change, networking in the logistics chain to satisfy the parking needs of guests outside the hotel should be of a more permanent nature so that, if the need arises, a good alternative solution can be provided to guests through the rapid exchange of information via previously arranged channels.

Hotel facilities in city centres (Klementsitz & Stark, 2007) are often located in pedestrian zones, making it impossible for them to ensure their own parking spaces in the vicinity for all their guests. When this is the case, a logistics chain is needed to provide transport to guests to and from a remote parking place, in particular during guest arrivals or departures, either using the hotel's own vehicles or rented vehicles or by using local transport operators, without charging guests for parking services or charging only a token fee. Shuttle service can provide an optimal solution in the case of increased frequency of guests between the hotel and a remote car park. A hotel could also make more effective use of its parking capacities by hiring a car park attendant responsible for overseeing the use of the hotel's car parking facilities or it could provide valet parking whereby hotel drivers would take the guests' cars to and from either the hotel's car park/parking garage or public ones. The logistics chain pertaining to a remote public car park and a hotel could include bus drivers and buses that also encounter considerable problems relating to movement and immobility in "road-travel" destinations (Rosa Anna La Rocca, 2009).

3. RESEARCH SAMPLE AND METHODOLOGY

Research using a questionnaire was conducted during the 2019 summer tourist season on a sample of N = 596 guests in Istria County and Primorje-Gorski Kotar County, two distinctly car-travel destinations in Croatia. Table 1 shows the share of guests in the sample by country of origin.

The importance of a systems' approach to building an integrated parking model and related logistics chains is underscored by the fact that both counties possess airports and sea ports, while Primorje-Gorski Kotar County also boasts developed railway connections with Central, Eastern and South-eastern Europe.

The sample (N = 596) consists of 357 men (59.9%) and 239 women (40.1%). The educational structure of the respondents is exceptional, given the fact that fully 68.2% of the respondents possess higher education qualifications and 36.24%, have secondary school qualifications. Only 5.5% of respondents have only an elementary school education (Table 2).

Table 1. Share of guests, by country of origin

<i>Name of the Country</i>	<i>Count</i>	<i>Cumulative – Count</i>	<i>Percent</i>	<i>Cumulative-Percent</i>
Croatia	140	140	23.48993	23.4899
Austria	99	239	16.61074	40.1007
Germany	65	304	10.90604	51.0067
Italy	62	366	10.40268	61.4094
Slovenia	59	425	9.89933	71.3087
Slovakia	24	449	4.02685	75.3356
Czech Republic	24	473	4.02685	79.3624
Hungary	19	492	3.18792	82.5503
Bosnia and Herzegovina	15	507	2.51678	85.0671
Australia	8	515	1.34228	86.4094
Other countries	81	596	13.5906	100.00

Source: Authors, based on results obtained by surveying guests

Table 2. Demographic characteristics of respondents

		N	%
SEX	Male	357	59,9
	Female	239	40,1
AGE	18-25	70	11,75
	26-35	132	22,15
	36-49	182	30,53
	50-64	176	29,53
	65+	36	6,04
EDUCATION	Elementary school	33	5,54
	Secondary school	216	36,24
	Faculty	308	51,68
	PhD	39	6,54
TOURIST TYPE	Host	140	23,49
	Foreign	456	76,51

Source: Authors, based on results obtained by surveying guests

In addition to data on the demographic characteristics of the respondents, data were also collected regarding the presence of parking problems in hotels, the success of managers in resolving parking problems, the sufficiency of parking places in hotels, the ways in which parking is organised, the methods of collecting parking fees, and the importance of parking services for guests when choosing a hotel. The collected data were analysed using methods of descriptive statistics.

4. RESEARCH RESULTS AND DISCUSSION

The relationship between the domestic and external environments and the links of a tourist destination's passenger transport logistics chain is based on the level of development of the traffic infrastructure. A well-developed traffic infrastructure is a primary factor of the accessibility of a given tourist destination (Willson, W. R. 2015).

As a result, parking is a micro-service element of the hotel product, reflecting a gap in the logistical process of visitor movement caused by their stay at the hotel. Without understanding the characteristics of tourist demand - dynamics, seasonality (Fawcet, 2000), the structure related to modes of transportation, length of stay in a hotel, purchase power, age, education, special interests, and so on - efficient organization and management of the segment of the hotel supply

chain that includes parking is impossible. It should be remembered that hotels that are open all year have a significant advantage in terms of supplying parking places for their customers, as opposed to hotels that have a clear seasonality in their operation. Simply because of this fact, as well as other primarily financial reasons, hotel management may be motivated to try to eliminate seasonality in their commercial operations.

Data presented in Table 3 show that all countries with a Tourism and Travel Competitiveness Index ≥ 5 belong to the group of countries with highly developed traffic and tourism infrastructure.

Table 3. Level of development of traffic infrastructure in leading countries, as per Tourism and Travel Competitiveness Index

Name of the Country	Travel & Tourism Competitiveness Index	Air transport infrastructure	Ground and port transport infrastructure	Tourist service infrastructure
Spain	5.4	5	5.2	6.6
France	5.4	4.8	5.6	5.7
Germany	5.4	4.9	5.7	5.9
Japan	5.4	4.8	6	5.7
U.S.A.	5.3	5.9	4.9	6.6
Great Britain	5.2	5.2	5.4	6.1
Australia	5.1	6	3.6	6.1
Italy	5.1	4.4	4.7	6
Canada	5.1	6.6	3.9	6.1
Switzerland	5	6	6.1	6.2
Austria	5	4.2	5.2	6.7

Source: Authors prepared according to: [www.http://reports.weforum.org/travel-and-tourism-competitiveness-report-2019/country-profiles](http://reports.weforum.org/travel-and-tourism-competitiveness-report-2019/country-profiles) (23 December 2020)

Table 3 shows that Canada (6.6), Australia (6), Switzerland (6) and the U.S.A. (5.9) are countries with the most developed air transport infrastructure. These countries are also exceptionally powerful air-travel tourist destinations. Switzerland has the most developed ground infrastructure, which classifies it as a powerful car-travel destination as well. Based on the data in Table 3, a brief descriptive statistic of the level of development of traffic and tourism infrastructure in leading countries as per the Tourism and Travel Competitiveness Index is given in Table 4.

Table 4. Descriptive statistic of the level of development of traffic and tourism infrastructure in leading countries, as per the Tourism and Travel Competitiveness Index

	Air transport infrastructure	Ground and port transport infrastructure	Tourist service infrastructure
MEAN case 1-11	5.25	5.11	6.15
MEDIAN case 1-11	5	5.2	6.1
SD case 1-11	0.76	0.80	0.34
VALID_N case 1-11	11	11	11
SUM case 1-11	57.8	56.3	67.7
MIN case 1-11	4.2	3.6	5.7
MAX case 1-11	6.6	6.1	6.7
_25th% case 1-11	4.8	4.7	5.9
_75th% case 1-11	6	5.7	6.6

Source: Authors' calculations

The leading world countries with a competitiveness index equal to or greater than 5 also have an average traffic infrastructure development index higher than 5. According to the Tourism and Travel Competitiveness Index, Croatia (4.5) is ranked 27th out of 140 countries. With an index of 3.6 for air transport infrastructure, however, Croatia is ranked 44th, while its index of 3.9 for ground and port infrastructure puts it at only 47th place. As the ground and port infrastructure index is a composite index, it should be noted that with regard to road infrastructure Croatia has a score (5.5) above the average of the leading countries, marking it as an attractive car-travel destination and ranking it 18th in the world by road infrastructure quality. Croatia is continuously engaged in improving its air, ground and port infrastructure, to be able to attract as many foreign tourist arrivals as possible. Railway traffic in Croatia, however, is not up to the mark, with an index of 2.7 for railway traffic development. The importance that railway traffic has for Croatian tourism became evident during the summer tourist season of 2020 and the COVID-19 crisis when large numbers of tourists from the Czech Republic and Slovakia arrived in Croatia by train.

The arrival at a hotel of tourists, either in their own or rental passenger car, is a crucial moment in creating first impressions about a tourist destination (Latinopoulon, M. S. et al., 2012). By “taking care” of the cars of its guests, a hotel helps to reduce the pressure placed on public parking areas, while enabling guests to move about in the destination without having to worry about their cars. Guests are then able to focus on the activities they plan to take part in (recreation, sports, entertainment, relaxation...) and places they intend to visit (historical and cultural sites, events, food and wine offering...), without having to concern themselves with questions such as “Where am I going to park? (Palmer, & Ferris, 2010) Will I find a parking place? (Klappe-necker, Lee, Welch, 2014) If I do find one, what then? How long can I leave the car? (Pupavac, Maršanić, Krpan, 2013) How much will I have to pay for parking? (Simicević, Milosavljević, Maletić, 2012)”.

Finding the right answers to the above questions is very important because almost every third guest stays in hotels (Figure 2).

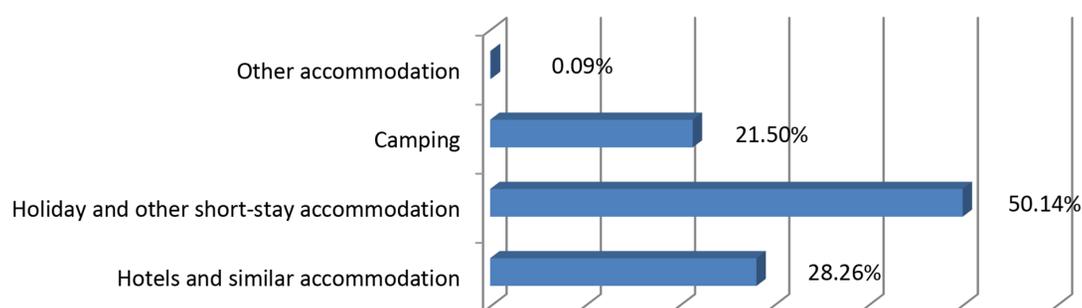


Figure 2. Tourist nights, 2019

Source: Authors prepared according to: Croatian Bureau of Statistics, First Release, No 4.3.2., Zagreb, 5. march, 2021., pp. 4

To enable visitors to freely plan their activities and movements in the destination without the use of their cars, certain conditions are required. This means putting in place a functional system comprising other traffic modalities and based on the principles of multimodality. Hotel guest parking is affected by a series of factors from the environment that should be included in the supply chain. In this way, the need of people for movement to achieve the desired goal or simply to get around is brought to the forefront. The focus should be on providing a feeling of comfort, ensuring environmental protection, and encouraging exercise and healthy living habits (Eran, B. J., 2012).

Hence, the respondents were asked the following question: Does the hotel where you are staying have enough parking places for its guests? (Table 5).

Table 5. Does the hotel where you are staying have enough parking places for its guests?

	<i>Count</i>	<i>Cumulative – Count</i>	<i>Percent</i>	<i>Cumulative-Percent</i>
Yes	332	332	55,70470	55.7047
No	264	596	44,29530	100.0000

Source: Authors, based on results obtained by surveying guests

Table 4 indicates that fully 44.29% of respondents believe the hotel enterprise does not have enough parking places for its guests. The findings of the study back up the idea that offering a parking space is an important part of the hotel service. On the basis of supply-chain, cognition was defined about the factors of the hotel guests parking model. The supply chain is identified as an optimal method for meeting demand for parking services, which guests regard as a vital component of the hotel product whose quality, in turn, determines the guest’s level of happiness with their stay. The model encompasses mobility and multimodality as modern concepts of moving about tourist destinations.

The hotels in which respondents were staying provide parking places (Herin & Akkara, 2019) for their guests in one of the four following ways (Table 6).

Table 6. Providing parking places for hotel guests

	<i>Count</i>	<i>Cumulative – Count</i>	<i>Percent</i>	<i>Cumulative-Percent</i>
on-street	283	283	47,48322	47,4832
off-street	118	401	19,79866	67,2819
Garage	104	505	17,44966	84,7315
Other	91	596	15,26846	100,0000
Missing	0	596	0,00000	100,0000

Source: Authors, based on results obtained by surveying guests

Table 6, featuring the ways (Hongwei, et al, 2012) hotels provide parking for their guests, shows that only 17.45% of hotel enterprises provide parking places in their own garages, while 19.80% of hotels provide off-street parking and fully 47.48% provide for on-street parking. Hence, it comes as no surprise that as many as 36.91% of guests did not pay a parking service fee (Table 7).

Table 7. Collection of parking fees by hotels

	<i>Count</i>	<i>Cumulative – Count</i>	<i>Percent</i>	<i>Cumulative-Percent</i>
Included	117	117	19,63087	19,6309
Free-of-charge	220	337	36,91275	56,5436
Separately	259	596	43,45638	100,0000
Missing	0	596	0,00000	100,0000

Source: Authors, based on results obtained by surveying guests

As the conducted study showed that one in four hotel guests had parking problems (Maršanić, et al., 2021), the following section of this scientific discourse examines the impact of the organisation of hotel parking services on the issues that guests have with parking (Figure 3).

Figure 3 suggests that guests encountered the least problems with parking when hotels provided off-street parking or parking in their own parking garages, while guests experienced the most problems with parking when on-street parking was provided by hotels. Accordingly, at a significance level of 5%, we can conclude that the parking alternatives provided by hotels are not equally effective, with on-street parking service being the least effective.

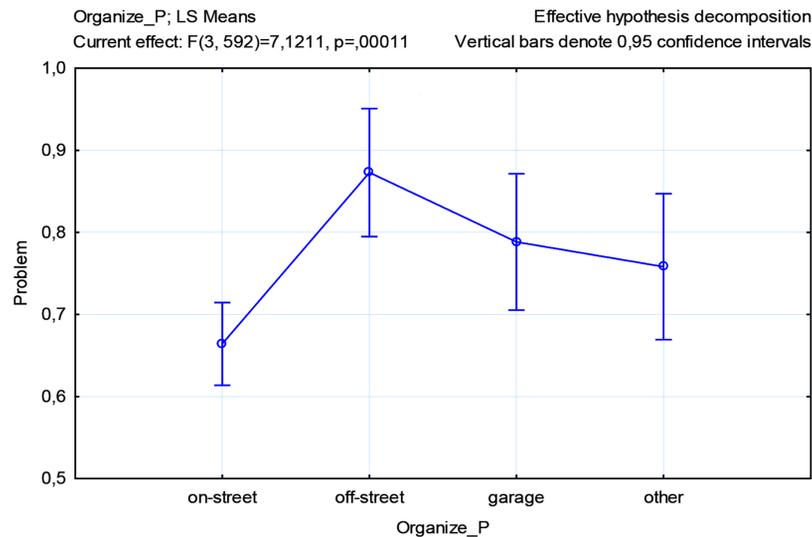


Figure 3. Variance analysis

Source: Authors, based on results obtained by surveying guests

5. CONCLUSION

Dynamic and unpredictable changes in the economic and political environment, combined with potential service users' ability to make quick decisions thanks to the Internet, social media, mobile apps, and other IT tools, are forcing hotel business systems to constantly question and correct their business decisions, adjust their hotel offerings to meet new demand requirements, and improve quality while lowering prices.

To do so as efficiently as possible, hotels develop various forms of cooperation with interest-based partners, in which they face numerous challenges, the most difficult of which is determining how and in what ways to efficiently manage their own capacities in conditions of seasonality and highly variable demand, while also acknowledging the business objectives of partners and meeting demand requirements.

As a result, parking has become a major issue for hotel management, as transportation, which has aided the development of many tourist sites, is increasingly becoming a limiting element in terms of tourist destination quality. It is reasonable to predict that parking problems in hotel facilities will worsen and that a successful solution will necessitate new ideas and an interdisciplinary approach. When even 64 percent of all tourists arrive by automobile, as in the Republic of Croatia, it is very vital to provide enough space for cars to park in a fixed state in tourist hotspots, which is important both for each destination and for providers of certain parts of the tourist offer. Accordingly, parking is part of a segment of services that make up the hotel product on a micro level, signifying a disruption in the tourist movement process aimed at staying in the hotel. Hotel corporations use a variety of criteria to supply parking places for their guests, as they are exposed to a variety of circumstances.

The task of passenger transport logistics chains in tourism is to bring passengers to a specific tourist destination suitably and safely, at a reasonable price and at a reasonable time. Traffic infrastructure development ensures the accessibility of tourist destinations. The leading countries as per the Tourism and Travel Competitiveness Index have highly developed traffic infrastructure, thus confirming the fact that countries seeking to develop inbound tourism must pay the greatest attention to developing modern infrastructure. In recent times, in particular in car-travel tourist destinations, there is a

growing problem relating to passenger-car parking and to the lack of parking places and public parking garages. A holistic approach involving all stakeholders is essential for this problem to be resolved efficiently and effectively.

The parking services provided by hotel enterprises need to be considered within the parking system of the tourist destination. There are two reasons for this: one, hotel enterprises are forced to make up for any shortage of hotel parking capacities by using public car parks and, two, the availability and quality of parking services has a direct and crucial impact on the ratings of tourist destination quality.

A tourist destination's integrated parking model must connect its links – hotels and their parking garages and parking areas, public parking areas and public car parks, and the parking areas of other tourism supply providers – with various other forms of transport chains – air traffic, road traffic, rail-road traffic and water-based traffic.

When viewed in this way, parking areas become an essential part of passenger transport logistics chains in tourism. The results of the research point to the shortage of parking capacities in tourist destinations, in particular during the tourist season. The guests of hotels that provide on-street parking have the most complaints about parking.

The results of this research should be considered indicative, due to a sample that consists only of hotel guests in the car-travel tourists' destinations. The references are relatively poor because similar research has not been performed. Therefore, it would be advisable to go on with more detailed research based on a wider sample which should include hotels and their guests from the air-destinations and use a more complex methodology. It should be interesting to deepen our knowledge about the difference in parking services among different kinds of hotels.

Sufficient capacity and convenient location of parking spaces increase the guest's satisfaction and herewith the quality of the hotel product. Therefore, the hotels should provide parking spaces for their guests, with a minimal divergence between the hotel capacity and adequate parking capacities. When hotels are in a process of renovation, investors should give priority to the parking spaces in relation to the number of hotel rooms and some other elements of the hotel offer. Such a concept should accept more expensive building solutions like for example the construction of the underground garages, which is often the only solution for older buildings located in the city centres. In short term more expensive building solutions will be paid in the long term off through better room occupancy due to the higher quality of the hotel product. Such a solution will further encourage the hotel management to adopt and implement strategies to reduce the seasonality of the business.

REFERENCES

- Asero V, Gozzo S and Tomaselli V (2015) Building tourism networks through tourist mobility, *Journal of Travel Research*, 55, pp. 751-763
- Asero, V., D'Agata, R., Gozzo, S. and Tomaselli, V. (2013). Tourism Mobility among Destinations: An Application of Network Analysis. In *Analysing Local Tourism: A Statistical Perspective*, edited by A. M. Oliveri and S. De Cantis. Maidenhead, UK: McGraw-Hill Education, pp. 309-24
- Barter A. P. (2014). A parking policy typology for clearer thinking on parking reform, *International Journal of Urban Sciences*, Volume 19, 2015 - Issue 2, pp. 136-156.

- Christiansen, P., Øystein Engebretsen, Ø., Fearnley, N., Hanssen, U.J., (2017). Parking facilities and the built environment: Impacts on travel behaviour, *Transportation Research Part A: Policy and Practice*, Volume 95, pp. 198-206, <https://doi.org/10.1016/j.tra.2016.10.025>).
- Christopher, M. (2011) *Logistics and Supply Chain*, Management 4th ed. London: Prentice Hall.
- Čorak S., Marušić Z. (2019). Attitudes and Expenditures of Tourists in Croatia, TOMAS summer 2019. Institute for tourism. Zagreb.
- Eran, B.J. (2012) *Rethinking a lot: The design and culture of parking*, Massachusetts Institute of Technology, First MIT Press paperback edition, London.
- Fawcett P., 2000, *Managing Passenger Logistics*, Kogan Page, London.
- Herin K.J., Akkara, J. (2019). Study of “On-Street” and “Off-Street” Parking Choice Behaviour, *International Journal of Advanced Research in Computer and Communication Engineering*, National Conference and Seminar on Innovations in Engineering & Technology, Govt Polytechnic College, Vol. 8, Special Issue 1, pp. 79-84.
- Honggang X., Zhenying X., Xingyu H. (2016). Land Policy and the Production of Tourist Destinations in China: A Case Study of the Tourist Industrial Park in Guangdong, *Asian Journal of Tourism Research*, Vol. 1, No. 1, pp. 125-149.
- Hongwei G., Ziyong G., Xiaobao Y., Xiaomei Z., Wuhong, W. (2012). Modeling Travel Time under the Influence of On-Street Parking, *Journal of Transportation Engineering*, Vol. 138, Issue 2, [https://doi.org/10.1061/\(ASCE\)TE.1943-5436.0000319](https://doi.org/10.1061/(ASCE)TE.1943-5436.0000319).
- Hyeonsup, L., Grant, T. W., Dua, A., Joseph, A., Ziwen, L., Davis, W. P., Christopher, Cherry, R. (2017). Alternative Approach for Forecasting Parking Volumes, *Transportation Research Procedia*, Vol. 25, pp. 4171-4184, <https://doi.org/10.1016/j.trpro.2017.05.360>.
- Jakle, A. J., Sculle, J. A. (2004). *Lots of parking: land use in a car culture*, University of Virginia press, Charlottesville and London.
- Janak Parmar, J., Das, P., Dave, S. (2020). Study on demand and characteristics of parking system in urban areas: A review, *Journal of Traffic and Transportation Engineering (English Edition)*, Volume 7, Issue 1, pp. 111-124.
- Jeong, M., Jeon, M. (2008). Customer Reviews of Hotel Experiences through Consumer Generated Media (CGM), *Journal of Hospitality & Leisure Marketing*, Vol. 17(1-2), pp. 121-138, Available online at <http://www.haworthpress.com>.
- Juan, Li, Jing Ye, Qinglian He, Chunfu Shao (2016). A Novel Scheme to Relieve Parking Pressure at Tourist Attractions on Holidays, *Sustainability* 2016, 8 (2), 164, <https://doi.org/10.3390/su8020164>.
- Klappenecker, A., Lee, H., & Welch, J. L. (2014). Finding available parking spaces made easy, *Ad Hoc Networks*, Elsevier BV, Vol. 12, pp. 243–249., <https://doi.org/10.1016/j.adhoc.2012.03.002>.
- Klementsitz, R., Stark, J. (2007). Parking fees and parking capacity restrictions at leisure centres and their influence on the visitor’s travel behaviour, *Suvremeni promet*, Hrvatsko znanstveno društvo za promet, Vol. 27, 1-2., Zagreb.
- Knoflach, H. (2006). A New Way to Organize Parking: the Key to a Successful Sustainable Transport System for the Future, *Environment Urbanization* 2006, Vol. 18, pp. 387–400., <https://doi.org/10.1177%2F0956247806069621>.
- Knoflach, H., 2006. A new way to organize parking: The key to a successful sustainable transport system for the future, *Environment and Urbanization* 18(2), pp. 387-400.
- Latinopoulou M.P., Basbas, S., Papoutsis, K., Sdoukopoulos, E. (2012). Parking Policies for Supporting Sustainable Mobility, *Procedia Social Behavioral Sciences*, Vol. 48, pp. 897–906., <https://doi.org/10.1016/j.sbspro.2012.06.1067>.
- Le-Klähn D.-T., Roosen, J., Gerike, R., Hall, C.M. (2015). Factors affecting tourists’ public transport use at destinations and areas visited, *Tourism Geogr.* 17, 1–20.

- Litman T. (2016). *Parking Management, Strategies, Evaluation and Planning*, Victoria Transport Policy Institute, www.vtppi.org/park_man.pdf.
- Manhas, P., Manrai, L., Manrai, A. (2016). Role of tourist destination development in building its brand image: A conceptual model, *Journal of Economics, Finance and Administrative Science*, <http://dx.doi.org/10.1016/j.jefas.2016.01.001>.
- Maršanić, R., Mrnjavac, E. (2015). Role of Parking in the Hotel Supply Chain Management, *LogForum, Scientific Journal of Logistics*, Vol. 11, No. 4, pp. 387-397.
- Mingardo, G. (2011). The legitimacy of raising revenue, Perception of the urban parking problem, *Parking Trend International*, publication of the European Parking Association, Köln, Volume 25, 1.
- Mrnjavac, E., Maršanić, R. (2018). Parking – An Element of Hotel Product Quality, *Scientific Project Supply Chain Management in Hospitality Industry*, University of Rijeka, Faculty of Tourism and Hospitality Management, pp. 19-32.
- Maršanić, R., Mrnjavac, E., Pupavac, D., Krpan, L.J. (2021). Stationary Traffic as a Factor of Tourist Destination Quality and Sustainability. *Sustainability* 2021, 13, 3965. <https://doi.org/10.3390/su13073965>
- Muñuzuri, J., Alho, A., João de Abreu e Silva (2020). Evaluating freight loading/unloading parking zones characteristics usage and performance in Southern, *European Transport \ Trasporti Europei*, Issue 73, Paper n°5.
- Palmer, D., Ferris, C. (2010). Parking measures and policies research review. *Transport Research Laboratory*.
- Paul, F.J. Eagles (2002). Trends in Park Tourism: Economics, Finance and Management, *Journal of Sustainable Tourism*, 10 (2), pp. 132-153, DOI:10.1080/09669580208667158.
- Pupavac, D., Maršanić, R., Krpan, Lj. (2013). Stationary traffic – the contemporary phenomenon in the logistics system of a tourist destination. *DIEM*, 1 (1),
- Remoaldo, P. C. & Cadima Ribeiro, J. (2015). Holistic approach, tourism. In Jafari, J. & Xiao, H., eds., *Encyclopedia of Tourism* (pp. 430–431). Cham: Springer International Publishing.
- Roig, A. (2011). *Data Collection by the European Parking Association Scope of Parking in Europe*, European Parking Association, Köln, Germany, (<http://www.europeanparking.eu>).
- La Rocca, R. (2009). Parking Policies in Tourist Cities, *TeMA - Journal of Land Use, Mobility and Environment*, Vol. 2, Number 1, <https://doi.org/10.6092/1970-9870/65>.
- Rudancic-Lugaric, A. (2014). Integrated quality management of a tourist destination – the key factor in achieving a competitive advantage, *INTERDISCIPLINARY MANAGEMENT RESEARCH X*, Josip Juraj Strossmayer University of Osijek, Faculty of Economics in Osijek, Croatia.
- Simicević, J., Milosavljević, N., Maletić, G. (2012) Influence of Parking Price on Parking Garage Users' Behaviour, *Promet – Traffic & Transportation*, Vol. 24, No. 5, pp. 413-423.
- Stipanović, C., Rudan, E. (2016). Tourism Product Club in Generating the Value Chain, *Polish Journal of Management Studies*. Vol. 14, No 2., Poland.
- Willson, W. R. (2015) *Parking management for smart growth*, Island Press, Washington.
- [www.http://radboud.academia.edu/KMartens/Papers/550770/Effects_of_Restrictive_Parking_Policy_on_the_Development_of_City_Centers](http://radboud.academia.edu/KMartens/Papers/550770/Effects_of_Restrictive_Parking_Policy_on_the_Development_of_City_Centers), (10th December 2020).
- [www.http://reports.weforum.org/travel-and-tourism-competitiveness-report-2019/country-profiles](http://reports.weforum.org/travel-and-tourism-competitiveness-report-2019/country-profiles) (23th December 2020).



What We Can Learn from the Process of Urbanization of a Mountain Tourist Resort: The Zlatibor Case

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Abstract: Serbia started the transition in 2000 using a neoliberal development approach. Since 2012, a populist model of development has been underway. In such an environment the mountain tourist resort of Zlatibor became an example of an inadequate decision-making process, with inevitable negative long-term outcomes. Speeding up in reforming construction permits, unfortunately, made room for too fast urbanization of Zlatibor.

Granting construction permits on the local level, without a comprehensive development plan of the destination as a broader development frame, was a wrong reforming step. It is complicated by political fighting between the top (Republican) level and local level of governing, regarding interests. An additional problem is related to the wrong defined place for decision – making process. Namely, Zlatibor became too large and too rich for its local capital, Čajetina.

The aim of the paper is firstly, to envisage development problems of Zlatibor, potentially “Mountain Kaludjerica”, like ecological, infrastructure and touristic disaster, if rapid, chaotic urbanization continues, and secondly, to point out some institutional, decision making and practical steps toward neutralization of these negative outcomes.

1. INTRODUCTION

Zlatibor became a top touristic location in Serbia during the last decades. During the Covid-19 disease, in the last two years, even more, tourists were interested to come, because of the closeness of the main international destinations for Serbian tourists.

One can be sure that everyone would welcome the construction of new touristic accommodations on Zlatibor to cover the gap between modest tourist and hospitality capacities till recently and the increasing demand for international and domestic tourists. Also, economists and the public were satisfied with improving the business environment by the time during the transition, including an important step forward in the construction permit time frame, which was shortened from more than a year to one month at least. However, these improvements made room for the urban mess on Zlatibor, caused by the explosion of too many high buildings constructed on the mountain in a short period.

The interest of investors is clear, to fulfill the increasing demand for apartments. The increasing demand for apartments is caused by citizens to invest in real estate as secure and unfortunately a rare opportunity for investments in Serbia and also by professionals in tourism, who are aware of modest capacities on the site in quality and quantity terms. The interest of the local municipality is also clear, to gain in the short-term revenues for taxes from the construction permits, from higher tourists' consumption and in the long term from revenues from the tax on immovables, which are

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collected on the municipal level. The only problem is related to the acceptable measure of this construction euphoria. Namely, these particular interests are not in line with principles of neither sustainable (tourist) development, nor in line with a green economy (low carbon), in other words, not in line with the long-term public interest and defined sustainable development strategy of Serbia.

The aim of the paper is twofold. Firstly, to point out that the hectic urbanisation of Zlatibor is not the right path for both levels of decision-making, the local community and the direction of tourist development of Serbia, so the national level, as well. Too aggressive urbanisation, in the long run, would ruin the climate spa of Zlatibor, make infrastructural problems and finally, push tourists away from the site. Also, the authors tried to find out the causes in decision - making process and institutional weaknesses for this negative outcome. Secondly, the authors pointed out that this negative outcome is not inevitable. In other words, more important is to find a solution, as to converse this speedy, chaotic urbanization process into a more comprehensive, less carbon producing development of Zlatibor mountain and the Zlatibor region.

2. THE METHODOLOGY USED

In order to fulfill the aims of the paper, the authors used several methods. Firstly, based on data available from the Republican statistic office, SORS and Republican Tourist Organization for the tourist traffic and its revenues one can find that Zlatibor is the top mountain tourist destination in Serbia and among the main in general, as well. It is important fact considering that Serbia defined tourism as its development priority. The analysis of tourist and hospitality capacities was made and confronted to financial and economic performances of Zlatibor mountain, as a touristic destination in order to point out the gap between the increasing demand for tourist services and the high potential of the site, on the one hand, and modest capacities in quality and quantity terms and modest economic performances, on the other. Available development documents and analyses on the Republican and local levels were also used to clarify whether they are up to date or in line with principles of sustainable, green agenda.

The SWOT analysis was performed in order to clarify development potentials, strengths and at the same time weaknesses and threats of Zlatibor in more broaden the content of the Zlatibor region, ZR. SWOT analysis can be an important and powerful tool in strategic, spatial and urban planning and development. It means that Zlatibor mountain and its contemporary development has to be examined in the context of the whole Zlatibor region, as Zlatibor mountain itself can be a leading force in the Region, if would develop in the right direction, but can hamper a lot of people and economic subjects of the whole region if the development would realize in the wrong direction, like now.

In order to find appropriate solutions to overcome the chaotic urban development of Zlatibor, which is underway, three scenarios approach was developed by the authors: an optimistic, a realistic and a pessimistic one. The optimistic scenario is developed to emphasize that there is room to transform chaotic, hectic urbanization into an overall comprehensive, harmonized, green development of the region under consideration. Moreover, it was explained how to do it, in institutional and legal meaning. The authors pointed heavy, difficult, necessary changes in the decision-making process and institutions responsible for the development and its governing. The realistic scenario is developed to point to the transformation possibilities which are not so heavy but plausible or will happen in the longer run. The pessimistic scenario is developed with the purpose to warn all decision-makers responsible for the development of the Zlatibor

region if continue with fast, non - controlled urbanization of Zlatibor mountain. In other words, to point out what would be the final negative outcome if continue with chaotic urbanization.

The authors are aware that the paper is limited, considering that it is focused on one development problem, although there are more than one. Also, the paper is limited as the area analysed is the Zlatibor Region only, although better insight could be to analyse tourist potential and development problems of the West Serbia Region. However, in this case, the paper should be out of the limit required by the editor.

3. TOURISM AS A DEVELOPMENT PRIORITY

The Republic of Serbia, as one of its development priorities, in its Development Strategy (2011) emphasized the strengthening of tourism as an economic activity that has significant potential to contribute to accelerated GDP growth. Since the entry into the 21st century, a number of programs have been defined aimed at raising the quantity and quality of tourism capacities in order to make tourism revenues a more significant item in the formation of domestic products, especially in the form of foreign exchange inflows. The Ministry of Tourism of Serbia has prepared, and the Government of the Republic of Serbia has adopted, the Strategy for the Development of Tourism of Serbia for the period 2016-2025 (2016), which defines the development goals in the field of tourism, and one of the basic is the sustainable development of activities and contribution to a more balanced regional development of the country.

The area of Western Serbia is one of the most interesting and potential tourist regions in the country. The two main tourist destinations in this area are the mountains Zlatibor and Tara, while the mountain of Zlatar is unjustifiably neglected in the development plans to date. However, in the first place according to the results achieved is Zlatibor, which at the level of the whole of Serbia dominates as the main destination of mountain tourism with over 35% of the total nights spent.

Table 1. The Tourist traffic, Republic of Serbia, mountain centres 2013 - 2015

Resort	Tourist arrivals			Number of nights		
	2013	2014	2015	2013	2014	2015
Zlatibor	93.858	87.671	114.493	388.344	348.253	456.161
Kopaonik	70.301	61.496	87.453	293.746	271.763	362.945
Tara	52.498	48.117	54.140	210.391	194.564	208.953
Divčibare	21.962	14.960	22.180	98.463	68.253	97.271
Ivanjica	13.274	9.322	6.592	69.336	40.625	34.861
Zlatar	5.895	6.092	8.230	14.114	24.086	24.109
Rudnik	6.670	3.287	3.967	42.536	20.539	25.557
Stara Planina	10.155	9.570	12.905	30.014	34.291	44.555
Goč	8.031	6.985	7.606	49.241	39.638	44.459

Source: Ministry of Trade, Tourism and Telecommunications RS

4. ZLATIBOR AS A TOURIST DESTINATION

Zlatibor is the centre of the tourist region of Western Serbia. The main administrative centre of Zlatibor is Čajetina, which is located on the northern slopes of the mountain 3 km from the centre of Zlatibor and is the seat of the municipality. Zlatibor is 230 kilometres away from Belgrade, and it is reached by the main road via Užice, which continues to the Montenegrin coast.

It is decorated with plenty of green spaces, parks, baths and cultural events. The most developed activities in this region are agriculture, food industry and tourism.

As a destination that should represent an oasis of natural peace, Zlatibor has great natural potential that greatly complements anthropogenic values, which is reflected in the development of various forms of tourism in this area. It has exceptional natural-geographical conditions. Bearing in mind that the atmospheric pressure on Zlatibor is extremely favourable, its geographical position is protected from the impact of cold air currents, staying on this mountain has a favourable effect on the preservation of health, which is why Zlatibor was declared a therapeutic area for various respiratory and other diseases. This allows visitors to combine the characteristics of mountain and spa tourism at the same time.

A considerable part of this mountain has the appearance of a wide covered plateau, whose average height is about 1000 meters above sea level. Elevations rise above the edges of the plateaus, with Tornik (1496 m) and Čigota (1422 m) standing out prominently, while numerous elevations can also be observed in the interior of the plateaus. About 80% of the territory of Zlatibor consists of a hilly-mountainous part, which is inhabited from 600 to 1100 m above sea level.

In terms of the climate of this area, it can be noted that Zlatibor is represented by a temperate continental climate, which is intersected by elements of the mountain climate. Climate suitability is reflected in the high degree of oxygen present, but also in moderately cold winters (the lowest mean temperature in January is -3.4°C) and mild summers (the highest mean temperature in August is 16.8°C)

Zlatibor is characterized by relatively low humidity (76%), as well as reduced rainfall (about 990 mm on average per year), compared to other similar areas. Since insolation is also favourable (164.7 hours per month or 1976.5 hours per year), Zlatibor stands out with clean and dry air, with relatively low humidity.

Zlatibor has great potential especially for more recent modes of tourism, like eco-tourism, green tourism, and alternative tourist activities. In this respect, Zlatibor belongs to a small group of areas in Serbia with the most precious and particular natural characteristics of the kind.

5. IMPORTANCE OF ZLATIBOR FOR THE MUNICIPALITY OF ČAJETINA

When looking at the demographic trends in this area of the country, it can be concluded that the trend of population decline is still present here, as well as in most of Serbia. However, in its administrative environment, the municipality of Čajetina has the smallest population decline, thanks to Zlatibor as a tourist centre of great importance, as a source of income generation and employment in this municipality. This can best be seen in Table 2.

The importance of tourism for the municipality of Čajetina is also evidenced by the fact that out of 5,450 employees in 2018, as many as 1,285 or almost one quarter were employed in the accommodation and catering industry. Also, in the same year 2018 over 44% of all investments in this municipality were in tourism (RSD 1,056,861 thousand out of a total of RSD 2,392,355 thousand). When all this is added to the indirect effects of tourism consumption - the purchase of domestic food products, housework, transport services and more, it can be noted that tourism and hospitality are one of the most important economic activities that are the basis of the existence of Čajetina.

Table 2. Population 2011-2018.

Year	Zlatibor area	Čajetina municipality
2011	286.825	14.735
2012	284.216	14.632
2013	281.475	14.522
2014	278.771	14.413
2015	276.210	14.343
2016	273.629	14.404
2017	271.680	14.509
2018	268.393	14.564

Source: SORS, Population Statistics, 2019

6. OVERVIEW OF ZLATIBOR TOURIST AND ACCOMMODATION CAPACITIES

Accommodation facilities in Zlatibor represent one of the most important factors in the tourist offer and together with wellness, spa and restaurant capacities most affect the volume of tourist traffic in this region. Therefore, the development of accommodation facilities in Zlatibor that offer wellness and spa services is pointed out as well as the implications for the further development of this tourist segment, which can greatly provide an increase in interest throughout the year. The development and richness of the accommodation offered in the area of Zlatibor can best be seen from the following review:

Table 3. Tourist capacities, number of beds – Zlatibor

HOTELS (5 stars)		
Hotel „Tornik“	600	*****
HOTELS (4 stars)		
Hotel „Palisad“	550	****
Hotel „Mona“	300	****
Hotel „Olimp“	100	****
Hotel „Iris“	81	****
Hotel i apartmani „Mons“	63	****
Hotel „Mir“	60	****
Hotel i spa „Idila“	44	****
Total (1)	1798	
HOTELS (3 stars)		
Hotel „Zelenkada“	143	***
Hotel „Prezident“	30	***
Total (2)	173	
HOTELS (2 stars)		
Hotel „Dijamant“	60	**
Hotel „Novakov Dvor“	30	**
Total (3)	90	
PANSIONS		
SPC „Zlatibor“ - Wai Tai	60	***
CMC klub „Satelit“	53	**
Total (4)	113	
HOSTELS		
„Braća Sekulić“	180	
„Sport trim“	110	
„Kačun“	41	
TO Zlatibor	18	
Total (5)	349	

APARTMENT SETTLEMENTS		
„Zlatiborski konaci“	812	***
„Kraljevi konaci“	324	**
Total (6)	1136	
Total (1+2+3+4+5+6)	3659	
RESORTS		
„Dunav“	74	
SO „Ratko Mitrović“	284	
Vila „Javor“ DMB	11	
GP „Zlatibor“	104	
BIP	34	
Ineks –intereksport	30	
Kirilo Savić	30	
Partizanski put	10	
Planum	80	
GP „Ratko Mitrović“	50	
RJ Railway	8	
C-market	39	
RTV	55	
Koža	10	
Valjaonica Sevojno	70	
Namateks	15	
MUP „Narcis“	87	
Elektromorava	35	
EPS	51	
ŽTP Užice	8	
JKP vodovod	6	
Naftagas	43	
Dečije odm. „Sunčani breg“	215	
Dečije odm. „Golija“	196	
Feršped	22	
Adventistička crkva (Adra)	60	
NAP Novi Sad	36	
„Big-geneks“	50	
Total (6)	1713	
Total (1+2+3+4+5+6)	5372	
SPECIAL HOSPITAL		
SB ČIGOTA	341	
FAMILY HOSTELS		
Family hostel „Zlatibor“	44	
CAMPING		
„Zlatibor“	200	***
Total (1+2+3+4+5+6+7+8+9)	5586	
PRIVATE ACCOMODATION		
	1120	22,4% ****
Over 5.000 categorised beds:	3260	65,2% ***
	620	12,4% **
Categorised in Rural Tourism	400	
Total categorised beds	5400	
Total uncategorised beds	12000	
Grand Total	23357	

Source: Tourist Organisation of Zlatibor

7. TURNOVER ACHIEVED

The tourist region of Zlatibor is one of the most visited mountain areas in Serbia with a share of almost 20% in the total number of nights realized. According to official data regarding mountain towns in 2015, it can be seen that Zlatibor is the leader in the number of arrivals over Kopaonik and in the number of nights over other places.

Table 4. The number of arrivals in the Republic of Serbia in 2015

2015	Arrivals					
	Total	Index	Domestic	Index	Foreign	Index
Republic of Serbia	2.437.165	111,2	1.304.944	112,2	1.132. 210	110,1
Mounting resorts	446.189	119,7	366.829	121,6	79.360	111,8
Zlatibor	148.372	132,5	114.493	130,6	33.879	139,5
Kopaonik	102.198	141,1	87.453	142,2	14.745	134,8
Tara	59.236	112,5	54.140	112,5	5.096	111,9
Divčibare	23.128	137	22.180	148,3	948	49,3
Ivanjica	6.711	66,2	6.592	70,7	119	14,5
Zlatar	9.568	129,8	8.230	135,1	1.338	104,8
Rudnik	4.417	119,9	3.967	120,7	450	113,4
Stara planina	17.141	139,1	12.905	134,8	4.236	154,1
Goč	7.606	108,9	7.606	108,9	-	-

Source: Ministry of Trade, Tourism and Telecommunications RS

Table 5. Number of overnight stays in the Republic of Serbia in 2015

2015	Overnights					
	Total	Index	Domestic	Index	Foreign	Index
Republic of Serbia	6.651.852	109,3	4.242.172	108,1	2.409.680	111,5
Mounting Resorts	1.661.487	117,7	1.419.156	118,6	242.331	112,7
Zlatibor	556.751	130,4	456.161	131	100.590	128
Kopaonik	427.383	132,3	362.945	133,6	64.438	125,4
Tara	221.467	107,2	208.953	107,4	12.514	103,5
Divčibare	99.793	140,5	97.271	142,5	2.522	90,8
Ivanjica	35.127	82,4	34.861	85,8	266	13,4
Zlatar	27.541	101,3	24.109	100,1	3.432	110,7
Rudnik	29.662	127,3	25.557	124,4	4.105	149,1
Stara planina	6.586	131,8	44.555	129,9	12.031	139,3
Goč	44.459	112,2	44.459	112,2	-	-

Source: Ministry of Trade, Tourism and Telecommunications RS

Based on the data in the table above, one can conclude that the tourist destination Zlatibor is one of the leading mountain areas in Serbia. Mountain tourist spots in the country record mostly the highest number of visitors during the winter season, as well as during the summer holidays.

For a more detailed analysis, the presentation of the achieved results in the tourist traffic on Zlatibor in the period from 2010 to 2016 is given below. Before the analysis itself, one must bear in mind that there are certain differences in the statistical monitoring between the Republic Statistical Office and the Tourist Organization of Zlatibor. Namely, the local tourist organization monitors and records the results on a sample of 2000 beds in registered (categorized) accommodation capacities and can be considered more reliable (the sample is smaller but the records are more accurate as only categorized accommodation capacities are monitored).

Table 6. Tourist traffic in Zlatibor 2010 - 2015.

Year	Domestic arrivals	Overnights	Foreign arrivals	Overnights	Total Arrivals	Total Overnights
2010	88.039	352.583	16.785	51.641	104.824	404.224
2011	96.776	410.833	19.526	64.467	116.302	475.300
2012	92.749	401.706	18.185	61.660	110.934	463.363
2013	93.858	388.344	21.118	67.415	114.976	455.759
2014	87.671	348.253	24.292	78.578	111.963	426.831
2015	114.493	456.161	33.879	100.059	148.372	556.751

Source: Ministry of Trade, Tourism and Telecommunications RS

Table 7. The number of nights in Zlatibor on the sample with approximately the same number of beds for the period 2010-2016 years - TOZ records

Year	Total Overnights	Increase %	Increase 2010=100.
2010	299.421	4,70%	----
2011	341.477	+14%	+5.02%
2012	276.732	-19%	-7.6%
2013	283.049	+2,30%	-5.5%
2014	291.268	+2.9%	-2.8%
2015	334.395	+14.8%	+11.6%
2016 (7 months)	228.724	+14,5%	+12.3%

Source: Tourist Organisation of Zlatibor

Thus, statistics show that the number of arrivals and the number of nights spent by both domestic and foreign tourists is increasing year by year. This puts some strain on the natural ecosystem and contributes to the increasing congestion of the mountain by the number of people who reside in the area at the same time. The feeling of enjoying the rest and relaxation is beginning to decline, as the increasing level of noise, pollution of the space and the inability to reach the destination make many tourists choose to visit Zlatibor. It should be emphasized that Zlatibor is one of the few tourist destinations in Serbia where the season is almost throughout the year, as can be seen from the following table (data for 2015 is illustrated only):

Table 8. Tourist turnover measured by the number of arrivals and overnight stays in 2015 in Zlatibor

Month	Number of arrivals		Number of Overnights		Average stay of days		Total average stay	Total nights spent
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign		
I	5.778	1.999	28.119	7895	4,87	3,95	4,63	36.014
II	5.729	1.292	23.113	4296	4,03	3,33	3,90	27.409
III	4.807	969	16.376	2699	3,41	2,79	3,30	19.075
IV	4.305	1.401	14.853	3956	3,45	2,82	3,30	18.809
V	6.645	2.144	23.470	5742	3,53	2,68	3,32	29.212
VI	6.133	1.826	24.412	5504	3,98	3,01	3,76	29.916
VII	5.673	2.997	27.592	11808	4,86	3,94	4,54	39.400
VIII	6.779	3.382	33.246	12141	4,90	3,59	4,47	45.387
IX	5.399	1.789	19.915	4949	3,69	2,77	3,46	24.864
X	6.090	1.690	19.423	3692	3,19	2,18	2,97	23.115
XI	5.102	1.139	16.461	2898	3,23	2,54	3,10	19.359
XII	5.403	1.744	17.500	4335	3,24	2,49	3,06	21.835
Total	67.843	22.372	264.480	69915	3,90	3,13	3,71	334.395

Source: Ministry of Trade, Tourism and Telecommunications RS

8. THE SWOT ANALYSIS OF THE ZLATIBOR REGION

In this section, the basic elements of a SWOT analysis were prepared, as well in addition a three scenarios approach. It is important to note, like Vujošević et al did (2008), that the tourist resort of Zlatibor mountain is necessary to examine from the development point of view in broader content of the Zlatibor Region, which includes municipalities, as follows: Užice, Čajetina, Arilje, Kosjerić, Požega, Prijepolje, Nova Varoš, Sjenica, Ivanjica.

Strengths

The Zlatibor Region, ZR is situated on the crossroads of the Adriatic coast and Montenegro, on the one hand, and Bosnia and Hercegovina, on the other hand. At the same time, it is important to be aware that it is out of the main Serbian development line north-south and out of the European corridors the tenth and seventh. Natural sources, like water and forest, can be seen as important development potentials, as their share in total Serbian sources are above the average. Non - less its biodiversity, geographical, geological sources and preserved ecosystem are also important. Considering tourism one can see recent dynamism, long tradition and relatively well-developed hospitality capacities. An important role in the future would have human sources and social capital, which can be assessed as good quality, but at the same time non - fully utilized. Zlatibor Region is, with its considerable territorial capital (TC), and especially with the so-called, soft TCs (institutional arrangements, human capital, capacity readiness of public authorities to include various actors in debating development prospects, and similar), definitively above the republican average, like Vujošević et al noted (2010). Recently, several laws related to eco - preservation were enacted and some institutional, organizational and administrative restructuring took place.

Weaknesses

In the Zlatibor Region, like in the rest of Serbia, regional discrepancies are high and were widening during the period of transition, with a trend of territorial polarization, as an inevitable outcome. On the one side, Užice and Čajetina became more advanced, while the group of underdeveloped municipalities widened. Regarding traffic infrastructure, one has to be aware that the Region is out of the European corridors in the tenth and seventh, so roads and railways are with low technical standards. A limiting factor for tourist development and green food production relates to numerous ecological problems, water, air and soil pollution and hot spots of waste management. The Region is not excluded from a common problem in Serbia, like Vujošević stated (2010), non - existence of strategic documents for sustainable development and low institutional, organizational and human resources, HR management, non-efficient administration and serious problem of the long-term, vide non – legal construction. The municipal and local budgets are faced with low financial volume, not enough sources to support local and private initiatives and interests. Forest, although rich is in danger in the long run, because of non-rational use, over capacities cuts and slow renewable sources. Tourism, as an important economic potential, is limited with non-optimal and non-planned development and use, cattle production not in line with tourist demand, as well medical plants production, fruits production and eco-food production. Ecosystem preservation is in danger, as it is partially devastated, with low financial, institutional, organizational and HR capacities. Rural areas are facing negative trends, like demographic decline and low infrastructure standards.

Opportunities

As Boljanović and Hadžić found out (2017) it seems that the interest of foreign direct investors and foreign investment inflow are increasing during the last several years, among others for investments in tourism, infrastructure and eco - preservation. As for its geographical position, the Region is, no doubt, largely handicapped by its distance from the so-called „Belgrade confluence”, or the metropolitan region of Belgrade and Novi Sad („Serbian spatial banana”), where on the some 10-15% of the total territory of Serbia more than 2/3 of the Gross Domestic Product, GDP of Serbia has been produced. However, such a position is more than compensated by ZR being a macro-regional hub for the adjacent regions in Montenegro and Bosnia and Hercegovina, at least when contemplating future development potential and prospects of these areas of the former Yugoslavia. In effect, the adjacent areas in the other two neighbour-states may well assume the role of cooperative partners in devising a common platform, especially regarding the prospects in tourism. Existed metal manufacturing companies, aluminium and copper, and engineering companies, as well, are in a good shape, already restructured and can be seen as a basis for industrial recovery. There is solid potential for traditional and renewable energy sources exploitation. Public Private Partnership, PPP need some legal improvement in order to become an important development vehicle. Both the municipal authorities and regional instances should continue with broadening the space for public dialogue in development and similar matters, e.g., via strengthening various institutional interfaces for dialogue between political-administrative actors and various other actors of the public at large (scientific community, non - governmental organizations NGOs, cooperatives and their respective associations, citizens’ associations, etc.). Human sources are at the same time relatively well developed, but below their full utilization, namely in agriculture, metal production and tourism. The region is rich in natural sources and biodiversity, so it can be used well after the necessary neutralization of hot spots, preservation of water springs and implementation of local ecological plans (including creating a cadastre and pollution data basis). Traffic can be used better in the function of sustainable development if rehabilitate roads and railways and especially with finishing the highway Belgrade - Požega – Montenegro (Bosnia and Herzegovina) and the transformation of the airport Ponikve for the civil use. Rural areas would be connected to the development of sustainable businesses, like green food production, and rural tourism, with the assumption to invest in infrastructure, sanitary dumps, health services and agricultural cooperatives. Zlatibor has a great potential for the development of new sorts of tourist activities like eco-tourism, green tourism, and alternative tourist activities. In this respect, Zlatibor belongs to a small group of areas in Serbia with the most precious and particular natural characteristics of the kind.

Threats

The most important limit for sustainable development is hesitation and opposition to continue post-socialist transition reforms and strengthen dialogue and create consensus on strategy issues. The Zlatibor Region suffers as well as Serbia, as Vujošević noted (2010), from a crisis of strategic thinking, research and management. Namely, the country found itself stuck in the ‘development schizophrenia’, denoting the existence of more than one thousand various strategic development documents, on the one hand, and a lack of exit strategies to effectively cope with the crisis, on the other. This happened on many occasions in the recent two decades, but is of particular relevance now, with the entire world facing predictably bleak prospects in coming years, following the outburst of the crisis instigated by the coronavirus (covid-19), along with the reduction of public resources for development. A whole gamut of pending austerity measures will

expectedly strongly ‚colour’ each and every future development path, under any of the scenarios chosen. Among other barriers and limits to local business development, one can see too high fiscal duties and generally speaking an anti - investments environment. A continuation of the process of degradation of ecosystem and biodiversity could be a danger, as well non - legal and non-controlled speedy construction, not coordinated tourism development, and non - existed waste treatment and projects. Although rich in water sources, the Region should put higher standards and more efficient utilization and preservation of water springs. Regarding forestry, too ambitious and speedy cuts have to be transformed into planned cuts with renewable character. The new development strategy on the Republican and the regional level for rural areas is necessary, together with new organizational and institutional arrangements, otherwise, these would face demographic and economic disaster.

Table 9. The SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> – Crossroads to Montenegro and B&H – Natural sources – water, forest – Geographical, Geological, Biodiversity – Tourist potential – tradition, dynamism, capacities – Quality HR and social capital – Laws on eco preservation and restructuring 	<ul style="list-style-type: none"> – Widening regional discrepancies – Out of European corridor 10th and 7th – Ecological problems, pollution – The lack of strategic sustainable development documents – Low local budget – Forestry – non rational and over capacities use – Tourism – non optimal use – Eco preservation – partial devastation – Rural areas – negative demography, low infrastructure standards
Opportunities	Treats
<ul style="list-style-type: none"> – Increasing FD investors’ interest – Metal production potential – aluminium, copper – Traditional and renewable energy sources – PPP potential – Agriculture, metal manufacturing, tourist HR – Utilization of natural sources – Rehabilitation of roads and railways – Rural development – infrastructure, healthcare, agriculture cooperatives 	<ul style="list-style-type: none"> – Hesitation and opposition to transition reforms – High Fiscal duties – limit for business – Degradation of natural system – Water – low standards, non-efficient use – Forest – cutting over capacities without replanting – New strategy, organization, for rural development

Source: Authors

9. THREE SCENARIOS APPROACH TO THE ZLATIBOR REGION

In addition to the SWOT analysis of the Zlatibor Region, ZR a three scenarios approach is developed, emphasizing the most important elements of the sustainable development approach. The scenarios are as follows: firstly, the ideal changings, with a meaning of an optimistic scenario; secondly, the possible changings, which means that some important steps forward would be implemented, but some others would be postponed or implemented later; thirdly, an existed continuity, means that crucial changings will not be implemented or even not set for execution.

1st Scenario – Ideal Changings

Among the first steps forward to more sustainable development would be the establishment of planning development office(s) on the regional and/or local level. It is important for the continuity of planning functions and at the same time a sign that minimization of plan and planning

functions is not any more a dominant attitude of the decision-makers as stated by Bukvić (2010). Modernization of existing development regional documents is also valuable, which asks for implementation of parameters from EU, Serbian documents and relevant neighbouring countries, as well, especially because of possible and plausible cooperation with Montenegro and Bosnia and Herzegovina. All these documents would have, as part of the content, defined sustainable development goals, concepts (plan solutions), measures and instruments for their implementation, including necessary sources and responsible institutions. For sustainable development, as recommended by Stiglitz (1999) and Marangos (2014), a comprehensive approach is important, which means that all aspects: natural, rural, urban, industrial, social and economic would be tackled. Some problems regarding an adequate territorial regionalization would be solved, as Lux recommended (2009), as the question: should the Sjenica municipality belong to the Region or not. Until now among the main development problems were the lack of ex-post analysis and evaluation, adopting development documents to new circumstances, overemphasized economic analysis, and the lack of plan communication and interaction, so these would be included. Considering ex-ante evaluation and decision-making processes it is necessary to include all relevant and interested interest groups in it, to emphasize supportive activities while avoiding non-supportive ones, adequate timing of decisions and face and discuss key development outcomes. Considering main opportunities and weaknesses urgent matter is to divide these for which the responsibility belongs to the regional and municipal level (forest, urban, rural, solid waste and water management) and those for which the Republican level has to be included (traffic infrastructure rehabilitation, finishing highway parts Čačak - Požega, Požega – Bosnia and Herzegovina and Požega – Montenegro and so-called Morava corridor, as a connection to the corridor 10th, the airport Ponikve restructuring, considerable cutting of fiscal duties, introducing more adequate proportion between republican and regional public consumption). For these matters, a kind of prioritization of goals would be necessary. For the problem under consideration, the speed and chaotic urbanization, the urgent solution of the long-term illegal construction would be useful, a re-examination of the adequate level of the decision-making process regarding construction permits, as well, and closer coordination of the Republican and the Regional level in the realization of (tourist- hospitality) development would be fruitful for amortization of already made damages.

2nd Scenario – Possible Changes

The hesitation and even opposition toward market reform were already mentioned as an important threat. One can assess it as the main reason for the importance of the development of this, let's say a realistic scenario. In history modernization in Serbia has entered with a certain time-lag and always partially only. Not to mention that from time to time the opposition to any modern step is too strong that produce leaving these persons advocating modernization from the political scene. If one wants to find the reasons why the consensus about the need for the transition toward a market economy, created during the political changes at the beginning of the 2000s, was ruined than a neo-liberal approach to development can be accused, as Chang argued (2002, 2004), which produced too many losers of transition. However, at the same time, according to the Statistical Office of RS, SORS (2019), from 2015 to 2019 the national economy recovered, together with the achievement of a respectable level of macroeconomic stability, due to NBS (2020). This is the reason that one can hope that these positive economic trends, together with the need of citizens for the increase in the standard of living, will give the potential for relevant development changes toward more sustainability, as EC recommended (2004, 2010). These changes would be introduced by the time, if not immediately then late with a certain time

- lag. If opposition on the Republican level would be strong than the regional and municipal levels would recognize it and push more possible measures on the regional and local level in order to become better off. Even it is possible to ask for support from EU funds and projects together with regions and municipalities from neighbouring countries, interested in realization of joined development projects and in this way amortize negative influences from the Republican level or the lack of development support. In regard to the speedy and chaotic urbanization of Zlatibor, the realistic path would include strengthening the local spatial and urban institutions and their human sources in order to manage the urban and spatial development of the Region better, if not possible to put up the level of coordination between the local and Republican level in development issues. Also, it seems that realistic would be launching some possible inter-regional development initiatives, together with neighbouring regions, including those from Montenegro and Bosnia and Herzegovina, together with EU and non - governmental and private support.

3rd Scenario – Existed Continuity

The pessimistic scenario should be possible predominantly because of the continuity in the populist approach to development, with the decision-making process being made only on the very top level without any relevant calculation related to these decisions, and additionally complicated due to a new development challenge - negative outcomes of the Covid-19 pandemic, like WB, stated (2020). The continuity of the populist development approach is unfortunately a realistic assumption for the future, with dangerous influence because of opposition toward the ruling interest group within the municipality of Cajetina, which is responsible for the development of the Zlatibor tourist resort itself. According to IMF (2021) regarding negative economic and non-economic outcomes caused by the Covid-19 pandemic Serbia in 2020 faced a decrease of GDP of 1%, while advanced economies a drop of 5%, among them the Eurozone a drop of even 7%, less developed counties with a drop of 2%. All in all, the crisis is assessed as deeper than the 2008 one. Considering the Serbia Ministry of Finance (2021), the main assumption is that for economic recovery the need is to launch a recovery program worth more than 5 billion €. The main economic problem is that public revenues would be less than 6 billion € or 1 percentage point of the increase in GDP, so the program asks for a Budget deficit of 7% of GDP. The Zlatibor region is very sensitive to these negative effects, as the most promising and fast developed is the tourism-hospitality industry. The main problem is that Zlatibor as a tourist destination is facing numerous illegal constructions and over-ambitious constructions on the way, due to easy access to a construction permit. So, if it continues there is a possibility to face a few years of devastated, overcrowded place, similar to „Kaludjerica Mountain”, as a reflex of general misdirected policies, based on the wrong legal stipulations regarding the legalisation of illegal/informal construction, as they were launched in 2002/3. There was an intention to prevent illegal construction, estimated at 500,000 to one million in those years, but they failed to stop this kind of construction, as in 2018 the estimated number of total illegal constructions exceeded two million.

10. CONCLUSION

For some years after 2000, Serbia's reforms have been poorly contemplated and programmed, and subsequently exercised in accord with the doctrines of the Washington Consensus, especially regarding privatisation and economic restructuring. Consequently, they resulted in only partial recovery of the national economy, on the one hand, and many negative social and economic effects, on the other hand.

Zlatibor mountain is already the top mountain tourist destination in Serbia and among the leading tourist destinations in general. Zlatibor Region and Zlatibor mountain have a great potential for the development of tourist - hospitality capacities and activities in the near future. Considering tourism as one of the development priorities of Serbia it is important to settle and realize the right path of development of the site and the Region. In order to use specific natural sources and relatively well-developed territorial capital it is important to improve decision - making process, existing planning documents, capacities for development functions and development function itself, and institutional infrastructure on both the Republican and the regional levels. Some weaknesses of the Zlatibor Region, like peripheral traffic destination, can be transformed into an opportunity by the combination of private-public partnership and at the same time coordination with neighbouring countries and regions, combining with EU and private sources.

In this regard especially important is to be aware of possible problems and weaknesses and try to neutralize them. In the paper, the speedy and chaotic urbanization of Zlatibor, which is underway last several years, is considered a very important development problem. If continue without control it can jeopardize the overall development of the Zlatibor Region and limit tourist potential and tourist development of Serbia in the future. To stop and neutralize it, both the regional and the Republican levels have to be included and coordinated. On the Republican level, it is important to harmonize development documents concerning new circumstances and EU documents. Also essential is to continue with post-socialist transition reforms without hesitation, not in line with the Washington consensus, but in line with principles of sustainable, green, innovative development. At the regional and local level, important questions are related to the proper solution of illegal constructions realized during decades and to an adequate level of the urban permit decision, as well still an open question of the construction land, for which Republican level is responsible.

Abbreviations used

EU – European Union
FDI – Foreign Direct Investments
GDP – Gross Domestic Product
HR – Human resources
IMF – International Monetary Fund
NGOs - non - governmental organizations
PPP - Public Private Partnership
RS – Republic of Serbia
SORS - Statistical office of the Republic of Serbia
TC - territorial capital
ZR – The Zlatibor Region

REFERENCES

- Bukvić, R. (2010) *Morgentauov plan i Vašingtonski konsenzus: ima li razvojnog izlaza za zemlje u tranziciji*, Zbornik *Kriza i razvoj*, Institut društvenih nauka, Beograd, (pp7-28), ISBN: 978-86-7093-133-6
- Boljanović, S.& Hadžić M. (2017) Impact of foreign direct investments on Serbian industry, *Industrija*, 45 (3), 39-64. DOI: 310.5937
- Chang, H.J. (2002), Breaking the mould: an institutionalist political economy alternative to the neo-liberal theory of the market and the state. *Cambridge Journal of Economics*, 26 (5): 539-559, doi:10.1093/CJE/26.5.539
- Chang, H.J. and I. Grabel (2004) Reclaiming development from the Washington consensus, *Journal of post Keynesian economics*, 27 (2): 273–291doi: 10.1080/01603477.2004.11051434.
- European Commission, (2004), *Fostering structural change, industrial policy in enlarged Europe*, EC, Brussels
- European Commission (2010), *Europe 2020: A Strategy for Smart, Sustainable and Inclusive Growth*, EC, Brussels
- Government of the Republic of Serbia. Ministry of Trade, Tourism and Telecommunications, (2016), *Strategy for the Development of Tourism of Serbia for the period 2016-2025*, Belgrade
- International Monetary Fund (2021), *World Economic Outlook, March 2021*, Washington D.C.
- Lux, G. (2009), *The industry standard spaces of the old industrial regions*, *Space and Society*. 23 (4). 45-60 ISSN 0237-7683
- Marangos, J. (2014), A Keynesian alternative to the Washington consensus policies for international development, *International Journal of Trade and Global Markets*, 7(1) 67 – 85 doi: 10.1504/IJTGM.2014.058723
- Ministry of Economy and Regional Development RS, Republican Bureau for Development, (2011), *Strategy of Industrial Development of Serbia in period 2011-2020*, Government of RS, Belgrade
- Ministry of Finance of Republic of Serbia, *Current Macroeconomic Trends, August 2021*, Belgrade
- National Bank of Serbia, NBS, *Inflation Report, February 2020*, Belgrade
- Statistical Office of RS, SORS, (2019), *Economic trends in 2019, An Assessment*, 2019, Belgrade
- Stiglitz, J.E. (1999) Whither Reforms? Ten years of the transition, in *Annual World Bank Conference on Development Economics*. Washington D.C. World Bank.
- USAID, FREN, Ekonomski institut (2010) *Postkrizni model ekonomskog rasta i razvoja Srbije 2011-2020*, USAID, FREN, Ekonomski institut, Beograd.
- Vujošević M., Zeković S. & Maričić T. (2010), *Postsocijalistička tranzicija u Srbiji i teritorijalni kapital Srbije: stanje, neki budući izgledi i predvidljivi scenariji*, IAUS, Beograd ISBN: 978-86-80329-64-2
- Vujošević M. (2010) Collapse of Strategic Thinking, *Spatium*, IAUS, Belgrade 23. 22-29 doi: 10.2298/SPAT1023022V
- Vujosevic M.& Petovar K. (Ed.) (2008), *Novi metodološki i teorijski pristupi u izradi strategije održivog regionalnog razvoja, Primer Zlatiborskog regiona*, Centar za demokratiju, IAUS, Beograd, 2008. ISBN 978-86-80329-56-7 (IAUS)
- World Bank, (2020), *Doing Business Report 2019*, Washington D.C.



Interaction between Tourism and Culture for the Purpose of Urban Regeneration of the Town of Smederevo

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Abstract: *The authors of this chapter reveal the relevance of the interaction between tourism and culture for the purpose of urban regeneration in the example of the town of Smederevo, the Republic of Serbia. They analyze the town's cultural and historical values and advantages for the development of tourism, in direct communication with urban methods required to revitalize the entire area and the town itself. Through the analysis of good practices of urban regeneration of the towns of Genoa and Dresden, the authors indicate possible guidelines for achieving the most effective urban regeneration. The aim of this chapter is to examine the opportunities that tourism and culture provide for the successful urban regeneration of the town of Smederevo, in order to contribute to a better understanding of their mutual relation.*

1. INTRODUCTION

Urban regeneration is a complex procedure of renewing the degraded physical structure of a part of a town in order to stop its further degradation which may lead to major changes in the social and economic profile and the structure of the population (Roberts et al., 2017). Regarding tourism, urbanism may be observed as an up-to-date interaction between the concepts of urban space and the social environment. Economic opportunities arise almost daily, in accordance with the actual state of a town and a country. The economic impulse reverses after urban regeneration activation, which results in the creation of different living standards and quality of life. All this triggered the town's development in every single aspect, as well as the development of tourism, which does not reflect only on the town itself but on the wider area, country, and region (Milosavljević, 2019).

Tourism not only promotes the economic position of a place and/or town but spurs continuous regeneration of all the elements contributing to the development of tourism. Urban regeneration is continuously implemented while not a single town segment is left out and all the segments are deemed unique. Moreover, the potential for cultural, infrastructural, and urban development is activated, the topic of globalization is analyzed and competition with other localities developed (Fletcher, 1989). Cultural tourism is one of the first forms of tourism. Throughout the time, this type of tourism has been considered a “grand tour”, providing an opportunity for an educational acquaintance with a town. Today, if we're talking about cultural tourism, we're talking about the type of tourism that's much more than the simple “disinterested walking” by the cultural monuments (UNWTO, 1993).

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Cultural tourism may help the system of regeneration where the town has used up all its economic and social resources for creating cultural policy, holding cultural events, etc. (Lak et al., 2020). It may renew old town quarters and stimulate economic growth (Timothy, 2021; Chen & Chen, 2010; Lak et al., 2020). Cultural considerations should be given the main role in the process of sustainable and integrated regeneration (Smith, 2007) and sustainable spatial development (Popović et al., 2021).

The activation of the urban space for the purposes of tourism as one of the main ways of improving the economic standing of a town requires that all receptive factors and/or, social, anthropological, cultural, and historical and traffic potentials of a relevant town are in place. This is a basic or a starting point for tourism development and for emerging capacity and obligations that a town has to support in order to have the highest quality offer.

This requires continuous regeneration and a clear picture of available values, the creation of extra capacities for visitors, and renewed public spaces to create a modern attraction for both the new and temporary visitors and the town inhabitants. It is necessary to form a simple balance that will highlight the interaction between the cultural and the public, permanent and the temporary; mix the “branches” of the industry, culture, housing, and tourism into one big whole (Milosavljević, 2019).

This chapter concerns the case study of the town of Smederevo (the middle-sized town), one of the regional centers, with devastated industrial areas and located near medieval fortifications on the Danube River and archaeological sites as extremely important cultural assets of Serbia. Through the analysis of examples of good practices of urban regeneration of Genoa and Dresden, where the economic and social environment directly affect the development of tourism and the maintenance of heritage, the authors have developed the guidelines for the more effective urban regeneration of the town of Smederevo. Conclusions were made based on the benchmark analysis and comparative analysis techniques. Following the above, this chapter presents the opportunities created by the emerging tourism and culture for successful urban regeneration in the example of the town of Smederevo, to better understand their consequential relations.

2. MATERIALS AND METHODS

Smederevo is a town situated on the banks of the Danube, the second-largest European river, in the North-East of Serbia (Figure 1). The town has about 65,000 inhabitants and is only 46 km away from Belgrade, the capital of Serbia (The Spatial Plan of the town of Smederevo 2010-2015-2020, 2005). As mentioned above, Smederevo has direct contact with the Danube river, which makes this town connected to other towns and settlements located on the same river. Throughout history, the Danube route has been concerned the main road. It is precisely on this route that the fortifications were built to have direct communication with the water, banks, and natural goods as the existential recourses available to the town population. The Danube route has directly connected all medieval fortifications and their rich histories, still not recognized as special landmarks with foundations preserved until nowadays. All of the mentioned facts present the basic potential of the town of Smederevo. This refers to the micro position and the extremely favorable geographic and traffic position between the two European corridors, the motorway and the waterway - the Danube river. Thus, the infrastructural aspects are used to the maximum, based on the high-quality connection between the town and other landmarks (Čeliković, 2011).

Smederevo is one of the main transit centers and can contribute economically to the development of Serbia. It is considered one of the regional centers. It's historically been known as the northernmost port. According to the strategic documents of Serbia (Spatial Plan of the Republic of Serbia from 2010 to 2020, 2010), this town has got a profile of a port town and multifunctional traffic hub, whose resources should cover a much wider area of the Republic of Serbia and its economical and industrial development. Industry of Smederevo is developed on the banks of the river, along with some of the most important areas of the town, often positioned near the area of extreme importance – the Medieval Fortress of Smederevo.



Figure 1. Position of the town of Smederevo on the map of Serbia

Source: Milosavljević, 2019

Industrial complexes are located to the West of the town center, in indirect contact with the western towers of the Smederevo Fortress, but also to the East of the Fortress, with the facilities in the area of Godomin that used to be a huge zone with industrial complexes, planned for construction of an industrial park, that nowadays hosts only a few active remnants (Stojković, 1998). The most important industrial zones of the town of Smederevo are the zone of the Old Ironworks of Smederevo and the zone of Godomin, the field of Godomin (Figure 2). The mentioned industrial areas have been neglected and refurbished, with underutilized opportunities of the existing industrial complexes, which most likely stems from a lack of understanding of the value they may create or the value they could have created. The neglect of industrial values as intangible goods is most often the reason for underdeveloped towns and countries and/or their economic and social potentials (Milosavljević & Dobričić, 2021).

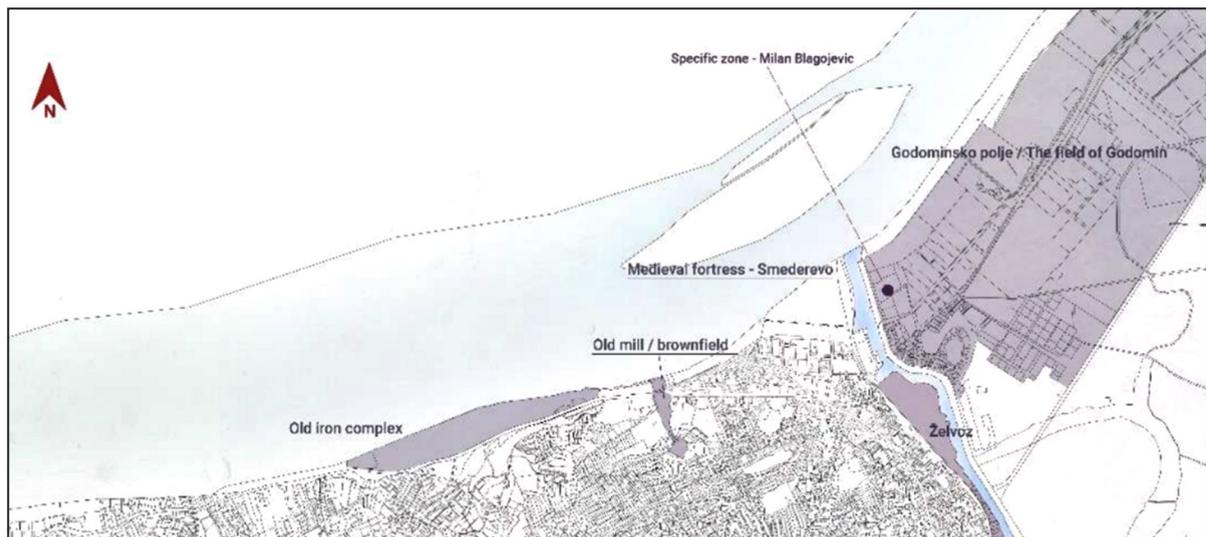


Figure 2. View of industrial zones in the town of Smederevo

Source: Milosavljević, 2019

In this chapter, the authors deal with the scope of touristic potential of the town of Smederevo and its narrow district as well as the touristic potential in the immediate vicinity of the town and the contact with the Danube River. They examine the possibilities of the town and its networking with other localities on the stretch of the river Danube. After presenting the advantages of the development of tourism and characteristic cultural and historical values, the chapter presents examples of good international practices implemented through models of urban regeneration, in the towns of Dresden and Genoa. The main reasons for choosing the mentioned examples are the following basis norms: a) the town's contact with water (river/sea), b) town with developed tourism that presents a unique opportunity for regeneration, c) a town with cultural identity and preservation of cultural and historical heritage.

By defining the guidelines for the urban regeneration of the case study, the authors examine the valorization of the given examples and find possible solutions. They make conclusions based on benchmark analysis, a technique of comparative analysis that searches for the best practices that may inspire the urban regeneration of the town of Smederevo. Benchmarking is a new method that was introduced into theory and practice in the early 1980s of the 20th century, and its full application has come to light at the very end of the 20th century (EBRD, 2020; Štoković, 2004).

3. RESULTS AND DISCUSSIONS

3.1. Tourism and the culture of the town of Smederevo serving the purpose of urban regeneration

Within the narrower and relatively wider district of the town of Smederevo, tourism is only partially developed. The most impressive segment of Smederevo is the fortress. However, it is included in tourism at the state level, meaning that it has not been activated in the sphere of tourism that refers to the cultural goods of Smederevo only. On the contrary, the fortress is activated in the other, comprehensive sphere that focuses on the cultural goods of Serbia of special significance (Figure 3). This means that the visitors will only see the fortress complex during their trip, but not the other cultural goods of the town itself, which directly leads to their neglect. As already mentioned, it is necessary to activate each segment of the town of Smederevo in order

to have it better presented and increase the number of its visitors. It is precisely in this way that the awareness of the town will increase (Milosavljević, 2019).

During the 15th century, in the midst of Turkish rule, Smederevo became the last capital city of the Serbian medieval state and the ecclesiastical life. For the purpose of strategic defense from the attacks coming from the North and West and bearing in mind the fact that Smederevo used to be a the border with the northern and western neighbors of Serbia, a Serbian 15th-century despot Đurađ Branković built a fortress of great capacity, considered as unique and the largest lowland fortress in Europe. The ramparts of the fortress still exist. Although they have been revitalized to a certain level, they testify to the turbulent past of the town and are unique indicators of the importance of Smederevo, which, throughout history, exceeded the local and regional dimensions. At that time, Smederevo officially became a center at the crossroads of civilizations, where the influences of the East and West merged. The fortress was built on the model of the Constantinople defense fortifications. It was placed on the right bank of the Danube river and occupied 11 ha (Popović, 1980), while its wider district today enters into the urban structures.

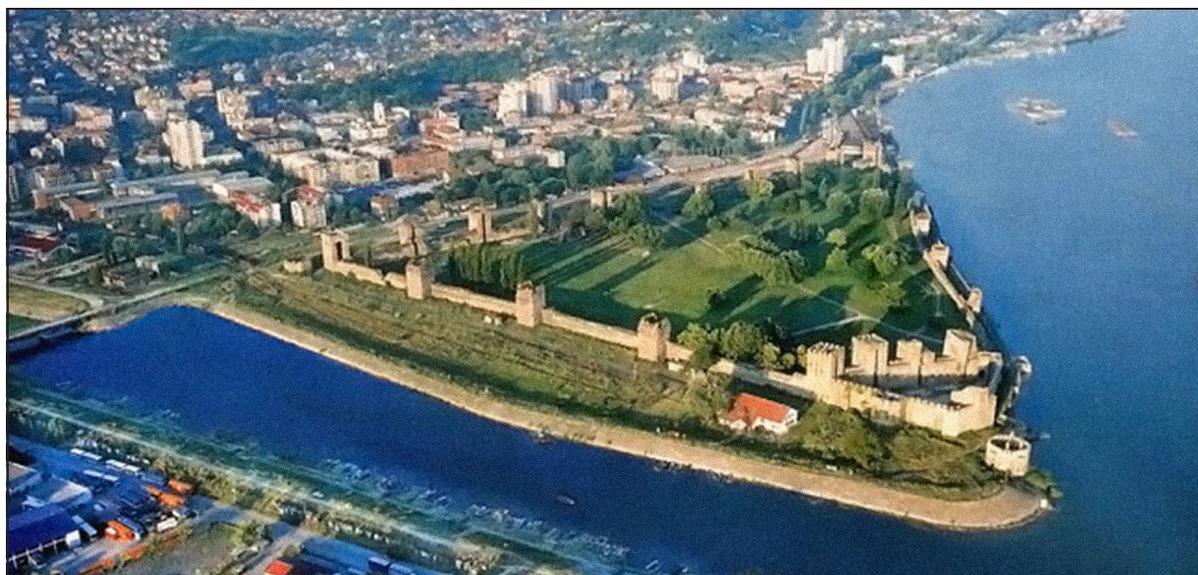


Figure 3. The town of Smederevo

Source: <https://www.palelive.com/prica-o-smederevu-gradu-pobratimu/>

The Smederevo Fortress (Figure 4) represents a historical and cultural good of the town of Smederevo and is an unavoidable gathering place for visitors. Positioned on the river Danube at the confluence of the river Jezava and the river Danube on the northernmost side of the urban district of the town, it offers a special sight-seeing opportunity to the visitors both inside the fortress and in the surrounding area. Within a rich historical context and a recognition as one of the largest lowland fortresses in Europe, it is a sign of recognition of the town of Smederevo. A fortress has been recognized on the UNESCO preliminary World Heritage List, since 2010. (<https://whc.unesco.org/en/tentativelists/5538/>). This fortress still has no defined connection with the coast and their interaction has not been fully implemented. Next to the fortress, there is a museum that has been founded during the past few decades. The museum offers the visitors time travel through the history of the town of Smederevo, starting from the earliest ancient period until the mid-20th century. The material and immaterial elements found in the course of history can be seen at the museum. Those elements represent the only sources that testify to the long-lasting existence of the town and the fortress and provide evidence and historical facts

about the life of the town of Smederevo and Serbia of that time, in general. The Danube quay is also a must for the visitors to see since it establishes a unique connection with the main town promenade as well as the town center.

A wider area of the town of Smederevo comprises the facilities of great or exceptional importance and a more recent date, built during the 18th and the 20th century. These facilities include the complex that is the building of Golden Hill Villa, situated in the suburban area of Smederevo, a part of the town known as Plavinac (Figure 5). The Summer House of the Obrenović family encompasses a vineyard and a park, offering idyllic views that revive the period when this summer house was actively used. It is considered to be the property of great significance. Jugovo is one of the modern resorts. As already mentioned, it is located 5 kilometers from Smederevo and includes a complex of the spacious cultural resort with public facilities (Milosavljević, 2019). Jugovo has also been deemed the property of great significance. The significant cultural monuments of the town of Smederevo also include the Republic Square, the Church of St. George dated 1850, the building of the Administration from the second half of the 20th century, and the Church of the Assumption of the Blessed Virgin Mary from the second half of the 15th century.

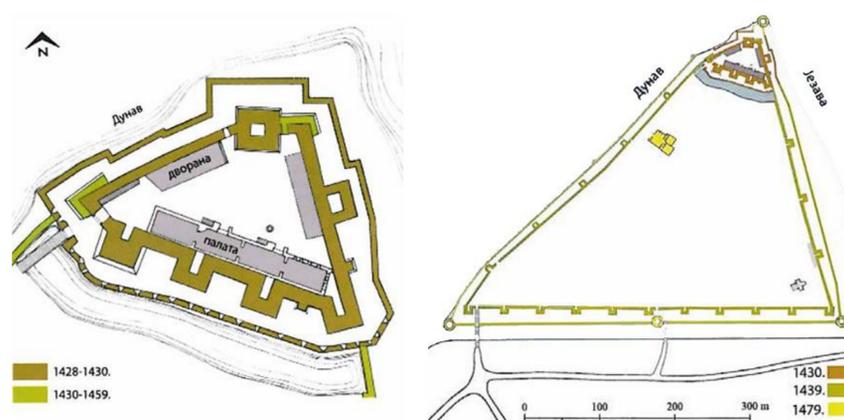


Figure 4. The medieval fortress, the town of Smederevo, a map of the former town district

Source: Popović, 1980

One of the forms of cultural tourism is the organization of cultural events (Liu, 2014). Smederevo is a town known for events that are organized throughout the year (<https://www.visitsmederevo.com/index.php/dogadjaj/12/Kalendar-manifestacija>; <https://filipovicfilip.wordpress.com/najpoznatije-smederevske-manifestacije/>). Festivals and events which represent an important type of tourism build a completely new image of the town. The local competent authorities strive to create an interaction between the residents and the visitors, on the one hand, and the historical events and cultural goods of special significance for the town, on the other hand. Although tourism is an underdeveloped branch of industry, it has an emerging potential at the regional level. The mentioned events and their specific characteristics mark almost every month of the year, with at least one manifestation.

The “Smederevo Autumn” represents a tourist and economic event held every year in September. It symbolically honors the grapes and wines of the Smederevo vineyards. In addition to the rich cultural and artistic programs organized in the Smederevo Fortress and along the streets of the town center, and the wine exhibitions, the town may also boast of a parade of medieval knights. Today, this event has become one of the most important events in the Danube district, with some fundamental traits of fairness. The “Nušić’s days” festival in Smederevo is traditionally held in

April, with the aim of popularizing the work of the poet Branislav Nušić. This festival comprises theater performances, scientific gatherings, tribunes, exhibitions, and publishing activities. It is also called the “Smederevo Poetry Autumn” which is an international poetry festival organized in October. It brings together thousands of poets from around the world.

The “Fortress Theater” is yet another cultural event that takes place in August. The theater program is carried out in the Small Town of the Smederevo’s Fortress, in the open space – the open square. Foreign theaters participate as well.

In addition to the festivals described, there are wine fairs, art colonies, carriages, and music festivals (<https://www.visitsmederevo.com/index.php/dogadjaj/12/Kalendar-manifestacija>; <https://filipovicfilip.wordpress.com/the-most-famous-Smederevo-manifestations/>).

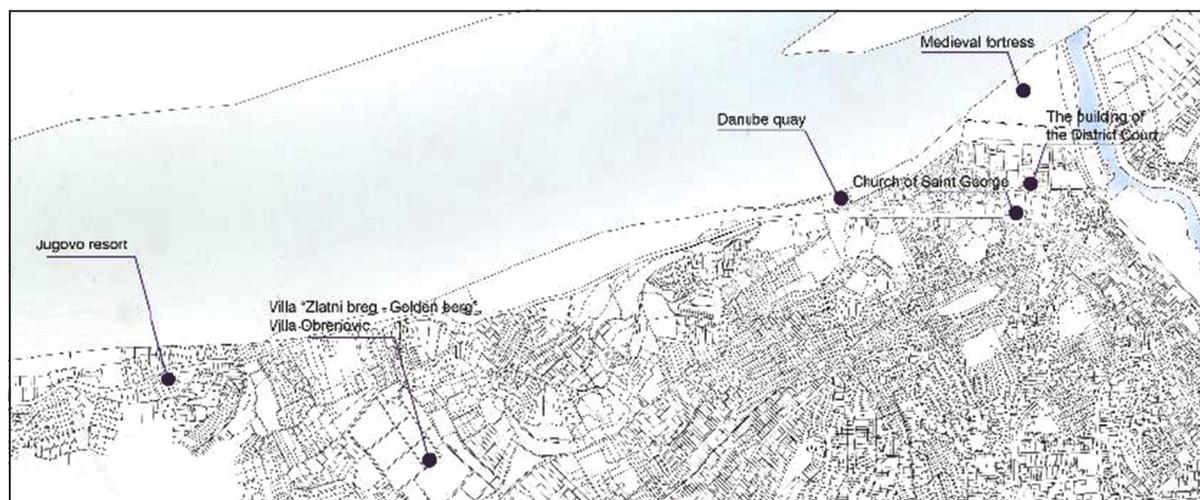


Figure 5. Map of the tourist facilities in Smederevo

Source: Milosavljević, 2019

As for the availability of accommodation units for temporary housing of the tourists and the visitors, it’s noticeable that the number of hotels, apartments and the like has been reduced to the minimum. The reason for this is the economic situation of the town and the implementation of the system of already available recourses. The current temporary accommodation is mostly located along the river Danube and in the center of the old town (Figure 6).



Figure 6. Map of accommodation units along the Danube River in the town of Smederevo

Source: Milosavljević, 2019

On the other hand, the number of private apartments and studios is noticeably higher. They are, nevertheless, also located in the peripheral town district. It may be concluded that the development of such facilities is a prerequisite for encouraging tourism development and the number of visitors.

3.2. Tourism and culture in a broader context – the Danube route

In this case, tourism refers to the local and surrounding elements of cultural and natural goods that can be visited along the Danube route. With a planned construction of the marina, Smederevo endeavors to become a port town. As one of the important stations along the Danube route, Smederevo can be included in the highly visited locations. Moreover, the town would be an indispensable segment of the tourist route - a fact that would assign Smederevo an additional role in the touristic and urban regeneration. This would trigger the regeneration of all vital landmarks of the town.

The cultural heritage of the Danube route includes three fortresses, the Belgrade, Ram, and Golubac, as well as two archeological sites, Vinča and Lepenski Vir. The Belgrade Fortress is a city town fortress that dates back to the beginning of the 1st century. Later on, it developed into a Roman castrum, a Byzantine castle, and finally into a medieval fortress. At present, it is registered as a unique cultural and historical monument hosted within the Kalemegdan Park (https://en.wikipedia.org/wiki/Belgrade_Fortress). The fortress complex includes several zones within the upper and lower town, connecting this wide area directly to the river Danube. Encircled by double ramparts built through different historical periods and reigns, this fortification became one of the main defense fortresses. Today, this fortress is a cultural good of exceptional significance and it is particularly responsible for the further development of the city.

The Ram Fortress is located on a rock to the Northeast and has direct contact with the Danube River (https://en.wikipedia.org/wiki/Ram_Fortress). This fortification was considered one of the most significant defense points. Although it is assumed that it was formed opposite the Haram Fortress (of which we have no remains), today the Ram Fortress is deemed a cultural monument of great significance. The Republic of Serbia has adopted numerous projects for the active regeneration of this Fortress.

The Golubac Fortress is also positioned on the Danube River, like other fortresses. It belongs to the Đerdap National Park and stands on the high cliffs above the Danube narrowing, at the entrance to the Đerdap gorge. The Fortress has a trapezoidal shape and consists of two parts. The upper part includes the citadel, whereas the foundations of the front part lie in the water.

Unlike the medieval fortresses, Vinča is an archeological prehistorical site. At a distance of 14 km from Belgrade, on the Danube River, this prehistorical site named “Belo Brdo” became a world-famous archeological site with remains from the Neolithic period (Regulation on Adoption of Spatial Plan for the Special Purpose Area of the International Waterway E80 (i.e. the Danube or Pan European corridor VII), 2015). Lepenski Vir is also an important Neolithic and Mesolithic archeological site. It is located in Serbia, in the Đerdap Gorge of the Danube river. It is the seat of one of the most important and complex prehistoric cultures. Seven settlements and about 136 residential and sacral buildings were discovered at this site.

Smederevo is a part of several different tourist routes. One of them is the Danube route which consists of the natural goods of national and international significance, such as the “Deliblatska

peščara” and the National Park Đerdap. The “Deliblatska peščara”, better known as the “Banatski Pesak” (*Engl.* The Sand of Banat), is the only sandstone in Europe located on the river Danube, in the immediate vicinity and opposite to the stretch between Kostolac and Ram (Figure 7). This natural monument of the Pannonian lowlands is one of the habitats of specific species of flora and fauna which are extremely rare in Europe and the world. The “Deliblatska Peščara”, a special nature reserve, covers an area of 35,000 ha and forms part of the ecological network of Serbia (Dobričić et al., 2018). Today, this area is intended for recreation, hunting, fishing, and nautical and ecological tourism. Since 2002, it has been part of the preliminary list of UNESCO as an area of exceptional natural values.

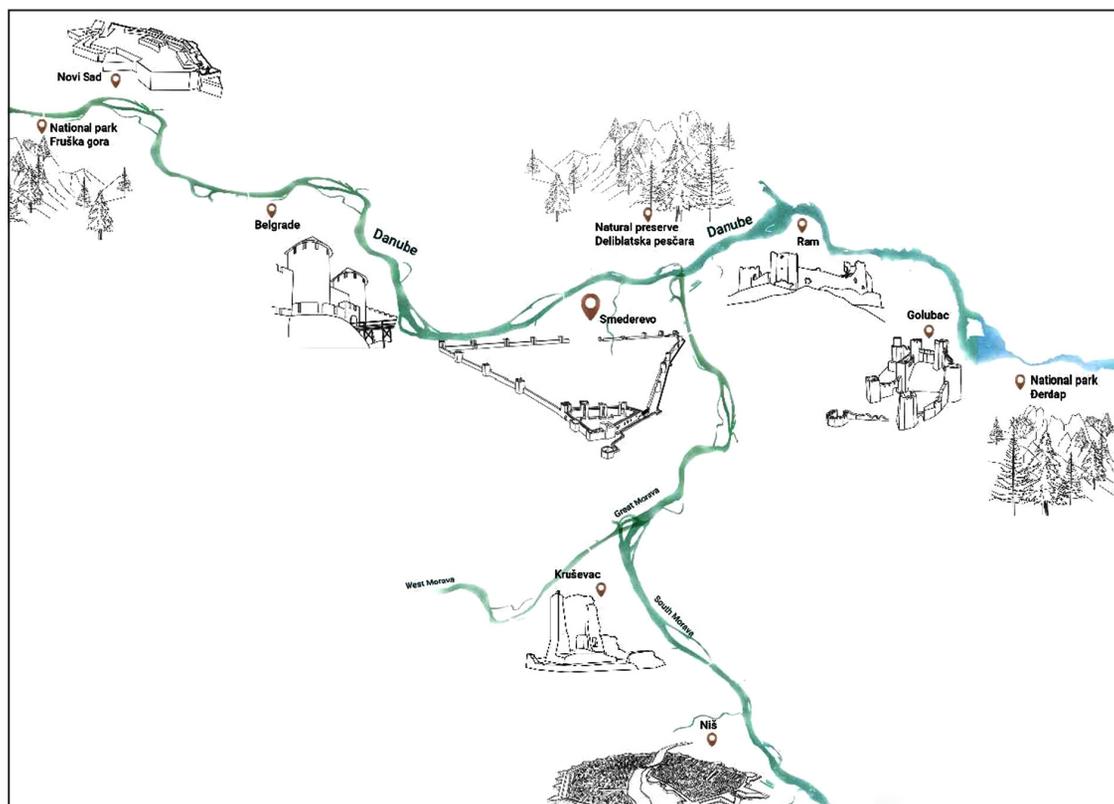


Figure 7. Presentation of natural and cultural goods along the Danube route

Source: Milosavljević, 2019

The National Park Đerdap is located on the very border between Serbia and Romania (Milosavljević, 2019; Dobričić & Sekulić, 2020). The area of this National Park is almost 95,000 ha, including the highly protected area of 63,000 ha. Imbued with direct communication with the river Danube, this national park hosts a narrow wooded hilly, and mountainous belt that runs along the river Danube and rises above the river at an altitude of 50 to 800m. It received the status of a national park in 1974. The National Park comprises several monuments of cultural and historical heritage, dating back to the period of ancient Rome and through the medieval fortifications. Examples are the sites of Diana, Trajan’s Bridge, Trajan’s Tablet, Roman limestone, and Golubac town. The main feature of the park is the large forest which covers more than 64%. Đerdap is considered one of the most important natural national parks.

One of the oldest routes, the Danube route, follow up a development of ancient towns in the Balkans, dating back to the 2nd and 12th centuries (Maksić et al., 2018; Dobričić et al., 2016). Still insufficiently researched, the route along which the Roman towns developed represents

a reasonable stretch for the formation of towns pertains to the east stretch that completely follows the Danube route (Figure 8). The specific importance of this route is also supported by the fact that it has been the host for the construction of the most relevant towns of Serbia, from its ancient history to nowadays. The modern towns were built precisely on the sites of former ancient cities, such as Singidunum and Mediana. The segments of ancient towns are still being intensively explored, although their walls and foundations have been covered with high levels of the earth due to frequent floods and land deposits. Another such town is called Viminacium, not far away from the town of Smederevo. It is completely located underground, due to natural disasters (Ministry of Economy and Regional Development, 2007).



Figure 8. The Roma roads

Source: Ministry of Economy and Regional Development, 2007

The Danube bicycle route is yet another route where the town of Smederevo is located, as the point of interest (Figure 9). It starts in Hungary and completely follows some of the most important goods. It has direct contact with the Danube River. This route follows the course of the river itself. The last stop of the route in Serbia at the location of Negotin, on the border with Romania. From this point, the route continues successfully through other countries. What is also interesting is that, because of the geological characteristics of Serbia, the sections of the route passing through Serbia are the greatest challenge. With the starting stop at “Bački Breg”, through the towns of Sombor, Apatin, Belgrade, Pančevo, Stara Palanka, Ram, Golubac, Donji Milanovac, and Kladovo to the final stop at Negotin, the distance covers a total of 667 km. In addition to the direct bicycle line, there are also alternative side routes and the so-called “Detour, or detour” stretch. Alternative routes follow similar paths to the main routes, but the focus is on moving toward the natural reserves.

An example is the “Deliblatska Peščara”, through and around which an alternative route passes. On the other hand, the Detour routes are focused on suburban traffic. They are considered as connection stretches to the main routes and are located within the towns (in particular, Novi Sad, Belgrade, Smederevo, and Kostolac). The cycling route provides idyllic views of the river and cultural goods visible from the opposite side of the bank or the river. Although the route is one of the most challenging, it is also the path most abundant with unique views of the river Danube.

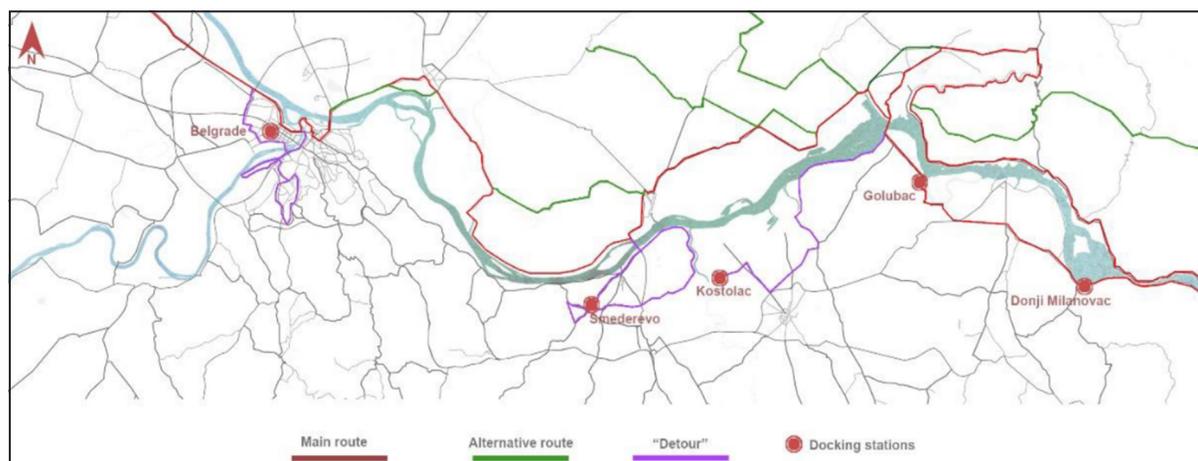


Figure 9. Bicycle route in the Danube corridor

Source: http://archive.danubecc.org/upl/ICT/ICT_leaflet_DCC_Serbia.pdf

3.3. Examples of good practice – Genoa and Dresden

Tourism, as a unique urban type of modern industry, often occurs in places where the former industry is not active anymore or is not regulated. The regeneration of such facilities leads to the renovation of former complexes to serve artistic purposes and attract the general public, to the museums and cultural centers for visitors (Brown, 1998). This chapter represents the examples of Genoa and Dresden areas' successful outcomes of regeneration.

Genoa (Figure 10) is a town located in the Gulf of Genoa on the Mediterranean coast, in North-western Italy. It is the sixth-largest town in Italy and the capital of the province of Genoa, densely populated with 650,000 inhabitants. Genoa is 510 km away from the capital city of Rome. It stretches in a narrow belt between the sea and a hill - 9 km wide, 22 km long, and has a total area of 240 km² (Menchawy, 2008). The town is divided into three separate units: central (concentration of cultural and historical heritage, services, and public services), western (industrial activities), and eastern (housing function). The town suffered a loss of population due to the sharp decline of traditional industry.

Genoa is a very clear example of a town where tourism is considered a unique possibility for regeneration (Galdini, 2005). After a deep crisis, Genoa sustained during the 20th century, it has intensively recovered its identity and role in the economic and social system. Today, the town has resorted to its roots of historical sites, discovering the remaining undiscovered sources and developing an urban and cultural revitalization to participate jointly in the emerging tourism industry. They have built a clear relation between the tradition and innovation and/or the current state of cultural goods as a resource of the identity of the town, but also of social significance - a state that strives towards the town's modernization. The alignment between the two took place in parallel place with the regeneration that supported both tasks. The main challenges are the

continuous struggle with decay in all forms, starting from social to physical. The regeneration program included the complete preservation of the old town.

The main challenges were related to both the process of revitalization of cultural goods and the process of rebuilding the coast, with the goal to start a new relationship with the old town and thus completely modify the town and the complete functional system. In order to better rebuild the town, it was necessary to be active on two fronts. It was required, on the one hand, to reactivate micro-centers, and on the other hand, to include all public interventions to revive the original state of the town and represent its identity.



Figure 10. The town of Genoa

Source: <https://maclaine.ca/2013/09/08/the-winding-seaside-streets-of-genova/>

The 1999 Operating Plan for Historic Town Center protected historical values from decay, restored significant architectural heritage, and changed the perception of Genoa from an industrial town to a tourist, cultural, and sports center (Menchawy, 2008). The town was renovated for the first time in 1992 with the addition of new facilities (exhibition, shopping center, Opera, etc.). The metro was extended and connected to the port and the railway station, a pedestrian connection was installed in the town center and the industrial port and brownfield were converted into new urban spaces. As a result, the town made a contact with the sea, the old town was active again and revitalized cultural goods received a UNESCO World Heritage nomination (Brown, 1998; <http://www.genovameravigliosa.com/en/urban-regeneration>).

The example of Dresden (Figure 11) is another solution in which renewal and regeneration were widely represented. Dresden is a town on the banks of the Elbe river in the Saxony region which hosts half a million inhabitants in the area of 328,3 km² and is the fourth largest town in Germany. It is located on the left and right banks of the river Elbe and the town center (Old Town - Altstadt) is positioned on the left bank of the river (<https://sh.wikipedia.org/wiki/Dresden>). Known as the center of music and a strong art scene, Dresden gradually lost its identity after the emergence of socialist parties. It experienced the most difficult period in its history during World War II when it was the most bombed town in Europe. After the war, Dresden became part of the German Democratic Republic and one of its most important industrial centers. The town was renovated in the realistic and socialist-style, but important cultural and historical monuments were faithfully reconstructed and most of the town was renovated according to its pre-war appearance. The ruins of the war existed until the end of the 20th century. Today, the town

is an important cultural, political and economic center, famous for its Baroque cultural monuments (<https://urbact.eu/dresden>; Milosavljević, 2019; <https://sh.wikipedia.org/wiki/Dresden>). The historic center of the town with the 18 km distance long valley of the Elbe river has been recognized and placed on the UNESCO World Heritage List in 2004 and removed in 2009, when, contrary to UNESCO opinion, a four-lane bridge was built.



Figure 11. The town of Dresden

Source: [https://co.pinterest.com/pin/364017582359701611/?amp_client_id=CLIENT_ID\(&mweb_unauth_id=&simplified=true](https://co.pinterest.com/pin/364017582359701611/?amp_client_id=CLIENT_ID(&mweb_unauth_id=&simplified=true)

4. FUTURE RESEARCH DIRECTIONS

Further research may include the interaction between industrial and cultural content and the presentation of tourist activities whose potential has not been fully utilized by the town of Smederevo. Regeneration would permeate through the reactivation of the complete industrial heritage, creating the interaction with the coast and aspiring to form an area suitable for the development of tourism or housing. The goal is to emphasize the unique appearance of the town of Smederevo through the best cultural and public presentation, as well as to give a quality example of urban regeneration in general.

5. CONCLUSION

Tourism in Smederevo has the perspective to become a significant economic activity. Key aspects include the preservation and improvement of existing and new tourist resources (General Town Plan of Smederevo, 2009; Spatial Plan of Smederevo 2010-2015-2020, 2005). The Danube River presents the greatest potential for the town of Smederevo, and there are tendencies and goals to include it in various European projects that cover the towns situated along the Danube River and the existing Danube routes. This would imply the presentation of cultural potentials, the inclusion of bicycle paths, and the activation of Danube marinas. The Smederevo Fortress is a functional and spatial determinant of special importance for the town of Smederevo. In addition to the

facility conservation, the required activities include the provision of a strong physical connection of this monument with the town fabric. The goals refer to the appurtenant cultural goods of great importance within the town core and separate districts that represent the main tourist attraction of the town including their active presentation and revival of their original potential.

Simultaneously with the regeneration, the notion of cultural tourism is coming to light, as one of the modern industrial branches that is far more active in the cities of countries other than Serbia. In order to understand cultural tourism as one of the methods of site recovery, elements of the town have been explored that, regardless of the current situation, can fulfill the purpose of their renewal. The active routes are pointing to the importance of tourism not only at the town level but also at the level of the stretch of the Danube which in its never ending flow makes direct contact with the relevant cultural, historical, and natural goods (such as the local nature reserves and historical fortifications). The diversity leads to the conclusion that the inclusion of the town of Smederevo in active tourism branches can positively affect the development of the town's capacities and other contents.

Examples of good practices from Genoa and Dresden reveal the benefits of urban regeneration. First of all, these are just some of the examples where the areas of cultural significance are transformed into places of consumption. This does not reduce their significance but forms a relationship between culture as a town identity and the economic resources entailed in the heritage. Thus, the number of visitors is increased, and so is the income.

The urban regeneration of Genoa and Dresden confirms the importance of using an integrated approach to cultural policy, urban intervention, and creating the link between tradition and innovation (Galdini, 2005). Based on the conducted analyzes, it can be concluded that the goals of urban regeneration of Smederevo should be improving the environment and the quality of life of the inhabitants, preserving the cultural heritage and unique facilities, restructuring the economic activity in tourism, and developing of a port town, rehabilitation of the urban structure, etc.

Guidelines for the urban regeneration of the town of Smederevo which can lead to positive solutions (Milosavljević, 2019; Milosavljević & Dobričić, 2021) could be as follows: to establish a contact of the Danube quay with Smederevo Fortress, which is on the preliminary UNESCO World Heritage List, to activate the neglected cultural content, to promote cultural events in the town (manifestations, etc.), to form new stops on the Danube tourist routes in the town (cultural, bicycle and Roman), to encourage easier movement through the town (bicycle and pedestrian paths) and define tourist routes in the town and to focus on the river traffic and marina planning, etc.

REFERENCES

- Brown, F. (1998). *Tourism Reassessed: Blight or Blessing*. Butterworth Heineman, Oxford University Press.
- Chen, C. F., & Chen, P. C. (2010). Resident attitudes toward heritage tourism development. *Tourism Geographies*, 12(4), 525–545. DOI: 10.1080/14616688.2010.516398
- Čeliković, B. (2011). *Okolina Beograda i Smedereva: naselja, poreklo stanovništva, običaji*. Službeni glasnik, SANU, Beograd.
- Dobričić, M., Kesić-Ristić, S., & Josimović, B. (2016). The spatial planning, protection and management of world heritage in Serbia. *Spatium*, 36, 75-83. <https://doi.org/10.2298/SPAT1636075D>

- Dobričić, M., & Sekulić, G. (2020). Assessment of the value of Protected areas in Serbia, on the example of application of Pa-Bat method and tourism development. In V. Bevanda & S. Štetić (Eds.), *5th International Thematic Monograph: Modern Management Tools and Economy of Tourism Sector in Present Era* (pp 285-299). Belgrade: Association of Economists and Managers of the Balkans with Faculty of Tourism and Hospitality, Ohrid, North Macedonia. DOI: 10.31410/tmt.2020.285
- Dobričić, M., Sekulić, N., & Josimović, B. (2018). Spatial planning and ecological networks in Serbia. *Spatium*, 18-26. <https://doi.org/10.2298/SPAT1738018D>
- Dresden | URBACT: <https://urbact.eu/dresden>. accessed on 17.09.2021.
- EBRD. (2020). Prijedlog razvojne strategije - Urbana regeneracija napuštene industrijske zone u Šibeniku. ARUP, European Bank for Reconstruction and Development (EBRD). <https://www.sibenik.hr/upload/dokumenti/2021/Prijedlog%20razvojne%20strategije.pdf>. Accessed on 20.09.2021.
- Fletcher, J. (1989). Input-Output Analysis and Tourism Impact Studies. *Annals of Tourism Research*, 16(4), 514-529
- Galdini, R. (2005). *Urban Regeneration Process-The Case Of Genoa, An Example of Integrated Urban Development Approach*. 45th Congress of the European Regional Science Association: "Land Use and Water Management in a Sustainable Network Society", Amsterdam, The Netherlands, European Regional Science Association (ERSA), Louvain-la-Neuve.
- Generalni urbanistički plan Smedereva, Službeni list grada Smedereva, broj 19/2009.
- Genova, Italy: Getting Lost In The Winding Seaside Streets – MacLaine.ca|Jeremy MacLaine: <https://maclaine.ca/2013/09/08/the-winding-seaside-streets-of-genova/>. Accessed on 10.08.2021.
- ICT_leaflet_DCC_Serbia.pdf (danubecc.org): http://archive.danubecc.org/upl/ICT/ICT_leaflet_DCC_Serbia.pdf. Accessed on 20.08.2021.
- Lak, A., Gheitasi, M., & Timothy, D. J. (2020). Urban regeneration through heritage tourism: cultural policies and strategic management. *Journal of Tourism and Cultural Change*, 18(4), 386-403. <https://doi.org/10.1080/14766825.2019.1668002>
- Liu, Y. D. (2014). Cultural Events and Cultural Tourism Development: Lessons from the European Capitals of Culture. *European Planning Studies*, 22(3), 498-514. <https://doi.org/10.1080/09654313.2012.752442>
- Maksić, M., Dobričić, M., & Trkulja, S. (2018). Institutional limitations in the management of UNESCO cultural heritage in Serbia: The case of Gamzigrad-Romuliana archaeological site. *Land Use Policy*, 78, 195-206. <https://doi.org/10.1016/j.landusepol.2018.06.055>
- Menchawy, A. E. (2008). Urban regeneration in Mediterranean cities: an integrated urban development of Brownfield sites. *WIT Transactions on Ecology and the Environment*, 117, 115-127. doi:10.2495/SC080121
- Milosavljević, M. (2019). *Urbana regeneracija kroz kulturu i turizam, Studija slučaja: Industrijska zona Milan Blagojević*. Univerzitet u Beogradu, Arhitektonski fakultet i Politehnika u Torinu, DAD – Odsek za arhitekturu i dizajn, master rad, 2019. (mentori: prof. dr Đukić A, prof. dr Crotti M).
- Milosavljević, M., & Dobričić, M. (2021). Urbana regeneracija industrijske zone u Smederevu - komparativna analiza. *Tehnika*, 5, 565-571. DOI: 10.5937/tehnika2105564M
- Ministarstvo ekonomije i regionalnog razvoja. (2007). *Master plan kulturno istorijske rute, Put rimskih careva*. <https://mtt.gov.rs/download/sektor-za-turizam/master-planovi/MASTER%20PLAN%20RUTE.pdf>
- Popović, L. (1980). *Istorija Smedereva u reči i slici*. Muzej Smederevo.

- Popović, S. G., Dobričić, M., & Savić, S. V. (2021). Challenges of sustainable spatial development in the light of new international perspectives-The case of Montenegro. *Land Use Policy*, 105, 105438. <https://doi.org/10.1016/j.landusepol.2021.105438>
- Pin op Germani (pinterest.com): [https://co.pinterest.com/pin/364017582359701611/?amp_client_id=CLIENT_ID\(&mweb_unauth_id=&simplified=true](https://co.pinterest.com/pin/364017582359701611/?amp_client_id=CLIENT_ID(&mweb_unauth_id=&simplified=true). Accessed on 04.09.2021.
- Priča o Smederevu, gradu pobratimu|Palelive.com: <https://www.palelive.com/prica-o-smederevu-gradu-pobratimu/>. Accessed on 15.09.2021.
- Prostorni plan grada Smedereva 2010-2015-2020 (Službeni list opštine Smederevo, broj 6/2005).
Prostorni plan Republike Srbije od 2010 do 2020 (Službeni glasnik RS, broj 88/2010).
- Roberts, P., Sykes, H., & Granger, R. (2017). *Urban Regeneration - Second edition*. Los Angeles, London, New DELPHI, Singapore, Washington DC, Melbourne.
- Smederevo Fortress – UNESCO: <https://whc.unesco.org/en/tentativelists/5538/>. Accessed on 15.10.2021.
- Smederevske manifestacije|Smederevo (wordpress.com): <https://filipovicfilip.wordpress.com/najpoznatije-smederevske-manifestacije/>. Accessed on 23.10.2021.
- Smith, M. (Ed.). (2007). *Tourism, culture and regeneration*. London: Routledge.
- Stojković, J. (1998). *Sartid–srpska industrija čelika 1913-1940*. PINUS zapisi 8, Zajednica tehničkih fakulteta, Beograd.
- Štoković, I. (2004). Benchmarking u turizmu. *Ekonomski pregled*, 55(1-2), 66-84.
- Timothy, D. J. (2021). *Cultural heritage and tourism*. Channel View Publications.
- UNWTO. (1993). General Assembly Documents, Volume 1993, Issue 1. <https://www.e-unwto.org/toc/unwtogad/1993/1>
- Urban Regeneration | GENOVA MERAVIGLIOSA: <http://www.genovameravigliosa.com/en/urban-regeneration>. Accessed on 04.07.2021.
- Uredba o utvrđivanju Prostornog plana područja posebne namene međunarodnog vodnog puta E 80 – Dunav (Panevropski koridor VII) (“Službeni glasnik RS”, broj 14/2015)
- Wikipedia, Belgrade Fortress: https://en.wikipedia.org/wiki/Belgrade_Fortress. Accessed on 23.10.2021.
- Wikipedia, Ram Fortress: https://en.wikipedia.org/wiki/Ram_Fortress. Accessed on 23.10.2021.
- Yearly event calendar of the town of Smederevo (visitsmederevo.com): <https://www.visitsmederevo.com/index.php/dogadjaj/12/Kalendar-manifestacija>. Accessed on 23.10.2021.



Human Resources Hospitality Employment Perspective: Cluster Scenario for Selected Tourism Industries

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Abstract: *Creating an employment policy and its perspective development within the tourism industry depends on the successful management of human resources. This research aims to determine the significance of the impact of certain employment indicators on the performance of hospitality human resources in the European Union countries (including the United Kingdom), Norway, Switzerland, Turkey, and several Balkan countries. The annual job fluctuation and changes in tourist potential enable the performance analysis of employment indicators within a shorter period, in this case for 2019 and 2020. The authors will use multiple hierarchical regression to determine the magnitude of the contribution of individual indicators to job permanency in the tourism industry. The cluster analysis based on Ward's method and squared Euclidean distance will group countries according to the performance of employment indicators in tourism. In this way, the most dominant group of countries will be formed, and during the mentioned period, will be shown the eventual movement of particular countries to clusters where better conditions prevail, in the tourism industry labor market. The cluster structure changes in the analyzed years should prove the fluctuation of human resources in the tourism industry, which depends a lot on the education level.*

1. INTRODUCTION

The management of human resources in tourism in recent years is a real challenge given the rapidly growing development of the tourism and hospitality industry and therefore their significant contribution to the development of the economic activity. Consequently, the quality selection of employees in the tourism industry is an extremely important segment in the provision of services, especially in the case of competitive advantage between tourist destinations in different countries. The development of human resources management policy in tourism implies understanding the needs of the market in terms of tourist preferences as well as the customization of services to increase the competitive advantage of a particular tourist destination.

That is why it is extremely important to recruit employees in the tourism industry based on their education and skills to improve the quality of service and ensure the re-arrival of tourists to a particular destination in the future. As a labor-intensive activity, the tourism sector should enable the influx of those employees who can pay full attention to tourists and ensure the popularity of the destination in the future, which is achieved by motivating employees, constant training, and maintaining job permanence, and competitive earnings.

Therefore, in creating the strategy and policy of human resources management in the tourism sector, it is extremely important to determine the trajectory of employees in tourism following their education, age, and skills to provide the best possible service to new tourists.

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Competitiveness of earnings concerning other economic branches is very important so that employees have the motivation to improve their skills, which is indirectly reflected in the satisfaction of visitors to a particular tourist destination.

To see the discrepancy in the perspective of the development of employment policy in tourism, this paper will analyze the impact of certain employment indicators on the permanence of work in tourism. Also, the cluster analysis will cover the grouped countries of the European Union, Turkey, Norway, Switzerland, and some Balkan countries, by similarity concerning employment indicators, to see which countries are leaders in the field of human resources in tourism. Cluster analysis is used to get a picture and describe in real terms the human resource management and tourism employment perspective for a short-term period (from 2019 to 2020) (Hermawati et al., 2019). That was a period (2020) that has been affected by the pandemic COVID-19 structural changes in each economic sphere, especially in tourism.

2. LITERATURE REVIEW

Human resource management in the tourism industry is important starting the necessity for economic development, generally. The tourism sector has its revolution regarding technology, knowledge, human attitude, and desire, personal preferences. In this way, a tourism company is a highly regulated powerhouse that stabilizes the economic environment. Employees in an organization, from executives to tellers, must have a higher level of integrity and trustworthiness and also work-life balance which is rated as the most important out of the many facets of a career. “Measure of subjective career success is typically attitudes, emotions, and perceptions of how individuals feel about their accomplishments rather than the objective amount of achievement” (Arthur et al., 2005). Taking into account that creating an employment policy and its perspective development within the tourism industry depends on the successful management of human resources we should define it. Management of human resources is constituent of the tourism sector. Managing this sector means well connecting the individual attitude and the organization’s goals. The tourism sector needs human resources in a more specific way regarding the fact that its HRM delivers services. It’s not a product that can be controlled before the product is delivered. Firms that operate in the tourism sector use specific models to select the right people that will carry for tourists’ needs.

Equally the employer may decide to change their business activity in the future which may adversely impact future job opportunities for individuals; as part of succession or diversity planning a tourist organization may decide to appoint people from outside thereby reducing the opportunities available to existing employees, or it may be that during a recession or economic slowdown redundancy impacts on an individual’s career. King (2004) has identified several principles that it is claimed underpin the effective provision of management of human resources within an organization. Author King highlights several important segments and characteristics that need to be observed to have effective human resource management. In this context, he emphasizes the importance of the right information to identify potential opportunities. It is also considered that every employee should show proactivity in performing their tasks but also intentions for career advancement because the tourism sector is dynamic. In this regard, the dynamics itself require a rapid change in the way of providing services and type of services according to the wishes of tourists.

Employees will also be motivated to give their best only if the top management monitors and rewards their enthusiasm of employees. King (2004) has also suggested that effective

management of human resources contains five components, that are important in the case of the tourism industry too:

- Career planning and support. This involves activities including setting through personal development plans, appraisal, and development reviews, development programs, and work experience.
- Career information and advice. This involves activities including career counseling and coaching, career workshops and courses.
- Developmental assignments. This involves activities including external or internal secondments, project assignments and work shadowing, and international assignments.
- Internal job markets and job allocation processes.

When selecting employees in the tourism industry, it is necessary to pay attention to social factors, where Beltrami emphasizes the following (Beltrami 2011):

- Consolidation of fundamental labor rights, such as a journey of 40 hours a week.
- Periods of unemployment, compensation, and remuneration for the holidays.
- Recognition of congestion and poor welfare in most European cities, due to the good weather of the south, choosing its beaches as the ideal place for recovery.

Therefore, tourism professionals and researchers should consider that the identity and consciousness of the people that live in a region can influence the external image of a cluster, for example, in the resources management, promoting innovation, establishing relationships with external agents, and especially the strategies for attracting tourists (Chavez et al., 2016). Tourism employment should not purely be seen as a production factor, but also as a social phenomenon (e.g. number of persons employed, their socio-demographic profile conditions of work, motivation, etc.). The starting point in thinking about competency is to recognize that there is a difference between what someone knows and what they can do effectively. „Organizations are facing incredible pressures in multiple areas (economy, technology, structure, society in general) to adjust to the new, evolving demands of their constituencies and to become more efficient and competitive within their environments” (Ballout, 2007). In a tourism organizational context, the focus on competency rather than knowledge should ensure that there is a detectable impact on operational effectiveness and performance as a result. Accordingly, the development of knowledge-based tourism confirms the importance of intellectual capital in the field of tourism, which indicates that employability whose content is human capital becomes a prerequisite and key factor in the success of an individual’s career. (Guo et al., 2012).

There is some debate about the relationship (if any) between the terms ‘competency’, ‘competence’, and ‘skill’ concerning this topic. Some writers and indeed practitioners tend to regard the terms as interchangeable, others see a difference between them. Competence can refer to an ability of an individual to deliver what is required in terms of output. The distinction between competency and skill is less easy to identify, as in its broadest sense a skill reflects the ability to ‘do’ something. So skill can be defined as expertness. Boyatzis (1982) overcame this difficulty by suggesting that competency comprised any or all of the following elements:

- Traits. This aspect of competency reflects the characteristics or innate qualities that an individual possesses and which impact their performance at work.
- Motives. Some people are motivated to deliver superior performance and to achieve good results for many reasons.
- Skills. This aspect would be a skill as reflected in the traditional sense of the term as outlined above.

- Self-image. The self-image that individuals hold about themselves influences how they interpret the world around them and their circumstances and will consequently form the basis of how they decide to interact with those situations.
- Social role. This aspect of competency reflects the acceptable and conventional social norms and behaviors that exist in a particular context.

Salaman and Taylor (2002) identified that several weaknesses were inherent in the application of the competency approach concerning management jobs, including:

- An emphasis on behavior marginalizes the effect on success through other factors in the social, cultural, and organizational context.
- Most will emphasize a small, narrow set of behaviors and attitudes whereas most management jobs will involve a wide range of tasks and requirements.
- There is a tendency to focus on current competency requirements rather than on long-term management development.
- There is an inbuilt assumption that management decision-making and action are always rational and aimed at achieving the highest performance.
- There is an assumption that managers are results-driven whereas in practice they must balance many competing pressures in deciding which outcomes must take precedence.

3. METHODOLOGY

The primary methodological framework in this research is based on the application of multiple hierarchical regression and hierarchical cluster analysis. Namely, by applying multiple hierarchical regression, the authors aim to determine which of the human resources hospitality indicators contributes the most to creating employment policy in the tourism industry in European Union countries (including the United Kingdom). The methodological framework will cover within its research Norway, Turkey, Switzerland as well as Balkan countries such as Serbia, Northern Macedonia, and Montenegro. The analyzed values of indicators from the Eurostat Database will also be used for the application of cluster analysis where countries will be grouped according to the performance of indicators. The aim of applying cluster analysis is to find a dominant cluster in a relatively small and narrow time interval for 2019 and 2020, as well as to determine the migration of countries to clusters with better performances. The implementation of cluster analysis determines statistically significant differences between clusters by applying appropriate statistical techniques. The mentioned cluster analysis was conducted in IBM SPSS 26.0 as one of the possibilities of using the information contained in a multidimensional observation (Hitka et al., 2017).

In this research, an agglomerative procedure was used to conduct a hierarchical cluster analysis. First, the distances of all units to each other are calculated, and then the groups are formed through joining or separating techniques. The merging technique (agglomerative, hierarchical method) starts from the fact that each unit is alone in a group of one member. Close groups are gradually merged until all the units in one group are finally found. In agglomerative procedures, each object or unit of observation begins as its cluster. In the following steps, the two closest clusters (or individuals) are combined into a new cluster, thus reducing the number of clusters by one in each subsequent step. Finally, all individuals are grouped into one large cluster (group). For this reason, agglomerative procedures are sometimes called construction methods. An important feature of hierarchical procedures is that earlier results are always ranked among later results. In “agglomerative” methods, each object is treated in the first step as a

separate cluster. Then the two nearest objects merge into the first cluster. Arithmetic means for each variable are calculated for each cluster. Then, for each object, the square Euclidean distance to the arithmetic mean of the cluster is calculated. These distances are summed for all cluster members. Those clusters for which the total (total) sum of these deviations is the smallest are merged.

The distance between two objects is determined as the sum of square differences in values for each variable. The Euclidean distance between two points is the line of the hypotenuse of a right triangle. Euclidean distance is used to calculate specific measures such as simple Euclidean distance and square, or absolute, Euclidean distance which is the sum of squares. The square Euclidean distance has the advantage that it does not take the square root that speeds up the calculation process, so it is a recommended measure for Ward's clustering methods. Ward's method was applied to form an agglomeration scheme to identify groups of countries that are similar to each other, but also different from other groups of countries (Rađenović et al., 2022). According to available data from Eurostat Database and literature, the authors have decided to analyze the following indicators:

- Employed persons by full-time/part-time activity (X1)- „The distinction between full-time and part-time work is generally based on a spontaneous response by the respondent. The main exceptions are the Netherlands and Iceland where a 35-hours threshold is applied, Sweden where a threshold is applied to the self-employed, and Norway where persons working between 32 and 36 hours are asked whether this is a full- or part-time position.“ (Eurostat- the statistical office of the European Union, 2017a)
- Employed persons by age groups (X2)- Employed persons are all persons between 15 and 74 years of age who worked at least one hour for pay or profit during the reference week or were temporarily absent from such work. The employment rate is the percentage of employed persons in the total population. (Eurostat- the statistical office of the European Union, 2017b)
- Employed persons by educational attainment level (X3)- “The educational attainment level of an individual is the highest ISCED (International Standard Classification of Education) level completed, the successful completion of an education program being validated by a recognized qualification, i.e. a qualification officially recognized by the relevant national education authorities or recognized as equivalent to another qualification of formal education.” (Eurostat- the statistical office of the European Union, 2017c)
- Permanency of job (permanent or temporary) (X4)- Unit of measure is the type of an employment contract in total measured in thousands according to workability population. (Eurostat- the statistical office of the European Union, 2017d)
- Average seniority of work with the same employer (X5)- Unit of measure is the period in years. (Eurostat- the statistical office of the European Union, 2017e)
- Employed persons and employees by sex and full-time/part-time activity (X6)- Unit of measure is employees by sex in total measured in thousands. (Eurostat- the statistical office of the European Union, 2017f).

Based on the values of indicators for both observed years, descriptive statistics were performed in Table 1.

Correlation analysis for 2020 also shows similar values as for the previously observed year where there is statistically significant conjunction between the mentioned indicators (Table 3).

Table 1. Descriptive statistics for human resources hospitality indicators for 2019 and 2020

Indicator	N	Min	Max	Mean	Stdev.	Indicator	Min	Max	Mean	Stdev.
X1_2019	35	201	42400	7778.78	10678.96	X1_2020	194.50	41861.70	6929.57	9720.51
X2_2019	35	20	4077	690.39	1098.37	X2_2020	16.90	4070.30	561.82	930.18
X3_2019	35	201	42400	7778.78	10678.96	X3_2020	194.50	41861.70	6929.56	9720.51
X4_2019	35	178	38322	6459.09	9006.67	X4_2020	172.0	37821.80	5748.67	8218.36
X5_2019	35	50	9489	1747.47	2532.46	X5_2020	36.40	8917.20	1425.22	2121.59
X6_2019	35	201	42400	7778.78	10678.96	X6_2020	194.50	41861.70	6929.57	9720.51

*Note: X1_2019- Employed persons by full-time/part-time activity; X2_2019- Employed persons by age groups; X3_2019- Employed persons by educational attainment level; X4_2019- Permanency of job (permanent or temporary); X5_2019- Average seniority of work with the same employer; X6_2019- Employed persons and employees by sex and full- time/part-time activity; X1_2020- Employed persons by full- time/part-time activity; X2_2020- Employed persons by age groups; X3_2020- Employed persons by educational attainment level; X4_2020- Permanency of job (permanent or temporary); X5_2020- Average seniority of work with the same employer; X6_2020- Employed persons and employees by sex and full- time/part-time activity.

Source: Authors' calculation based on Eurostat Database

Table 2. Pearson Correlation between selected indicators for 2019

		X4_2019	X3_2019	X1_2019	X2_2019	X5_2019	X6_2019
Pearson Correlation	X4_2019	1.000	.994	.994	.928	.964	.994
	X3_2019	.994	1.000	1.000	.942	.977	1.000
	X1_2019	.994	1.000	1.000	.942	.977	1.000
	X2_2019	.928	.942	.942	1.000	.978	.942
	X5_2019	.964	.977	.977	.978	1.000	.977
	X6_2019	.994	1.000	1.000	.942	.977	1.000
Sig. (1-tailed)	X4_2019	.	.000	.000	.000	.000	.000
	X3_2019	.000	.	.000	.000	.000	.000
	X1_2019	.000	.000	.	.000	.000	.000
	X2_2019	.000	.000	.000	.	.000	.000
	X5_2019	.000	.000	.000	.000	.	.000
	X6_2019	.000	.000	.000	.000	.000	.

Source: Authors' calculation based on Eurostat Database

Table 3. Pearson Correlation between selected indicators for 2020

		X4_2020	X3_2020	X1_2020	X2_2020	X5_2020	X6_2020
Pearson Correlation	X4_2020	1.000	.994	.994	.923	.964	.994
	X3_2020	.994	1.000	1.000	.932	.974	1.000
	X1_2020	.994	1.000	1.000	.932	.974	1.000
	X2_2020	.923	.932	.932	1.000	.973	.932
	X5_2020	.964	.974	.974	.973	1.000	.974
	X6_2020	.994	1.000	1.000	.932	.974	1.000
Sig. (1-tailed)	X4_2020	.	.000	.000	.000	.000	.000
	X3_2020	.000	.	.000	.000	.000	.000
	X1_2020	.000	.000	.	.000	.000	.000
	X2_2020	.000	.000	.000	.	.000	.000
	X5_2020	.000	.000	.000	.000	.	.000
	X6_2020	.000	.000	.000	.000	.000	.

Source: Authors' calculation based on Eurostat Database

The correlation analysis (Pearson Correlation) for indicator values for both observed years was first performed in IBM SPSS 26.0. Thus, the values of the correlation coefficients for 2019 are extremely high and positive, which only indicates a strong correlation of selected indicators/ variables that act in the same direction on creating employment policy in the tourism industry. In addition, in the Sig. column (Table 2) could be realized that all correlations are statistically significant.

Applying multiple hierarchical regression in this research, the authors aim to determine which of the independent predictor variables by sequential introduction into the regression model most affects the dependent variable - Permanency of job. As can be seen in the Model Summary table for 2019, the adjusted coefficient of determination explains more than 90% of the variability in the model which means that the regression model is valid. Also, a Durbin-Watson test value of 1,489 or less than 2 indicates that the model tends to have no autocorrelation (Table 4).

Table 4. Model summary for hierarchical regression model in 2019

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson	
					R Square Change	F Change	df1	df2		Sig. F Change
1	.994 ^a	.989	.988	978.176	.989	2849.528	1	33	.000	
2	.995 ^b	.989	.989	961.069	.001	2.185	1	32	.149	
3	.995 ^c	.990	.989	958.243	.000	1.189	1	31	.284	1.489

a. Predictors: (Constant), X3_2019

b. Predictors: (Constant), X3_2019, X2_2019

c. Predictors: (Constant), X3_2019, X2_2019, X5_2019

d. Dependent Variable: X4_2019

Source: Authors' calculation based on Eurostat Database

In order to prove the validity of the regression model in terms of the statistical significance of the variables in the model, the ANOVA procedure was conducted for both years. In the column Sig. for 2019 we see that there is a statistically significant difference between the variables included in the model because the value in all three steps of the hierarchical regression is less than 0.05 (Table 5).

Table 5. ANOVA procedure for regression model for 2019

Model		ANOVA ^a				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2726507598.196	1	2726507598.196	2849.528	.000 ^b
	Residual	31575312.343	33	956827.647		
	Total	2758082910.539	34			
2	Regression	2728525980.965	2	1364262990.483	1477.028	.000 ^c
	Residual	29556929.574	32	923654.049		
	Total	2758082910.539	34			
3	Regression	2729617762.475	3	909872587.492	990.898	.000 ^d
	Residual	28465148.063	31	918230.583		
	Total	2758082910.539	34			

a. Dependent Variable: X4_2019

b. Predictors: (Constant), X3_2019

c. Predictors: (Constant), X3_2019, X2_2019

d. Predictors: (Constant), X3_2019, X2_2019, X5_2019

Source: Authors' calculation based on Eurostat Database

From the table of regression coefficients for 2019, after the hierarchical regression in three steps, it can be seen that the independent variable *Employed persons by educational attainment level* have the greatest influence on the dependent variable *Permanency of job*. Thus, with the growth of the level of education in the tourism industry, there is a greater opportunity for job maintenance and making career progress. In the Sig. column for 2019, the indicator *Employed persons by educational attainment level* has a statistically significant value in all three steps of hierarchical regression (Table 6).

Table 6. Hierarchical regression coefficients for variables in 2019

Model	Coefficients ^a							
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.*	95.0% Confidence Interval for B		
	B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	-63.891	205.597		-.311	.758	-482.180	354.399
	X3_2019	.839	.016	.994	53.381	.000	.807	.871
2	(Constant)	-105.934	203.994		-.519	.607	-521.455	309.587
	X3_2019	.903	.046	1.070	19.590	.000	.809	.997
3	X2_2019	-.662	.448	-.081	-1.478	.149	-1.575	.250
	(Constant)	-94.168	203.680		-.462	.647	-509.575	321.240
	X3_2019	.969	.076	1.148	12.772	.000	.814	1.123
	X2_2019	.011	.762	.001	.014	.989	-1.543	1.564
	X5_2019	-.565	.519	-.159	-1.090	.284	-1.623	.492

a. Dependent Variable: X4_2019

Source: Authors' calculation based on Eurostat Database

The Model Summary (Table 7) table as a result of hierarchical regression showed similar results of the adjusted coefficient of determination and Durbin-Watson statistics for the variables in 2020. Accordingly, in this case, too, it is a valid regression model.

Table 7. Model summary for hierarchical regression model in 2020

Model	Model Summary ^d									
	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change	Durbin-Watson
					R Square Change	F Change	df1	df2		
1	.994 ^a	.988	.988	906.395	.988	2681.000	1	32	.000	
2	.994 ^b	.988	.988	915.213	.000	.386	1	31	.539	
3	.994 ^c	.989	.988	917.0190	.000	.878	1	30	.356	1.448

a. Predictors: (Constant), X3_2020

b. Predictors: (Constant), X3_2020, X2_2020

c. Predictors: (Constant), X3_2020, X2_2020, X5_2020

d. Dependent Variable: X4_2020

Source: Authors' calculation based on Eurostat Database

A statistically significant difference between the mentioned indicators was proved in the ANOVA procedure for 2020 (Table 8).

Table 8. ANOVA procedure for regression model for 2020

Model	ANOVA ^a					
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2202579099.259	1	2202579099.259	2681.000	.000 ^b
	Residual	26289645.387	32	821551.418		
	Total	2228868744.646	33			
2	Regression	2202902681.598	2	1101451340.799	1314.985	.000 ^c
	Residual	25966063.049	31	837614.937		
	Total	2228868744.646	33			
3	Regression	2203641034.148	3	734547011.383	873.500	.000 ^d
	Residual	25227710.498	30	840923.683		
	Total	2228868744.646	33			

a. Dependent Variable: X4_2020

b. Predictors: (Constant), X3_2020

c. Predictors: (Constant), X3_2020, X2_2020

d. Predictors: (Constant), X3_2020, X2_2020, X5_2020

Source: Authors' calculation based on Eurostat Database

Table 9. Hierarchical regression coefficients for variables in 2020

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-75.385	191.873		-.393	.697	-466.217	315.447
	X3_2020	.840	.016	.994	51.778	.000	.807	.874
2	(Constant)	-92.014	195.578		-.470	.641	-490.899	306.870
	X3_2020	.867	.045	1.025	19.114	.000	.774	.959
3	X2_2020	-.295	.474	-.033	-.622	.539	-1.261	.672
	(Constant)	-83.841	196.158		-.427	.672	-484.449	316.768
	X3_2020	.924	.076	1.093	12.104	.000	.768	1.080
	X2_2020	.290	.784	.033	.370	.714	-1.311	1.892
	X5_2020	-.516	.551	-.133	-.937	.356	-1.640	.609

Source: Authors' calculation based on Eurostat Database

The output table of the regression model for the values of regression coefficients as in 2019 also shows a statistically significant and the largest impact of the indicator *Employed persons by educational attainment level* on the tourism industry workplace permanence (Table 9).

4. RESULTS AND DISCUSSION

The following analysis of the empirical part of this chapter is oriented on cluster analysis as a type of multivariate technique. The cluster analysis was conducted using a hierarchical agglomeration approach, where Ward's method was used to form the agglomeration scheme. Ward's procedure means that "the average value for each variable (center of the cluster) is calculated for each cluster, and then the square of Euclidean distance from the center of the cluster is calculated for each object, after which the distance for the objects is summed" (Simović et al. 2020, p.620).

In this way, countries were grouped by similarity, but also differences between groups of countries were identified based on the values of the mentioned indicators. "Cluster membership is assessed by calculating the total sum of squared deviations from the mean of a cluster. The criterion for fusion should be the smallest possible increase in the error sum of squares". As can be seen in the agglomeration schedule table (Table 10) from 2019, the smallest possible increase in the error sum of square is after the fifth step. It could be concluded the same fact for the agglomeration schedule table (Table 11) for the 2020 year because of the same number of iterations after which there is no significant increase in the error sum of square (Kol'veková et al., 2019).

Looking at the changes in the agglomeration scheme in the last few iterative steps (in this case five), the authors concluded that five clusters were formed in both years, which is presented on the map charts (Figure 1) for EU countries together with the United Kingdom, Norway, Turkey, Switzerland, and some Balkan countries.

The first cluster's map chart for 2019 shows five groups of analyzed countries according to mentioned indicators. It could be concluded from the distribution of countries by clusters that Cluster 1 is the largest cluster which consists of 17 countries (Stryzhak et al., 2021). The single-country cluster is Germany. The following cluster map chart (Figure 2) shows the distribution of countries within five clusters for 2020. As can be seen directly in 2020, Germany is a single-country cluster. On the other hand, in 2020, based on the values of the analyzed indicators, there are evident structural changes in clusters considering their transitions from previous groups, compared to 2019.

Table 10. Agglomeration scheme for 2019

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	18	32	480.355	0	0	2
2	18	28	5609.293	1	0	4
3	14	24	14617.953	0	0	14
4	16	18	25244.248	0	2	9
5	1	22	39829.513	0	0	11
6	6	33	64494.993	0	0	14
7	25	26	121215.333	0	0	12
8	17	20	197161.118	0	0	17
9	13	16	286299.874	0	4	24
10	4	29	379313.254	0	0	15
11	1	30	525672.349	5	0	17
12	7	25	687002.616	0	7	19
13	11	15	857113.961	0	0	22
14	6	14	1037504.141	6	3	22
15	4	34	1274453.834	10	0	18
16	3	27	1630168.034	0	0	20
17	1	17	2192103.369	11	8	20
18	2	4	2780149.016	0	15	19
19	2	7	4068374.340	18	12	23
20	1	3	5772377.289	17	16	27
21	19	23	7985284.794	0	0	30
22	6	11	10454962.237	14	13	24
23	2	8	14122801.785	19	0	27
24	6	13	20595996.980	22	9	31
25	10	35	37217621.025	0	0	29
26	9	12	57979550.610	0	0	28
27	1	2	112388832.397	20	23	30
28	9	21	177212000.132	26	0	32
29	10	31	253951968.914	25	0	32
30	1	19	415561843.843	27	21	31
31	1	6	752792806.758	30	24	34
32	9	10	1266002370.461	28	29	33
33	5	9	2393308562.677	0	32	34
34	1	5	14649265346.090	31	33	0

Source: Authors' calculation based on Eurostat Database

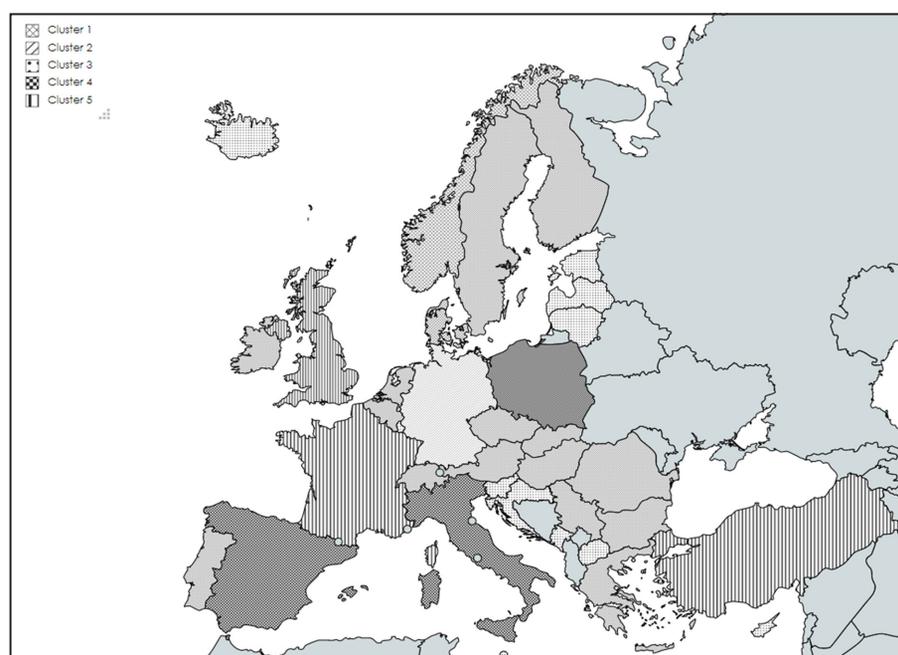


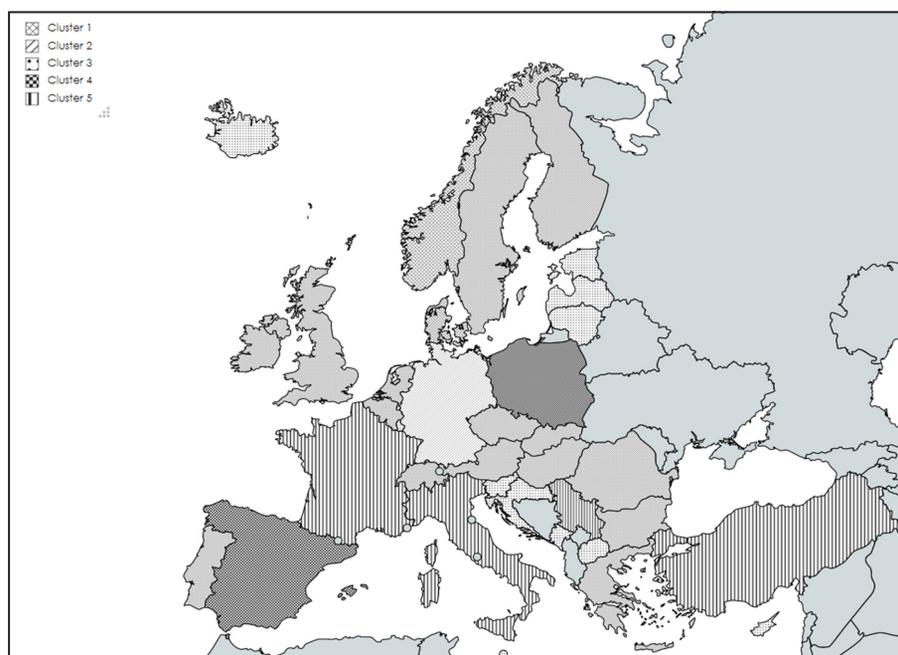
Figure 1. Clusters' map charts for 2019

Source: Authors' elaboration based on conducted cluster analysis in IBM SPSS 26.0

Table 11. Agglomeration scheme for 2020

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	28	32	1049.580	0	0	5
2	16	18	3545.485	0	0	5
3	1	22	8941.475	0	0	12
4	14	24	22742.430	0	0	14
5	16	28	42451.958	2	1	10
6	6	33	73355.378	0	0	14
7	25	26	128526.408	0	0	11
8	17	20	197013.762	0	0	18
9	4	29	277035.082	0	0	15
10	13	16	373128.954	0	5	24
11	7	25	515446.844	0	7	19
12	1	30	671486.734	3	0	18
13	11	15	842023.274	0	0	22
14	6	14	1014216.966	6	4	22
15	4	34	1238202.106	9	0	17
16	3	27	1537266.071	0	0	20
17	2	4	1929247.811	0	15	19
18	1	17	2529540.205	12	8	20
19	2	7	3828372.624	17	11	23
20	1	3	5417054.157	18	16	28
21	19	23	7693343.862	0	0	29
22	6	11	10060667.176	14	13	24
23	2	8	13754218.390	19	0	28
24	6	13	20075637.083	22	10	31
25	10	35	34586210.843	0	0	27
26	9	21	51811582.268	0	0	30
27	10	12	100000272.761	25	0	30
28	1	2	153229554.836	20	23	29
29	1	19	312545100.765	28	21	31
30	9	10	571118901.858	26	27	32
31	1	6	900065815.615	29	24	33
32	5	9	2192240622.610	0	30	33
33	1	5	11760307878.020	31	32	0

Source: Authors' calculation based on Eurostat Database

**Figure 2.** Clusters' map charts for 2020

Source: Authors' elaboration based on conducted cluster analysis in IBM SPSS 26.0

Descriptive statistics for the obtained groups of countries (clusters) are based on the indicators mean in both observed years. As can be seen in Table 8, the highest mean for all indicators in 2019 has the single-country cluster Germany, which means that this cluster is the most dominant and that it has the most favorable conditions in the labor market in the tourism industry. Also, the fifth cluster consisting of France, Turkey and the United Kingdom shows that the conditions in it are better for most indicators compared to other clusters, except Germany of course. Thus, it is concluded that the permanence of jobs does not have a high frequency of changes in Germany and the employment perspective is very favorable with efficient human resource management in the German tourism industry. Serbia is in the first cluster of 17 developed countries from the European Union, which only indicates there are positive tendencies in the sphere of the Serbian tourism employment perspective. Other countries in Western Balkans, such as Montenegro and North Macedonia, are in the third cluster, which has weaker human resources conditions in the tourism industry (Table 12).

Table 12. Indicators' mean within clusters for 2019

CLU	Number of Countries	Mean 2019					
		X1_2019	X2_2019	X3_2019	X4_2019	X5_2019	X6_2019
1	17 (Belgium, Bulgaria, Czechia, Denmark, Ireland, Greece, Hungary, Netherlands, Austria, Portugal, Romania, Slovakia, Finland, Sweden, Norway, Switzerland, Serbia)	4383.82	379.06	4383.82	3672.74	933.49	4383.82
2	1 (Germany)	42400.10	4077.30	42400.10	38321.80	9489.30	42400.10
		(max)	(max)	(max)	(max)	(max)	(max)
3	11 (Estonia, Croatia, Lithuania, Latvia, Luxembourg, Malta, Slovenia, Iceland, Montenegro, North Macedonia, Cyprus)	711.32	51.77	711.32	616.25	169.71	711.32
4	3 (Spain, Italy, Poland)	19866.70	1081.73	19866.70	15961.83	3876.87	19866.70
5	3 (France, Turkey, UK)	29302.57	3275.80	29302.57	23548.53	7435.10	29302.57

Source: Author's calculation based on Eurostat Database through SPSS

Table 13. Indicators' mean within clusters for 2020

CLU	Number of Countries	Mean 2020					
		X1_2020	X2_2020	X3_2020	X4_2020	X5_2020	X6_2020
1	18 (Belgium, Bulgaria, Czechia, Denmark, Ireland, Greece, Hungary, Netherlands, Austria, Portugal, Romania, Slovakia, Finland, Sweden, Norway, Switzerland, North Macedonia, UK)	4333.65	356.01	4333.65	3626.07	858.01	4333.65
2	1 (Germany)	41861.70	4070.30	41861.70	37821.80	8917.20	41861.70
		(max)	(max)	(max)	(max)	(max)	(max)
3	11 (Estonia, Croatia, Lithuania, Latvia, Luxembourg, Malta, Slovenia, Iceland, Montenegro, Cyprus)	702.08	46.04	702.08	609.88	154.06	702.08
4	2 (Spain, Poland)	17822.15	932.05	17822.15	14585.50	3429.65	17822.15
5	4 (France, Italy, Serbia, Turkey)	25568.06	2202.86	25568.06	20036.73	5466.70	25568.067

Source: Author's calculation based on Eurostat Database through SPSS

In 2020, indicators' mean within clusters is still the largest for country-cluster Germany. However, this year there have been some structural changes in terms of countries' movement into clusters that have better performance of indicators. This is especially true for North Macedonia, which moved to the first cluster, while Cyprus lost its place in the first cluster and moved to the third cluster with less favorable indicator values.

The same happened with the United Kingdom, where this country migrated to the third cluster from the fifth, which means decreasing in human resources indicators' performances in the tourism industry. Italy and Serbia migrated to the fifth cluster where France and Turkey are located, where the fifth cluster together with the second cluster is dominating in relation to the others (Germany). Thus, it is concluded that Serbia has made significant progress in 2020 in terms of human resources policy in the tourism industry (Table 13).

In order to confirm the correctness and validity of the cluster analysis and the statistically significant difference in the average values of variables among the clusters, the authors performed the ANOVA procedure. Based on the Sig. column a statistically significant difference in the average values of variables among the cluster is confirmed since the value in this column is less than 0.05 (Table 14).

Table 14. ANOVA procedure

Indicators	Mean Square	F	Sig.*	Indicators	Mean Square	F	Sig.*	
X1_2019	Between Groups	943046497.059	268.970	.000	X1_2020	760221877.561	285.469	.000
	Within Groups	3506139.337				2663058.756		
X2_2019	Between Groups	9529373.364	98.563	.000	X2_2020	6077240.111	41.528	.000
	Within Groups	96683.172				146342.364		
X3_2019	Between Groups	943046497.059	268.970	.000	X3_2020	760221877.561	285.469	.000
	Within Groups	3506139.337				2663058.756		
X4_2019	Between Groups	667448866.279	226.799	.000	X4_2020	541095480.642	243.333	.000
	Within Groups	2942914.847				2223683.520		
X5_2019	Between Groups	52308144.741	177.891	.000	X5_2020	34102340.877	81.543	.000
	Within Groups	294045.431				418215.115		
X6_2019	Between Groups	943046497.059	268.970	.000	X6_2020	760221877.561	285.469	.000
	Within Groups	3506139.337				2663058.756		

Source: Author's calculation based on Eurostat Database through SPSS

In order to determine the validity of the set model for cluster analysis, the authors used one of the statistical instruments - the test of homogeneity of variance (Table 15). The mentioned test "starts from the null hypothesis that the variance is the same in all samples if $P > 0.05$. If $P > 0.05$, the null hypothesis is accepted, i.e., the alternative is rejected, which implies such a situation that the variance is equal for at least one pair of samples" (Simović et al., 2020, p. 623). The results confirmed that there is no statistically significant difference between variations in a given sample (Levene's Statistic). This fact is shown in the column Sig. for both analyzed years in the section Based on Mean which implies acceptance of the null hypothesis according to which variance is homogeneous for a given variable by groups (Rađenović et al., 2022).

5. CONCLUSION

The applied multiple hierarchical regression led to the conclusion that the greatest impact on the permanence of work has an indicator related to the educational level of employees in the tourism sector. Namely, the level of education and qualifications, as well as the skills that contribute to the improvement of the tourist service, certainly have an impact on increasing the earnings of employees working in tourism, as well as on consistency when it comes to the career path of employees.

Table 15. Levene's Statistic for analyzed years

Indicators	Levene's Statistic	Sig.	
X1_2019	Based on Mean	3.940	.018
	Based on Median	2.659	.066
	Based on Median and with adjusted df	2.659	.085
	Based on trimmed mean	3.872	.019
X2_2019	Based on Mean	10.663	.010
	Based on Median	2.987	.047
	Based on Median and with adjusted df	2.987	.117
	Based on trimmed mean	9.125	.000
X3_2019	Based on Mean	3.940	.018
	Based on Median	2.659	.066
	Based on Median and with adjusted df	2.659	.085
	Based on trimmed mean	3.872	.019
X4_2019	Based on Mean	6.468	.012
	Based on Median	4.626	.009
	Based on Median and with adjusted df	4.626	.025
	Based on trimmed mean	6.388	.002
X5_2019	Based on Mean	8.867	.010
	Based on Median	3.409	.030
	Based on Median and with adjusted df	3.409	.077
	Based on trimmed mean	8.231	.000
X6_2019	Based on Mean	3.940	.018
	Based on Median	2.659	.066
	Based on Median and with adjusted df	2.659	.085
	Based on trimmed mean	3.872	.019
X1_2020	Based on Mean	2.857	.054
	Based on Median	1.895	.153
	Based on Median and with adjusted df	1.895	.173
	Based on trimmed mean	2.810	.057
X2_2020	Based on Mean	8.436	.010
	Based on Median	7.510	.001
	Based on Median and with adjusted df	7.510	.014
	Based on trimmed mean	7.997	.000
X3_2020	Based on Mean	2.857	.054
	Based on Median	1.895	.153
	Based on Median and with adjusted df	1.895	.173
	Based on trimmed mean	2.810	.057
X4_2020	Based on Mean	6.480	.012
	Based on Median	2.855	.054
	Based on Median and with adjusted df	2.855	.105
	Based on trimmed mean	6.283	.002
X5_2020	Based on Mean	10.531	.010
	Based on Median	8.688	.000
	Based on Median and with adjusted df	8.688	.018
	Based on trimmed mean	10.279	.000
X6_2020	Based on Mean	2.857	.054
	Based on Median	1.895	.153
	Based on Median and with adjusted df	1.895	.173
	Based on trimmed mean	2.810	.057

*Statistical significance at level 0.05

Source: Authors' elaboration based on conducted cluster analysis in IBM SPSS 26.0

Multiple hierarchical regression and its stepwise involvement of independent variables in the regression model found that even individually, the educational level has the highest impact on the perspective of employees in tourism, as evidenced by the fact that $p < 0.05$. Stable employment contracts based on work-ability potential depend on the long-term training of employees in the tourism industry and the transition to a higher level of education, which is confirmed by the results of regression analysis.

On the other hand, using cluster analysis, the authors determined which countries are dominant in terms of analyzed indicators. In both years, the most dominant cluster is Cluster 2 for all employment tourism indicators. Cluster 2 presents Germany as a single-country cluster. In other clusters, there have been significant structural changes, given that some countries have significantly changed their position when it comes to employment tourism indicators. For example, Serbia moved from Cluster 1, in which it was in 2019, which is the second most dominant, to Cluster 5, which has significantly lower performance compared to Cluster 1, in which this country was. This only indicates the great turbulence in the labor market in tourism in 2020, which is marked by the stagnation of tourism development due to the global pandemic.

In 2020, however, Italy moved to Cluster 5, which has a better performance compared to Cluster 4, which it was in 2019 when it comes to the labor market in tourism. The United Kingdom and North Macedonia also advanced in 2020 and moved from Cluster 5 and Cluster 3 to Cluster 1, respectively, which is second in dominance. It could be concluded that a flexible employment policy in the tourism industry could have results even in extreme business conditions such as a pandemic, which could be a recommendation for human resource management in the future.

6. FUTURE RESEARCH DIRECTION

Future research should be focused on identifying key factors influencing the permanence of jobs in the tourism industry in order to adapt human resource management as much as possible to trends in tourism and tourist destinations. Constant education and monitoring of technological trends regarding the formation of e-booking systems also groups countries based on digital literacy of the tourism labor force, which can be the subject of cluster analysis. The efficiency of the hospitality of information systems influences the choice of tourist destinations, which is another indicator for future research.

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REFERENCES

- Arthur, M.B., Khapova, S.N. and Wilderom, C. (2005). Career Success in a Boundaryless Career World. *Journal of Organizational Behavior*, 26, 177-202, doi: 10.1002/job.290.
- Ballout, H.I. (2007). "Career success: The effects of human capital, person-environment fit and organizational support", *Journal of Managerial Psychology*, Vol. 22 No. 8, pp. 741-765, DOI:10.1108/02683940710837705

- Boyatzis, R.E. (1982). *The Competent Manager: A Model for Effective Performance*. London: Wiley.
- Chavez, J., Torres, A. and Torres, M.C. (2016). Hierarchical Cluster Analysis of Tourism for Mexico and the Asia-Pacific Economic Cooperation (APEC) Countries, *Turismo em Analise*, 27(2), pp. 235-255, DOI: 10.11606/issn.1984-4867.v27i2p235-255
- Fu, J.C., Fu, P. (2008). Study of the Relationship between human capital and occupational mobility: the role of human capital. *Chinese Journal of Ergonomics*, vol.14, no3, pp. 36-40.
- Guo, W., Xiao, H., Yang, X., (2012). An Empirical Research on the Correlation between Human Capital and Career Success of Knowledge Workers in Enterprise, *International Conference on Solid State Devices and Materials Science*, Faculty of Management and Economics, Physics Procedia 25 (2012) 715 – 725, doi: 10.1016/j.phpro.2012.03.148
- Hermawati, A. and Suci, R.P. (2019). Biplot and Cluster Analysis of Satisfaction Level and the Interest of MSMEs Human Resource of Tourism Sector in East Java to Transglobal Leadership, *International Journal of Civil Engineering and Technology*, 10(8), pp. 348–363.
- Heslin, P.A., (2005). Conceptualizing and evaluating career success, *Journal of Organizational Behavior*, pp. 113-136, DOI: 10.1002/job.270
- Hitka, M., Lorincová, S., Ližbetinová, L., Pajtková Bartáková, G. and Merková, M., (2017). Cluster Analysis Used as the Strategic Advantage of Human Resource Management in Small and Medium sized Enterprises in the Wood-Processing Industry, *BioResources* 12(4), 7884-7897, DOI: 10.15376/biores.12.4.7884-7897
- King, Z. (2004). *Career Management: A CIPD Guide*. London: CIPD.
- Kol'veková, G., Liptáková, E., Štrba, L., Kršák, B., Sidor, C., Cehlár, M., Khouri, S. and Behún (2019). Regional Tourism Clustering Based on the Three Ps of the Sustainability Services Marketing Matrix: An Example of Central and Eastern European Countries, *Sustainability*, 11, 400; DOI:10.3390/su11020400
- Eurostat- the statistical office of the European Union: LFS series - detailed quarterly survey results (from 1998 onwards) (lfsq) Reference Metadata in Euro SDMX Metadata Structure (ESMS) https://ec.europa.eu/eurostat/cache/metadata/EN/lfsi_esms.htm (retrieved 16th April 2022)
- Rađenović, Ž., Krstić, B., & Marković, M. (2022). Economic Performance of Agriculture in the European Union Countries / Wyniki ekonomiczne w rolnictwie w krajach Unii Europejskiej. *Zagadnienia Ekonomiki Rolnej / Problems of Agricultural Economics*, 370(1), 5–21. DOI: 10.30858/zer/145686
- Salaman, G. and Taylor, S. (2002). 'Competency's consequences – changing the character of managerial work'. Paper presented at the ESRC Critical Management Studies. Seminar: Managerial Work, The Judge Institute of Management, Cambridge University
- Simović, O., Rađenović, Ž., Perović, D., & Vujačić, V. (2020). Tourism in the Digital Age: E-Booking Perspective. *ENTRENOVA – ENTERPRISE RESEARCH INNOVATION*, 6(1), 616-627. <https://hrcak.srce.hr/ojs/index.php/entrenova/article/view/13515/6766>
- Stryzhak, O., Akhmedova, O., Leonenko, O., Lopatchenko, I. and Hrabar, N. (2021). Transformation of human capital strategies in the tourism industry under the influence of Economy 4.0., *Problems and Perspectives in Management*, 19(2), 145-156. DOI:10.21511/ppm.19(2).2021.12



Determinants of Employment in Travel and Tourism Industries in EU: A Panel Data Estimation

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Abstract: *This chapter presents tourism indicators and determinants of employment in tourism activities in the Member States of the European Union, analyzed for the period from 1995 to 2019. The analysis of countries' travel and tourism contribution to gross domestic product and employment shows the development and causes of each EU members' position in this field in the observed period. The countries that had both, the lowest average percentage of contribution to employment and GDP, during the analyzed period are Slovak Republic, Poland, Lithuania, Romania, Belgium, and Luxembourg. The group of countries that had the highest average contribution of tourism and tourism related industries to employment and GDP included Austria, Croatia, Greece, and Malta. The empirical analysis applied panel data techniques in order to estimate the determinants of employment in tourism industries, such as capital investment in tourism activities, and domestic and foreign tourism spending. Results confirm the positive effect of investment and domestic and foreign spending on employment in tourism industries as well as in tourism-related industries.*

1. INTRODUCTION

This chapter deals with travel and tourism data. Travel is a broader word and it means the activity of travelers. These are persons who are moving for any purpose and duration in between different geographic areas. Tourism on the other hand is a subset of travel and it refers to an activity of visitors. A visitor is a traveler who is taking a trip to the main location outside his/her ordinary environment. The duration of this trip should not be longer than 12 months and it can be performed for any purpose, but it must not be performed for employment. So, a visitor is a subset of a traveler (UNWTO, 2010). To prevent confusion, we will be using the term tourism to comprise both definitions in one word, unless otherwise noted.

Tourism has become a very important economic activity in the world, affecting the volume of gross domestic product, the foreign exchange, balance of payments, and employment. Major changes in the field of tourism in the international arena, increasing competition, and the occasional lag in tourism turnover in the economies of some European countries, which all have taken place in the last few decades, required the adjustment of the tourism economy in all above mentioned areas. Due to its constant growth, expansion, and diversity, tourism has become one of the fastest-growing industries in the world. In the last six decades, the industry advanced tremendously. From the beginning of 1960 to 2000, the number of international tourist visits worldwide increased 27 times. Since then, however, it took only less than twenty years for the number of visits to reach 1,186 million, which is almost twice as many as in the year 2000 (Ministry of Economic Development and Technology, 2017). This is another reason why the tourism sector belongs to the labor augmented sector, which means that it is relatively more efficient in creating jobs than other sectors. Tourist consumption expenditure offers direct or indirect employment opportunities

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in this sector (Önder & Durgun, 2008). Because of its fast-evolving nature, it was recognized as a positive contributor to economic growth through various channels and is known as a currency earner sector, which promotes physical and human capital accumulation and pushes technology and innovation. Tourism also promotes other economic industries directly and indirectly, which helps even more in the economic growth acceleration (Brida, Matesanz Gómez, & Segarra, 2020).

According to World Travel & Tourism Council annual report (WTTC, 2020) data for 2019 show that travel and tourism were growing a lot faster than the World economy, the growth rate was 3.5%, which is 1 percentage point more than the global economy's growth. Travel and tourism was the third biggest sector that contributed the most to global GDP in 2018. If we take a look at European Union's (EU) key travel and tourism data, we can note that the contribution of travel and tourism to GDP in the region also grew more than the real economy. The EU travel and tourism contribution to the GDP growth rate was 2.3% while the real economy's growth was 1.4%. Travel and tourism in the EU contributed 22.6 million jobs to its region, which is 11.2% of total EU employment (WTTC, 2020).

Thus, after the literature review, we first analyze the data about travel and tourism contribution to employment and GDP in each EU member state. While the empirical part attempts to estimate the determinants of direct employment in travel and tourism industries, the determinants of employment in travel and tourism industries as well as in related industries, and the effect of travel and tourism activities on total employment in EU countries. The panel data methods are applied, such as fixed effects models and random effects models.

The following section presents a literature review where similar topics were studied as well as their interdependent connection. The third section describes countries' travel and tourism contribution to employment and GDP as a good introduction to our study and for a better perception of the field being analyzed. In the next section, we continue with an explanation of the chosen indicators, data, and methodology followed by a presentation and discussion of empirical results. The chapter concludes with further research possibilities and final thoughts in the conclusion.

2. LITERATURE REVIEW

It is known that various authors have been dealing with tourism as an economic aspect since the early 1980s, as confirmed by Lading (2011). In the last decades, the tourism sector has definitely grown fast and become a significant sector and has proven as an advantage to the economy (Yap & Saha, 2013). As Habibi and others (2018) stated, tourism can be a part of economic policy and so positively impact employment and economic growth; as well as creating a positive effect on the production of goods and services by signaling the market when new attendees enter the market and with achieving bigger efficiency and demand-based economies of scale for goods and services, and by making better life quality with greater consumer choice options and more competitors.

Through their project, the International Labour Organization and the United Nations World Tourism Organization stated that tourism is one of the industries which creates the most jobs, being a vital component in the economy's development (UNTWO, 2021). Tourism can directly improve employment in a local environment and indirectly through other industries which are connected to the tourism industry. It can highly stimulate other industries in the economy

throughout its forward and backward connection. Becerra (2009) says this can promote local industries that significantly support the tourism industry, such as artisanal manufacturing, hospitality, transport, telecommunications, and tourist guide services. This can financially help in building or adapting facilities that can be used by domestic and international travelers or even by some national communities. Described also diminishes the unemployment rate, because of tourism there are more jobs available in the sector itself and other sectors also. Consequently, this as well improves economic activity and contributes to bigger GDP (Tang & Tan, 2013).

Even though tourism has the potential in creating new jobs, employment is a field in tourism that is studied the least. Only some countries have a collection of relevant employment in tourism statistics UNWTO (2021). However, there are several studies analyzing the relationship between employment and tourism activities, and the impact they have on each other. Prasad and Kulshrestha (2016) analyzed the impact of tourism in creating employment in the Indian economy. Results revealed that the independent variable - foreign tourist expenditure, positively affects employment in the tourism industry and also in other industries. A study of a Brazilian tourism sector in the employment aspect, as well showed that chosen employment-oriented indicators have a positive impact on the employment growth in the tourism industry (De Santana Ribiero, Carneiro Rios Lopes, Goncalves Montenegro, & De Lima Andrade, 2018). Mozorova (2015) and others determined that there are complementary and interdependent relationships between the labor market and tourism sector in the Yaroslavl region. The study revealed that tourism has a multiplying positive impact on the level of employment in the region.

As the importance of the tourism sector for the economy grew through the decades, it was noted that the investigation of the relationship between tourism and economic growth also started growing, just oppositely to the tourism-employment relationship. This was discovered and also confirmed by Lee and Brahmašreṇe (2013). Brida, Matesanz Gómez, and Segarra (2020) accepted that tourism contributes to economic growth in a positive way via numerous direct and indirect channels. So, they state that it is important to include tourism as a key ingredient in the promotion of growth. In an empirical analysis of tourism-growth nexus for sixteen emerging market countries, Sokhanvar and others (2018) found that international tourism receipts have an impact on economic growth, but in some countries, there is a reverse impact too, that meaning, that the level of economic growth as well affects the tourism receipts. In their study on a sample of 144 countries, Cárdenas-García and others (2015) confirmed the argument of international organizations, that economic growth experienced in some countries as a result of the expansion of the tourism activity over the last two decades influences an increase in the level of a country's economic development.

Gómez López and Barrón Arreola (2019) studied the relationship between tourism activities, employment in the tourism sector, and economic variables in the states of Mexico. Variables that directly affect employment are the number of national tourists and the state's GDP. Thus, it is a study of the relationship between all three connected areas, tourism, employment, and economic growth or development.

3. EU COUNTRIES' KEY TOURISM INDICATORS

To better understand the situation in which a particular country finds itself, in this section, we will present key tourism indicators for European countries. The chosen indicators are travel and tourism total contribution to employment (TTtE) and travel and tourism total contribution

to GDP (TTtGDP). For a more transparent presentation countries are classified into groups according to similar average values of each indicator for the period from 1995 to 2019 as shown in Table 1. While Figures 1 – 4 exhibit both indicators for individual countries in all groups for four selected years: 1995, 2004, 2008, and 2019, in percentage.

Table 1. Groups classification intervals

Groups/Indicator	Travel & Tourism Total Contribution to Employment	Travel & Tourism Total Contribution to GDP
	Average Percentage Interval	
Lowest average percentage	5.14 - 6.88	5.12 - 6.80
Medium-high average percentage	7.05 - 10.58	7.17 - 9.51
High average percentage	11.09 - 14.49	10.11 - 12.96
Very high average percentage	15.61 - 26.98	13.72 - 25.41

Source: Authors' calculation

Figure 1 presents countries with the lowest average percentage of their travel and tourism total contribution to employment and GDP. As we can see, there is majority of countries are the same for both indicators. Those are Belgium, Lithuania, Luxembourg, Poland, Romania, and the Slovak Republic. For each indicator, there are some deviations. For the travel and tourism total contribution to employment, we can see that Latvia had the minimum percentage of 2.04% in 1995, but in 10 years its percentage increased 3 times and had a further increasing trend over the presented period. This was accompanied by new and updated tourism policies years after the global financial crisis. Because of these changes, a lot of new tourist accommodations grew in Latvia and they offered many new jobs (OECD, 2020). Luxembourg experienced a very good year in tourism in 2012 and the values ranged around that height, later on by 2019 even increased (LuxTimes, 2012). Thus, Luxembourg is a country with the maximum value and it was 11.3% in 2019.

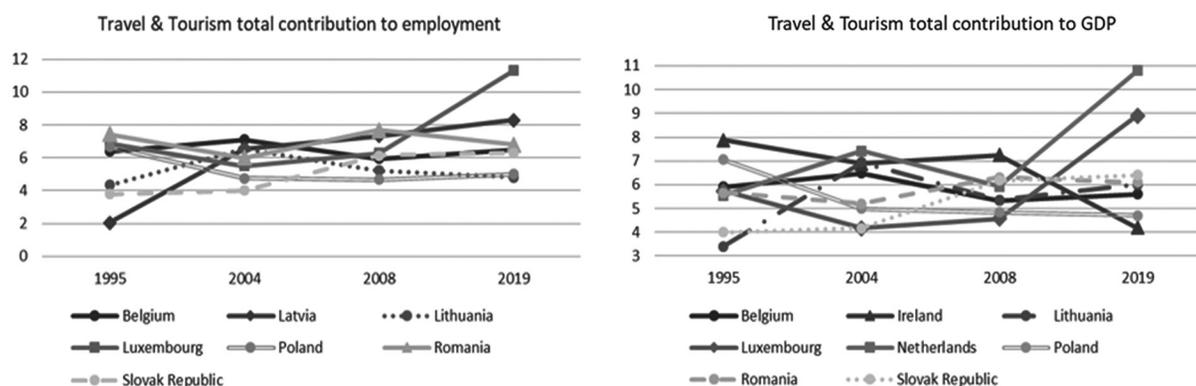


Figure 1. Group of countries with the lowest average percentage of contribution to employment and GDP

Source: Authors' elaboration based on data from The World Bank (WB, 2021a)

As shown in Figure 1 for the travel and tourism total contribution to GDP two countries have a positive deviation. These are the Netherlands and Luxembourg, for which a major rise in the contribution is seen in the period right after the global financial crisis due to a major increase in the importance of domestic and inbound tourism (OECD, 2016). Oppositely, for Ireland, a big decrease is noticeable for the same period. We can also observe a major enlargement of the percentage for Lithuania from 1995 to 2004. Other countries had small fluctuations between 4% and 8% for both indicators in the observed period.

Countries with a medium-high average percentage of their travel and tourism total contribution to employment and GDP are presented in Figure 2. In this figure, only three countries are the same for both indicators, France, the Czech Republic, and Denmark. The country that is the most deviating from the TTtE is Hungary, which had the maximum value (23.1%) in 1995 but in the next decade, the percentage dropped by almost 3 times. This is a consequence of the changes in the pension system and labor benefits system, therefore from 2001, the unemployment rate started to rise. A large part of the workforce was retiring early at the beginning of the nineties and in that time the learning time was also prolonged, which further contributed to the situation at the time (HCSO, 2006). This decreasing trend was continuing and turned in the opposite direction by the end of the observed period.

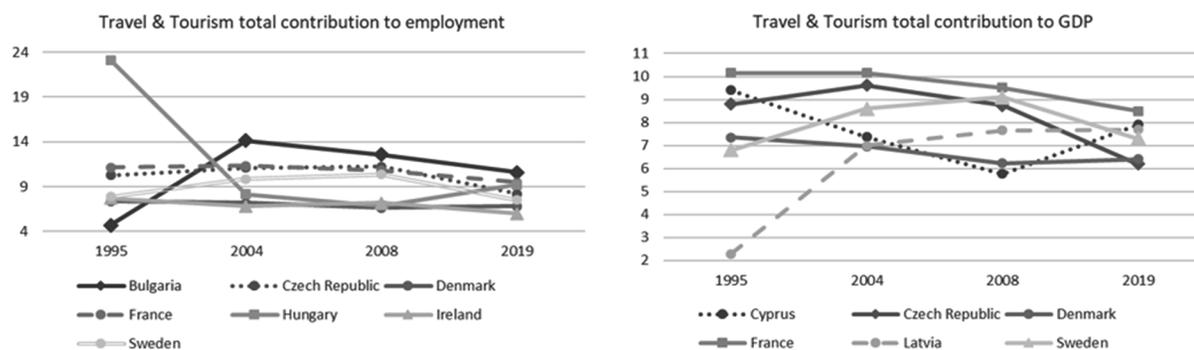


Figure 2. Group of countries with a medium-high average percentage of contribution to employment and GDP

Source: Authors' elaboration based on data from The World Bank (WB, 2021a)

On the contrary, Bulgaria started with the minimum value (4.7%) which started increasing in the following years, but after 2004 shrank a little or even stagnated. The deviations that are noticed for the TTtGDP are for Latvia and Cyprus. Latvia had the minimum percentage, which really differed from the percentage of other countries, it was only 2.29% when the second smallest was around 2 times bigger and it was Cyprus's 4.8% in 2009. But Latvia's percentage did not stay that low, as early as in the next two or three years it began to grow slowly. This is the cause of bigger tourism promotion in Latvia and also on an international level, which was determined by the 1998 Tourism Law. It is also known, that since then tourism is one of Latvia's main GDP growth drivers (OECD, 2020). It reached 9.39% in 2019 with small fluctuations throughout the period.

About Cyprus, we can also observe that its percentage started decreasing over the first decade, more precisely in 2003 and this trend continued until 2011. Even if the tourism sector is one of the services sectors that contributes the most to the country's GDP, this contribution was fluctuating in the early 2000s, because of the weak economic and political conditions. That had a great impact on the swings in tourist arrivals, which affected the competitiveness in tourism and consequently the share growth of GDP contributed by tourism. As these conditions gradually improved the percentage began to increase slowly (PAN, 2017).

Figure 3 shows countries with a high average percentage of their travel and tourism total contribution to employment and GDP. Here we can also see countries that fell in the same group for both indicators and there are five of them, Finland, Germany, Italy, Slovenia, and the United Kingdom. The first county that stands out for TTtGDP is Bulgaria. Bulgaria really improved its contribution to GDP in the first decade, the percentage grew more than 2 times, but at last, the contribution deteriorated. For the growth in the first observed decade, the culprit is the tourism

sector assets privatization, which largely invested in various tourism infrastructure and services. Modern accommodation bases and attractions have attracted visitors all of which are reflected in the growth of contribution to GDP. However, Bulgaria's high territory dependence and high seasonal fluctuations impact its tourism and consequently, this share of output suffered in the last observed years (Tapescu, 2015). However, the share of contribution has never been as low as at the beginning of the period.

Hungary's percentage started to decrease from the first observing year and the trend did not stop until the financial crisis. This was the act of the effect of the low share of capital investment in tourism, which was among the lowest in the European Union or even globally. At the same time, the number of tourist arrivals and guest nights started dropping in the 2000s or even a little before (MET, 2004). From then on to the last observed year it was fluctuating between 7.5% and 8.5%. From the first observing year to the last, the percentage decreased by around 10 %. Similar was for the United Kingdom for TTtE, just that the fluctuations after the crisis were a little bigger and the decrease was not as big as it was in Hungary. The contribution to employment dropped only by around 3%.

The country that substantially increased its contribution was the Netherlands. Its starting percentage was 10.36% and in 2019 it was 18.1%. Another interesting country is Spain of which the percentage ranged between 13.3% and 15.5% through the entire observing period, while all other countries have either reduced or increased their contribution to employment or GDP from the first to the last presented year.

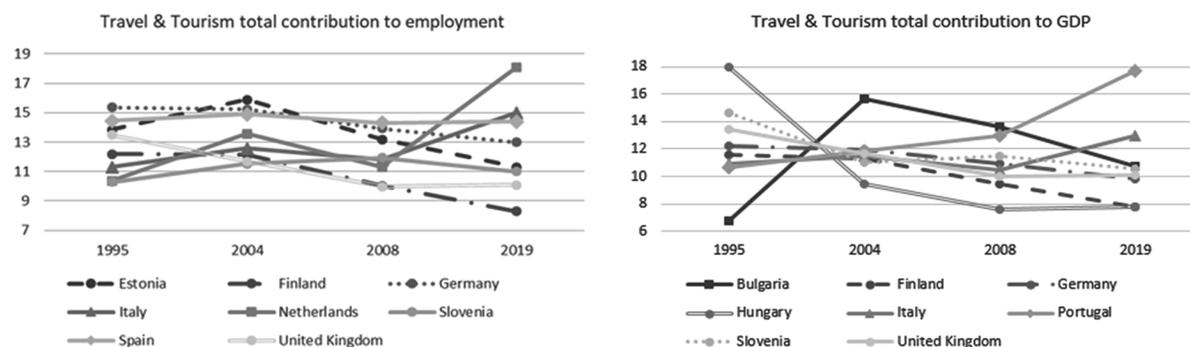


Figure 3. Group of countries with a high average percentage of contribution to employment and GDP

Source: Authors' elaboration based on data from The World Bank (WB, 2021a)

Countries with a very high average percentage of their travel and tourism total contribution to employment and GDP are presented in Figure 4. Here we can see the most deviating countries at the first look at both of the indicators. Those are Malta and Croatia. For both indicators, Malta had the biggest percentage in 1995 and after that, the percentage shrank, but the shrinkage was bigger in its contribution to GDP than it was to employment. A major reason for the decline of both is Malta's inability to compete with neighboring Mediterranean countries and its reliance on "mass tourism" from foreign visitors. It does not have in abundance the natural resources and sandy beaches to compete as a summer resort, so it is a must to diversify the products and markets. Despite the government's effort, however, it is difficult to accomplish this with capacity and other limitations (Blake, Sinclair, Sugiyarto, & DeHaan, 2003). The percentage in 1995 was 33.23 and in 2019 only 15.9.

Croatia had a very similar trend for both indicators. It started with a small percentage; then, it started to increase around 2004 and right after the international crisis it started to slowly decrease. Croatia's 1991-1995 independence war had a great negative impact on the country's tourism, but just a few years after the start of the war the tourism recovered. Among others, the reason for this was that the war took place mainly in more remote places than tourist ones, so it did not affect the foreign visits (Currie, Skare, & Loncar, 2004). Some of the structural characteristics of a country's tourism are an important factor in why the sector cannot achieve its full potential and this is seen in its oscillations of the percentages (Orsini & Ostojic, 2018).

For TTtGDP the share stayed around 25% and for TTtE around 23%. We can also mention Spain which has almost the same tendency as it was for the TTtE in the previous group of countries. For TTtE Cyprus also stands out, as it really reduced its contribution to employment with every new observing year. The contribution was reduced by more than half of the primary value. At the beginning of the observed period, tourism was a significant factor in maintaining low levels of unemployment, more than a quarter of the working population had a job directly or indirectly in tourism. This was negatively impacted by political instability which dates back to the so-called "Cyprus Problem" (Sharpley, 2001). Sector seasonality also contributed to this and caused fluctuations in the level of unemployment. However, the coming years were not favorable for the economy, as the employment situation only worsened with the onset of the international financial crisis (PwC, 2015).

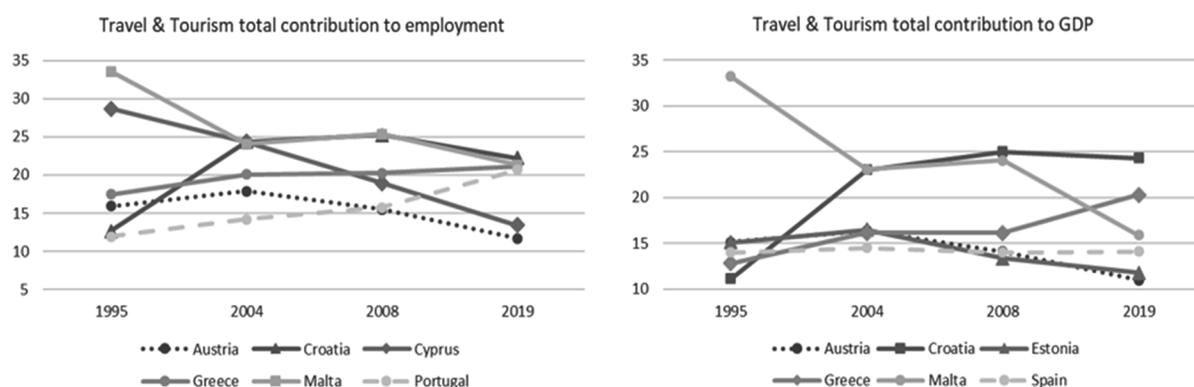


Figure 4. Group of countries with a very high average percentage of contribution to employment and GDP

Source: Authors' elaboration based on data from The World Bank (WB, 2021a)

4. METHODOLOGY AND DATA DESCRIPTION

The empirical analysis is divided into three parts. First, we examine the determinants of employment in travel and tourism activities. Second, we estimate the determinants of employment in travel and tourism industries as well as in related industries. Third, we focus on how expenditure related to travel and tourist activities and capital investment in travel and tourism activities affect total employment in the panel of 28 EU members.

The basic characteristics of the data used in this empirical analysis are reported in Table 2, including data sources, units of measurement, and abbreviations. The annual data covers a panel of 28 EU member states in the period from 1995 to 2019, resulting in 28 cross sections (i), 25 periods (t), and 700 total observations.

The emphasis is put on travel and tourism is defined as an activity of people who travel from one place to another for a short or a long-term trip, that is no longer than a year (WTTC, 2021). Travel and tourism direct contribution to employment (TTDE) measures the direct jobs that are in tourism industries. Travel and tourism total contribution to employment (TTTE) reflects direct jobs that are in tourism industries and other industries that are indirectly connected to tourism. Domestic tourism spending (DS) includes the spending of the country's residents in their country. Capital investment in travel and tourism (CI) comprises spending of all industries that directly take part in travel and tourism. It also includes other industries that invest in certain tourism facilities. Outbound travel and tourism expenditure (OE) represents spending by residents of a particular country when traveling abroad. Visitor exports (foreign spending, FS) includes spending on tourism activities of nonresidents in a particular country (WTTC, 2021). While total employment (TE) includes all people that participate in some kind of productive activity in a particular country, including employees and self-employed persons (Eurostat, 2021).

Table 2. Definitions of variables and sources

Variable	Abbreviation	Unit of measure	Source
Travel and Tourism direct contribution to employment	$TTDE_{it}$	Thousands of jobs	WB and WTTC
Travel and Tourism total contribution to employment	$TTTE_{it}$	Thousands of jobs	WB and WTTC
Total employment	TE_{it}	Thousand persons	Eurostat
Domestic Tourism Spending	DS_{it}	US\$ in bn, real prices	WB and WTTC
Capital Investment in Travel and Tourism	CI_{it}	US\$ in bn, real prices	WB and WTTC
Outbound Travel and Tourism Expenditure	OE_{it}	US\$ in bn, real prices	WB and WTTC
Visitor Exports (Foreign Spending)	FS_{it}	US\$ in bn, real prices	WB and WTTC

Notes: WB –World Bank, WTTC - World Travel and Tourism Council

Source: Authors' compilation

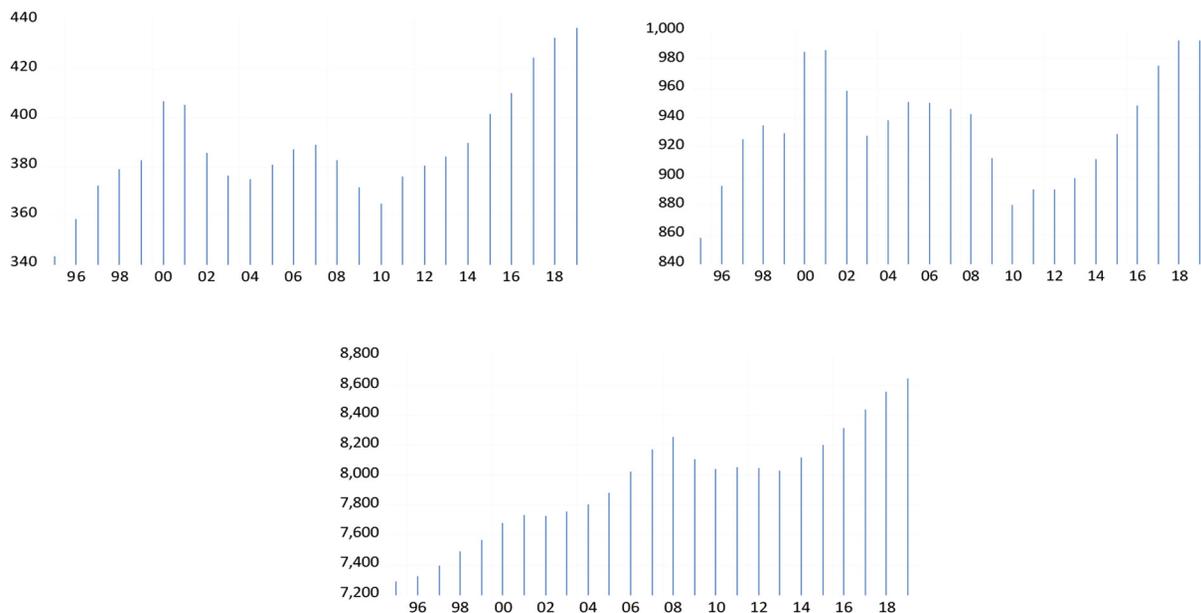


Figure 5. Means of cross sections of direct employment in tourism (left), total employment in tourism and tourism related industries (right), and total employment (bottom)

Source: Authors' compilation based on WTTC (2021) and Eurostat (2021) data

Figure 5 presents the means of cross sections (EU member states) for the observed period for the three dependent variables. The upper left panel displays the mean of cross sections for direct employment in tourism industries, while the upper right panel exhibit the mean of cross sections

for total employment in tourism and tourism-related industries. Both variables exhibit similar trends in the observed period with a peak in 2000 and 2001 and again in 2019. The bottom panel offers insight into the mean of cross sections for total employment, which shows an upward trend with a decline in 2009, which did not recover until 2014.

Three equations were estimated. The first one employed travel and tourism direct employment ($TTDE_{it}$) as the independent variable, in the second equation total employment in travel and tourism and related industries ($TTTE_{it}$) represented the independent variable, and in the third equation, the independent variable was total employment (TE_{it}). The three equations were assessed by panel data estimation techniques. First, we employed the one way fixed effect model, which takes into account the heterogeneity among cross sections and allows the constant to vary for each cross section, represented by β_{it} in Equation 1 (Wooldridge, 2002):

$$E_{it} = \beta_{it} + \beta_2 CI_{it} + \beta_3 DS_{it} + \beta_4 OE_{it} + \beta_5 FS_{it} + u_{it} \quad (1)$$

where E_{it} stands for one of the employment variables ($TTDE_{it}$, $TTTE_{it}$, TE_{it}).

Furthermore, the one way random effects in the panel model were estimated, which assume that the β_{it} is a random variable with the mean value of β_i and random term ε_i for each individual cross-section observation:

$$E_{it} = \beta_i + \beta_2 CI_{it} + \beta_3 DS_{it} + \beta_4 OE_{it} + \beta_5 FS_{it} + w_{it} \quad (2)$$

In the random effects model the error term (w_{it}) has two components: $w_{it} = \varepsilon_i + u_{it}$, where ε_i is the cross section specific error term, while u_{it} represents idiosyncratic term varying over cross sections and over time (Gujarati, 2015).

Since the random effects model results in inconsistent estimates of regression coefficients if the composite error term (w_{it}) is correlated with regressors, we have applied the Hausman test, which searches for the correlation among the cross section specific error component and regressors. If the error term and regressors are correlated, the fixed effects model is appropriate (Gujarati, 2015). The results are presented in the next sections. In all three cases, it turned out that the fixed effect model is more appropriate than the random effects model. Thus, the residual cross-section dependence tests and serial correlation tests were performed for fixed effects models. Finally, the robust standard errors and covariances were estimated by applying the White cross-section and White period approach (Arellano, 1987, and White, 1980).

5. DETERMINANTS OF EMPLOYMENT IN TOURISM INDUSTRIES

The first equation estimates the determinants of direct employment in tourism industries. The results of fixed and random effects models presented in Table 3 exhibit similar results among the two models. Domestic tourism spending (DS) and foreign visitors spending (FS) have a statistically significant and positive effect on employment, while outbound tourism expenditure statistically significantly negatively influences employment. Despite the anticipated positive effect, for both models, the estimated coefficients for capital investment in travel and tourism activities have negative signs. However, the coefficient is statistically significant only when the random effects model is applied. The Hausman test provides evidence in favor of the fixed effects model since the χ^2 statistic is statistically significant, rejecting the null hypothesis that

the fixed and random effect models do not differ substantially and proving evidence that the cross section specific error component and regressors are correlated.

Table 3. Panel data estimation of employment in tourism industries in EU, for the period 1995–2019 (dependent variable: employment in tourism industries)

Independent variable	Fixed effects	Random effects
Constant		107.3297*** (20.75148)
CI	-1.222576 (0.757327)	-1.814160*** (0.747965)
DS	5.774770*** (0.287938)	7.258616*** (0.225693)
OE	-2.982063*** (0.712862)	-0.930494 (0.655242)
FS	6.708953*** (0.627360)	4.982246*** (0.568081)
Root MSE	39.92186	42.64303
R ²	0.996134	0.715781
DW statistic	0.496132	0.497915
F-statistic	5552.444***	437.5743***
Periods included	25	
Cross sections included	28	
Total panel observations	700	
Hausman test (χ^2)	71.168591***	

Notes: ***statistically significant at 1% significance level. Standard errors in parenthesis.

Source: Authors' calculation

In panel data estimation, it is assumed that the errors for different cross-sectional units are uncorrelated. Table 4 exhibits the results of residual cross-section dependence tests for the fixed-effects model. All three tests reject the null hypothesis that there is no cross-section dependence in the residuals. Ignoring cross-sectional dependence in panel estimation results in the worst efficiency of estimators and, consequently, invalid test statistics (HIS, 2019). Robust standard errors and covariances were computed by applying the White cross-section method (White, 1980). In this case, the estimators are robust to cross-section correlation and heteroscedasticity. The results of White cross-section standard errors and covariances are presented in Table 6.

Table 4. Residual Cross-Section Dependence Tests for Fixed Effects Model (dependent variable: employment in tourism industries)

Null hypothesis: No cross-section dependence (correlation) in residuals		
Test	Statistic	p-value
Breusch-Pagan LM	1647.625	0.0000
Pesaran scaled LM	46.17581	0.0000
Bias-corrected scaled LM	45.59247	0.0000

Source: Authors' calculation

The Wooldridge panel data autocorrelation test (Wooldridge, 2002) in Table 5 displays the fact that the estimation fails to fulfil the requirement of the absence of autocorrelation, for the estimated coefficients to be the best and efficient. Since there is evidence of positive autocorrelation, the standard errors of the coefficients might be underestimated and consequently their

statistical significance overrated. In order to take the possible impact of the autocorrelation into account, robust standard errors and covariances of estimated coefficients were assessed by applying the White period approach (Arellano, 1987, and White, 1980).

Table 5. Serial Correlation Test for Fixed Effects Model
(dependent variable: employment in tourism industries)

	Coefficient/Statistic	p-value
Autocorrelation coefficient (ρ)	$\rho = 0.794444$	0.0000
Wald F test ($\rho=-0.5$)	1991.591	0.0000

Source: Authors' calculation

Table 6 displays the results of the White cross section and the White period procedure for calculating the robust standard errors and coefficient covariance. Within these methods all other parameters of the equations (coefficients, root MSE, adjusted R2) remain the same, only standard errors diverge from ordinary estimates in Table 3. The White cross section estimation of robust standard errors and coefficient covariance takes into account cross-section correlation and heteroscedasticity, while the White period estimates of standard errors and coefficient covariance allow for arbitrary heteroscedasticity and with-in cross-section serial correlation (Gujarati, 2015).

Table 6. Fixed Effects Model with Robust Standard Errors and Covariances
(dependent variable: employment in tourism industries)

Independent variable	White cross-section		White period	
	Coefficient	Standard Error	Coefficient	Standard Error
Constant	154.5987***	32.30233	154.5987***	32.28513
CI	-1.222576	1.009992	-1.222576	1.684829
DS	5.774770***	0.940378	5.774770***	1.117157
OE	-2.982063***	0.845518	-2.982063	2.097856
FS	6.708953***	0.768967	6.708953***	2.124683

Notes: ***statistically significant at 1% significance level.

Source: Authors' calculation

Since both are important for the above-stated problem of autocorrelation and cross-sectional dependence, we have calculated both types of robust standard errors estimated by the White cross-section and the White period approach. Thus, Table 6 shows that most of the coefficients remain highly statistically significant and of expected sign (domestic tourism spending, foreign visitors spending, outbound tourist expenditure) in the case of White cross-section robust standard errors and covariance. While the capital investment remains statistically insignificant for both methods of robust standard error estimation. Additionally, outbound tourism expenditure becomes statistically insignificant when White period standard errors are taken into account.

6. DETERMINANTS OF EMPLOYMENT IN TOURISM AND TOURISM RELATED INDUSTRIES

The second equation deals with determinants of employment in tourism industries as well as employment in industries related to tourism. Again, fixed and random effects models were estimated (Table 7). All estimated coefficients are of anticipated signs and highly statistically significant in both types of models. Thus, capital investment in tourism, and domestic and foreign tourism spending have a statistically significant positive influence on employment in tourism and tourism-related industries. On the other hand, outbound tourism expenditure has a

statistically significant negative effect on employment. The coefficients in the fixed effects model and random effects model are also jointly significant as shown by the F-test. Based on the Hausman test, we can conclude that the random effects model is not appropriate since the random error terms are correlated with one or more independent variables.

Table 7. Panel data estimation of employment in tourism and tourism related industries in EU, for the period 1995 – 2019 (dependent variable: employment in tourism and tourism related industries)

Independent variable	Fixed effects	Random effects
Constant	511.5285*** (23.57667)	374.0621*** (48.25847)
CI	4.855496*** (1.993019)	4.144551** (1.962863)
DS	13.08638*** (0.757754)	16.93514*** (0.568598)
OE	-10.45752*** (1.876003)	-6.323768*** (1.698825)
FS	7.487809*** (1.650992)	4.906076*** (1.466075)
Root MSE	105.0604	113.5246
R ²	0.994473	0.636303
DW statistic	0.295422	0.265017
F-statistic	3877.207***	303.9830***
Periods included	25	
Cross sections included	28	
Total panel observations	700	
Hausman test (χ^2)	88.970680***	

Notes: ***statistically significant at 1% significance level, ** statistically significant at 5% significance level. Standard errors in parenthesis.

Source: Authors' calculation

Residual cross-section dependence tests for the fixed effects model are presented in Table 8. The results of all three applied tests show that we can reject the null of no cross-section dependence in residuals. Thus, there is cross-section dependence in residuals, which is violating one of the main assumptions in the panel data approach. Consequently, we calculated robust standard errors and covariances, which are presented in Table 10.

Table 8. Residual Cross-Section Dependence Tests for Fixed Effects Model (dependent variable: employment in tourism and tourism related industries)

Null hypothesis: No cross-section dependence (correlation) in residuals		
Test	Statistic	p-value
Breusch-Pagan LM	1955.064	0.0000
Pesaran scaled LM	57.35727	0.0000
Bias-corrected scaled LM	56.77394	0.0000

Source: Authors' calculation

Table 9 displays the results of the Wooldridge serial correlation test in the fixed effects panel data model. If no serial correlation, the autocorrelation coefficient should have the value of -0.5. The Wald F test provides no evidence of that, rejecting the null about the expected value of the autocorrelation coefficient, suggesting there is serial correlation in the model.

Table 9. Serial Correlation Test for Fixed Effects Model (dependent variable: employment in tourism and tourism related industries)

	Coefficient/Statistic	p-value
Autocorrelation coefficient (ρ)	$\rho = 0.836107$	0.0000
Wald F test ($\rho=-0.5$)	4258.613	0.0000

Source: Authors' calculation

Taking into account the presence of cross-sectional dependence and serial correlation the White cross-section and White period standard errors were estimated for the fixed effect model. The results demonstrated in Table 10 show that we can confirm the statistically significant and positive effect of domestic tourism spending and the statistically significant and negative effect of outbound tourism expenditure on employment in tourism and tourism-related industries. While coefficients for capital investment and foreign visitors spending become statistically insignificant when our decision is being based on the robust standard errors estimated by the White cross-section and the White period method.

Table 10. Fixed Effects Model with Robust Standard Errors and Covariances (dependent variable: employment in tourism and tourism related industries)

Independent variable	White cross-section		White period	
	Coefficient	Standard error	Coefficient	Standard error
Constant	511.5285***	40.32899	511.5285***	118.4854
CI	4.855496	5.117292	4.855496	7.270135
DS	13.08638***	1.172406	13.08638***	1.821652
OE	-10.45752***	2.998536	-10.45752***	3.405276
FS	7.487809**	3.615480	7.487809	6.538231

Notes: ***statistically significant at 1% significance level, ** statistically significant at 5% significance level.

Source: Authors' calculation

7. EFFECTS OF TOURISM SPENDING AND INVESTMENT ON TOTAL EMPLOYMENT

When estimating the effects of tourism capital investment and tourism spending on total employment in the observed 28 EU economies, the ordinary estimates of fixed and random effects models result in the statistically significant and positive influence of all included explanatory variables (Table 11). These results are in line with expectations for all regressors but for the outbound tourism expenditure. The positive effect of the latter might be explained by the possibility that most of the outbound expenditure is spent within the EU and thus providing a positive transmission effect on total employment in the EU as a whole.

However, before we rely on these results, let us examine the appropriateness of the estimated regression coefficients. The Hausman test and the resulting χ^2 value reveal that the fixed effects model is more appropriate than the random effect model. Furthermore, the outcome of cross-section dependence tests, such as Breusch-Pagan LM test, Pesaran scaled LM test, and Bias-corrected scaled LM test, rejects the null of no the cross-section dependence in residuals for the fixed effects model. These results are demonstrated in Table 12. That is why the White cross section method was applied to estimate the robust standard errors and covariances of estimated regression coefficients (left panel of Table 14).

Additionally, the Wooldridge serial correlation test, which results are displayed in Table 13, provides evidence of serial correlation in the fixed effect model. The Wald F-test did not confirm the null about the autocorrelation coefficient, thus, proving evidence that in the fixed effects model

residuals are serially correlated. Hence, the White period method for estimating robust standard errors and covariances was utilized with results presented in the right panel of Table 14.

Table 11. Panel data estimation of total employment by spending related to tourism in EU, for the period 1995 – 2019 (dependent variable: total employment)

Independent variable	Fixed effects	Random effects
Constant	5185.089*** (112.7663)	4860.619*** (606.7333)
CI	58.77523*** (9.532537)	56.57532*** (9.506165)
DS	11.53068*** (3.624307)	21.21379*** (3.414497)
OE	133.8821*** (8.972852)	144.8521*** (8.782350)
FS	34.24432*** (7.896634)	25.76102*** (7.710091)
Root MSE	502.4999	540.7859
R ²	0.997607	0.613772
DW statistic	0.197496	0.192744
F-statistic	8982.374***	276.1141***
Periods included	25	
Cross sections included	28	
Total panel observations	700	
Hausman test (χ^2)	82.668845***	

Notes: ***statistically significant at 1% significance level, ** statistically significant at 5% significance level. Standard errors in parenthesis.

Source: Authors' calculation

Table 12. Residual Cross-Section Dependence Tests for Fixed Effects Model (dependent variable: total employment)

Null hypothesis: No cross-section dependence (correlation) in residuals		
Test	Statistic	p-value
Breusch-Pagan LM	2264.172	0.0000
Pesaran scaled LM	68.59940	0.0000
Bias-corrected scaled LM	68.01606	0.0000

Source: Authors' calculation

Table 13. Serial Correlation Test for Fixed Effects Model (dependent variable: total employment)

	Coefficient/Statistic	p-value
Autocorrelation coefficient (ρ)	$\rho = 0.897768$	0.0000
Wald F test ($\rho=-0.5$)	552.1304	0.0000

Source: Authors' calculation

Finally, the robust standard errors by the White cross-section and by the White period method were assessed and are exhibited in Table 14. Taking into account the cross-section correlation and heteroscedasticity the White cross-section standard errors result in a statistically insignificant coefficient for domestic tourism spending, while all other coefficients remain statistically significant and of the same sign as in Table 11, when ordinary standard errors were considered. Nevertheless, when a serial correlation is acknowledged by the White period standard errors estimates, only outbound tourism expenditure remains statistically significant. For all other regressors, the standard errors are too large for the coefficient to prevail in their statistical significance.

Table 14. Fixed Effects Model with Robust Standard Errors and Covariances (dependent variable: total employment)

Independent variable	White cross-section		White period	
	Coefficient	Standard error	Coefficient	Standard error
Constant	5185.089***	217.0249	5185.089***	344.7225
CI	58.77523***	13.46969	58.77523	35.82390
DS	11.53068	8.849082	11.53068	12.48428
OE	133.8821***	11.51581	133.8821***	23.45979
FS	34.24432***	11.70419	34.24432	27.54253

Notes: ***statistically significant at 1% significance level.

Source: Authors' calculation

Taking into account the serial correlation in the residuals, we have estimated the first difference equation for the fixed effects model. The results are demonstrated in Table 15. After all, in this case, all estimated coefficients remain highly statistically significant and with a positive effect on total employment. Thus, capital investment in travel and tourism activities, outbound tourism expenditure, domestic tourism spending, and foreign tourism spending positively influence the total employment in EU member states.

Table 15. Fixed Effects Model for First Difference Equation (dependent variable: total employment)

Regressors	Coefficient	Standard error	t-statistic	p-value
Constant	35.83135***	6.190757	5.787877	0.0000
d(CI)	7.996961**	3.480741	2.297488	0.0219
d(DS)	3.569845**	1.772341	2.014198	0.0444
d(OE)	40.22061***	5.755521	6.988179	0.0000
d(FS)	17.71233***	4.700287	3.768352	0.0002

Notes: ***statistically significant at 1% significance level, ** statistically significant at 5% significance level.

Source: Authors' calculation

8. FUTURE RESEARCH DIRECTIONS

The empirical results presented in this research allow for several extensions for further empirical analysis. Firstly, all three equations could be estimated by dynamic panel data including lagged dependent variables as regressors. This research focused on several expenditure variables related to travel and tourism activities. Due to the limited availability of data for some EU member states for the whole observed period about the number of tourists, the number of rooms occupied, and the number of nights spent for some of the EU member states, we could not assess the effects of these variables on employment. Hence, the next study could concentrate on the effects of the above-mentioned variables on selected EU members. Nowadays, we cannot avoid the Covid-19 pandemic, which has undoubtedly substantially affected travel and tourism activities all around the World. Due to data availability, the present empirical analysis comprises the period prior to the pandemic. Thus, it remains for future research to estimate the effects of the pandemics on employment in travel and tourism activities.

9. CONCLUSION

Despite the undoubtedly important effects that travel and tourism industries provide for domestic economic activities, it is clear from this research that in the EU member states the contribution of travel and tourism activities to employment in these and related industries as well as

to GDP varies substantially. The average contribution to employment in the period 1995-2019 ranges from 5.1% to 27%, while the average contribution to GDP is from 5.1% to 25.4%. The lowest average contribution to employment and GDP was recorded in Belgium, Lithuania, Luxembourg, Poland, Romania, and Slovak Republic (from 5.1% to 6.8%). On the other hand, the highest contribution to employment and GDP was reported in Austria, Croatia, Cyprus, Greece, Malta, and Portugal, ranging from 15.6% to 27% contribution to employment and from 13.7% to 25.4% contribution to GDP.

However, this empirical analysis confirms the importance of travel and tourism activities and related spending and expenditure for direct employment within the sector as well as indirect employment in industries related to travel and tourism and, moreover, also for total national employment. The results are in line with other similar empirical studies, which are presented in the literature review. The fixed effects panel data model with robust standard errors of regression coefficients estimating determinants of direct employment in travel and tourism industries has confirmed the positive effect of domestic and foreign tourism spending as well as the negative effect of outbound tourism expenditure. It turned out that determinants of total employment in travel and tourism together with employment in related industries comprise domestic tourism spending with a positive effect and outbound tourist expenditure with a negative effect. The first difference equation estimating the fixed effects model for total national employment resulted in confirming the positive effect of capital investment in travel and tourism industries, domestic and foreign tourism spending as well as outbound tourism expenditure. The latter might be explained by the possibility that most of the outbound tourism expenditures are spent within the EU as a whole, thus proving a positive effect on total national employment in the EU.

REFERENCES

- Arellano, M. (1987). Computing Robust Standard Errors for With-In Groups Estimation. *Oxford Bulletin of Economics and Statistics*, 49(4), 431-434.
- Becerra, M. E. (2009). Turismo y trabajo: Una aproximación desde el mercado hotelero. *Revista de estudios regionales y mercado de trabajo*, 5, 71-86.
- Blake, A., Sinclair, T., Sugiyarto, G., & DeHaan, C. (2003). The Economic Impact of Tourism in Malta. *Report for the Malta Tourism Authority, The University of Nottingham*, 1-42.
- Brida, J. G., Matesanz Gómez, D., & Segarra, V. (2020). On the empirical relationship between tourism and economic growth. *Tourism Management*, 81, 1-11.
- Cárdenas-García, P. J., Sánchez-Riverp, M., & Pulido-Fernández, J. I. (2015). Does Tourism Growth Influence Economic Development? *Journal of Travel Research*, 54(2), 206-221.
- Currie, D. M., Skare, M., & Loncar, J. (2004). The Impact of War on Tourism: the Case of Croatia. *Conference on Tourism Economics*, (str. 1-13). Palma de Mallorca.
- De Santana Ribiero, L. C., Carneiro Rios Lopes, T. H., Goncalves Montenegro, R. L., & De Lima Andrade, J. R. (2018). Employment dynamics in the Brazilian tourism sector (2006-2015). *Tourism Economics*, 24(4), 418-433.
- Eurostat. (2021). *Dataset details: Employees, domestic concept - annual data*. Retrieved July 27, 2021, from The Statistical Office of the European Union: <https://ec.europa.eu/eurostat/web/products-datasets/-/tipsna62>.
- Gómez López, C. S., & Barrón Arreola, K. S. (2019). Impacts of tourism and the generation of employment in Mexico. *Journal of Tourism Analysis*, 26(2), 94-114.
- Gujarati, D. N. (2015). *Econometrics by Example*. New York: Palgrave.

- Habibi, F., Rahmati, M., & Karimi, A. (2018). Contribution of tourism to economic growth in Iran's Provinces: GDM approach. *Future Business Journal*, 4(2), 261-271.
- HCSO. (2006). *Hungary 2005*. Retrieved October 19, 2021, from Hungarian Central Statistical Office: <https://www.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/mo/hungary2005.pdf>.
- IHS. (2019). *EViews II, User's Guide II*. IHS Global Inc.
- Ladking, A. (2011). Exploring tourism labor. *Annals of Tourism Research*, 38(3), 1135-1155.
- Lee, J. W., & Brahmasurene, T. (2013). Investigating the influence of tourism on economic growth and carbon emissions: Evidence from panel analysis of the European Union. *Tourism Management*, 38, 69-76.
- LuxTimes. (2012). *Positive year for Luxembourg's tourism sector*. Retrieved August 30, 2021, from Luxembourg Times: <https://www.luxtimes.lu/en/luxembourg/culture-life-positive-year-for-luxembourg-s-tourism-sector-602d4fa4de135b92366beed8>.
- MET. (2004). *Tourism in Hungary 2003*. Retrieved October 19, 2021, from Ministry of Economy and Transport: <https://mtu.gov.hu/documents/prod/2003.pdf>
- Ministry of Economic Development and Technology. (2017). *Strategija trajnostne rasti slovenskega turizma 2017-2021*. Retrieved October 8, 2021, from Slovenian Tourist Organization: https://www.slovenia.info/uploads/dokumenti/kljuni_dokumenti/strategija_turizem_koncno_9.10.2017.pdf.
- OECD. (2016). *OECD Tourism Trends and policies 2016*. Retrieved October 18, 2021, from Organization for Economic Co-operation and Development: <https://www.oecd-ilibrary.org/docserver/tour-2016-en.pdf?expires=1634654636&id=id&accname=guest&checksum=25AD1376D8270B53E115B424B486F6AE>.
- OECD. (2020). *OECD Tourism Trends and Policies 2020: Latvia*. Retrieved October 6, 2021, from Organization for Economic Co-operation and Development: <https://www.oecd-ilibrary.org/sites/6eed417e-en/index.html?itemId=/content/component/6eed417e-en>.
- OECD. (2021). *Gross domestic product (GDP)*. Retrieved July 12, 2021, from Organization for Economic Co-operation and Development: <https://data.oecd.org/gdp/gross-domestic-product-gdp.htm>.
- Önder, K., & Durgun, A. (2008). Effects of Tourism Sector on the Employment in Turkey: An Econometric Application. *Paper presented at International Conference on Management and Economics 2008*, (str. 365-373).
- Orsini, K., & Ostojić, V. (2018). *Croatia's Tourism Industry: Beyond the Sun and Sea*. Retrieved October 20, 2021, from European Commission: https://ec.europa.eu/info/sites/default/files/economy-finance/eb036_en.pdf.
- PAN. (2017). *Country Report Cyprus*. Retrieved October 19, 2021, from Prime Advisory Network: <https://www.primeadvisorynetwork.com/en/country-report-cyprus/>.
- Prasad, N., & Kulshrestha, M. (2016). Employment generation in tourism industry: An input-output analysis. *The Indian Journal of Labour Economics*, 58, 563-575.
- PwC. (2015). *Measuring Tourism's Impact: A Pilot Study in Cyprus*. Retrieved October 22, 2021, from PricewaterhouseCoopers: <https://skift.com/wp-content/uploads/2015/07/Measuring-Tourisms-Impact-low-res-FINAL.pdf>.
- Semenovna Morozova, L., Nikolaevich Ananjev, A., Yurievich Morozov, V., Vladimirovna Havanova, N., & Vladimirovna Litvinova, E. (2015). Influence of Tourism Industry Development on the Regional Labour Market (on the Example of the Yaroslavl Region). *Review of European Studies*, 7(3), 51-65.
- Sharpley, R. (2001). Tourism in Cyprus: Challenges and Opportunities. *Tourism Geographies*, 3(1), 64-86.

- Sokhanvar, A., Çiftçioğlu, S., & Javid, E. (2018). Another look at tourism-economic development nexus. *Tourism Management Perspectives*, 26, 97-106.
- Tang, C. F., & Tan, E. C. (2013). How stable is the tourism-led growth hypothesis in Malaysia? Evidence from disaggregated tourism markets. *Tourism Management*, 37, 52-57.
- Tapescu, A. I. (2015). Romanian versus Bulgarian Tourism Labour Market Analysis. *Procedia Economics and Finance*, 27, 375-384.
- UNTWO. (2021). *Employment and decent work in tourism - ILO-UNWTO joint project*. Retrieved September 3, 2021, from United Nations World Tourism Organization: <https://www.unwto.org/project/employment-and-decent-work-tourism-ilo-unwto-joint-project>.
- UNWTO. (2010). *International Recommendations for Tourism Statistics 2008*. Retrieved October 11, 2021, from United Nations World Tourism Organization: <https://www.e-unwto.org/doi/10.18111/9789211615210>.
- WB. (2021a). *TCdata360: Capital investment in Travel and Tourism*. Retrieved June 22, 2021, from The World Bank: https://tcdata360.worldbank.org/indicators/cap.inv.tat?country=BRA&indicator=24674&viz=line_chart&years=1995,2028.
- WB. (2021b). *GDP (constant 2010 US\$)*. Retrieved July 9, 2021, from The World Bank: <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD>.
- White, H. (1980). A Heteroskedasticity-Consistent Covariance Matrix and a Direct Test for Heteroskedasticity. *Econometrica*, 48(4), 817-838.
- Wooldridge, J. M. (2002). *Econometric Analysis of Cross Section and Panel Data*. Cambridge (Mass.): The MIT Press.
- WTTC. (2019). *Travel & Tourism Economic Impact 2019: World*. Retrieved August 23, 2021, from World Travel & Tourism Council: <https://www.slovenia.info/uploads/dokumenti/raziskave/raziskave/world2019.pdf>.
- WTTC. (2020). *EU 2020 Annual Research: Key Highlights*. Retrieved October 11, 2021, from Economic Impact Report: <https://wtcweb.on.uat.co/Research/Economic-Impact>.
- WTTC and Oxford Economics. (2021). *WTTC/Oxford Economics 2021 Travel & Tourism Economic Impact Research Methodology*. Retrieved October 26, 2021, from World Travel & Tourism Council: <https://wtc.org/Portals/0/Documents/Reports/2021/WTTC%20Methodology%20Report%202021.pdf?ver=2021-06-03-165822-823>.
- Yap, G., & Saha, S. (2013). Do Political Instability, Terrorism, and Corruption Have Detering Effects on Tourism Development Even in the Presence of Unesco Heritage? A Cross-Country Panel Estimate. *Tourism Analysis*, 18(5), 587-599.



Social Entrepreneurial Intention Factors of Tourism Management Students

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Abstract: *This chapter aims to assess how humane orientation as a cultural value and prior experience in social problems (dependent variable) influence social entrepreneurial intention (SEI, independent variable) of students of tourism management. The additional antecedents of SEI, such as empathy, moral obligation, social self-efficacy, and perceived social support, were entered into the research model as mediating variables between independent and dependent variables. The research was conducted on a sample of 70 students enrolled in studies of tourism management in the Republic of Serbia. The results of single mediation regression analysis indicate that empathy and perceived social support are mediators between the dependent and independent variables, while moral obligation and perceived social support are not. Results of the study present implications both for theory and practice in the area of social entrepreneurship of university students.*

1. INTRODUCTION

The tourism industry faces many problems, which primarily concern local communities and most often happen in underdeveloped countries. The challenges associated with this industry often have their source in the development of mass tourism and the use of natural resources in order to realize activities whose main goal is to appropriate profits. Increase of low-cost airlines, connection to the Internet, and taking advantage of the opportunities it provides, as well as growing competition, provide numerous benefits to travel users, but at the same time have significant negative consequences. It has become more difficult to ignore the invisible “externalities” associated with resource exploitation, environmental degradation, low wages, and poor working conditions (Pollock, 2016).

As the problem of environmental pollution becomes more and more present and obvious, the number of countries that pass laws in this area and oblige economic entities to implement them is also growing. This also applies to the tourism sector and requires innovative approaches that will include the application of environmental principles and sustainable practices. The search for responsible practices paves the way for innovative approaches to tourism development, as traditional approaches do not meet the new requirements that focus on sustainability principles.

It is of great importance for the tourism industry to become more sustainable for various environmental (pollution reduction, including greenhouse gas emissions, water, and energy consumption, to protect local ecosystems), social (cultural impact and social differentiation), and economic reasons (de Lange & Dodds, 2017).

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Due to the mentioned problems that the trends in the tourism industry bring with them, there is a growing pressure on tourism companies to be more responsible - both on the environmental and social levels. The number of profitable companies is increasing, while on the other hand, they are successfully creating social and environmental value. Such companies operate under different labels - environmentally friendly, responsible, sustainable, geo, good tourism - but there is no single conceptual framework and approach which unites them (Pollock, 2016).

As tourism is one of the first industries to start applying the principles of sustainable business and sustainable development, social entrepreneurship soon found its application in this area (von der Weppen & Cochrane, 2012; Sloan et al., 2014). The emergence of social enterprises in tourism puts focus on local communities, natural resources and helps develop sustainable tourism practices. By creating social value and a kind of social transformation, social entrepreneurship has the potential to counter the negative externalities caused by the tourism industry (Altinay et al., 2016; Sheldon et al., 2017).

The establishment of social enterprises in the Republic of Serbia (Serbia) took place after 2000, however, it is not possible to say with certainty how many of them there are today, since the last comprehensive survey on social enterprises was conducted in 2012 to examine their economic impact (SORS, 2014). According to the data obtained during the mentioned research, 1,196 social enterprises are registered in Serbia, which operate in various legal forms (cooperatives, citizens' associations, foundations, companies for professional rehabilitation, and persons with disabilities). Areas in which social enterprises in Serbia mainly operate are education and training, tourism and catering, and agriculture (SORS, 2014).

In recent years, there are more social enterprises that are trying to contribute to local development by connecting tourism and traditional crafts. These are mostly organizations from underdeveloped rural areas founded by women (Cvejić, et al., 2008). Social enterprises in Serbia that operate in the field of tourism are mainly from the category of citizens' associations (Cvejić, et al., 2008; SORS, 2014). Social enterprises in tourism represent a significant potential for local development, preservation of tradition, and protection of the environment. However, for social entrepreneurs operating in this field, it would be extremely important to improve knowledge about good practices and the latest trends in the field of local and rural tourism, as well as social services (Cvejić, et al., 2008).

Although there is an increasing number of social enterprises in the tourism industry in Serbia, there is not much research on this topic, especially not on the intentions to establish social tourism enterprises. Therefore, the purpose of this paper is to address the problem of social entrepreneurship in the tourism sector by identifying the main drivers of social entrepreneurial intention (SEI) of students enrolled in tourism management studies. The research was conducted on a sample of students of economics engaged in studies of tourism management. The results are obtained following the research concept of Hockerts (2015) by conducting a single mediation regression analysis. The results of the study create twofold contribution, theoretic and practical.

In the following part, firstly literature review on social entrepreneurship and intention is provided in a way to derive research hypotheses from it. Secondly, the methodology of data analysis is presented with specific identification of participants, measures used and procedure of analysis applied. Thirdly, the results of the analysis are shown, and fourthly discussion is derived from the results of the study. Lastly, future research directions and conclusions are introduced.

2. LITERATURE REVIEW

In line with the omnipresent environmental challenges which society faces, social entrepreneurship has emerged as one of the solutions that combine individual entrepreneurial values and goals and offers solutions to specific social problems. Social entrepreneurship has also found its place in tourism and has become an alternative that offers potential solutions to the numerous social problems that this industry is facing.

Social entrepreneurship is a relatively new topic in the academic world, so, accordingly, the literature on this topic is limited. However, in recent years, there has been a marked increase in interest in the concept of social entrepreneurship by various stakeholders, such as policymakers, NGOs, and scientists (Chamberlain et al., 2015).

Social entrepreneurship is a concept derived from entrepreneurship, but the intentions of the social and traditional entrepreneurs differ, as well as the overall goals of the enterprise (Lepoutre et al., 2013). While the basic goal of a traditional company is profit, social enterprises operate with the goal of achieving certain social benefits in addition to profit. Namely, social entrepreneurship is defined as “the process of identifying, evaluating and exploiting opportunities aiming at social value creation by means of commercial, market-based activities and of the use of a wide range of resources” (Bacq & Janssen, 2011, p. 374).

Peredo and McLean (2006) further clarify the concept of social enterprises by defining a social entrepreneur as an individual behind the entity and motivated not only by profit but primarily by social goals (George, 2013). In addition to social goals, social entrepreneurship is also aimed at eliminating the negative consequences that may arise from commercial business, which benefits the local community (Newbert & Hill, 2014).

Although there is no generally accepted definition of social enterprise, the one proposed by the European Commission (2011, p. 2) is often used, which defines social enterprise as “an operator in the social economy whose main objective is to have a social impact, rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives.” Also, the definition proposed by the OECD (1999 p. 184) shows the essence of social enterprise as follows: “social enterprise deals with any private activity conducted in the public interest, organized with an entrepreneurial strategy, but whose main purpose is not the maximization of profit but the attainment of certain economic and social goals, and which has the capacity to bring innovative solutions to the problems of social exclusion and unemployment.”

However, the stake that social entrepreneurship can play in the tourism industry has not been given enough attention (Boluk, 2011). Social entrepreneurship in the tourism industry is usually defined as a market-based strategy to address societal challenges while maximizing the benefits that tourism can provide to local communities, while proactively minimizing the negative impacts and externalities that this industry can cause, to achieve sustainable local community development (Aquino et al., 2018).

The role of social enterprises in the tourism industry is often associated with fostering environmental and sustainable business practices (Ergul & Johnson, 2011) and is seen as an instrument that helps conserve natural resources (Porter et al, 2018). Based on this approach, some of the benefits of

developing social enterprises in the tourism industry are the creation of sustainable tourism products and services, laying the foundations for other sustainable entrepreneurial activities, significant contribution to local community development by promoting local economic development, etc. (de Lange & Dodds, 2017). That is, the role of social entrepreneurship in the development of the tourism sector is reflected in the optimal engagement of available resources, new jobs, economic and social empowerment of local communities, encouraging sustainable entrepreneurial activities.

2.1. Social entrepreneurial intentions

Entrepreneurial operations in most cases do not happen spontaneously but are the result of the entrepreneur's intention to establish and develop a company on the basis of identified opportunities. As a social enterprise differs from a traditional enterprise in its characteristics, so a social entrepreneur is characterized by different characteristics and motives for doing business. The decision to start a social enterprise must be accompanied by a clear vision, great enthusiasm, and a strong moral responsibility of the social entrepreneur (Beauchamp et al., 2004). In order for a social entrepreneur to succeed in his intention to establish and promote a social enterprise, it is necessary for him to possess extremely high moral responsibility, empathy, compassion for other people's problems, etc. (Ivanović Đukić, et al., 2020).

According to Mair and Noboa (2006), the traits important for SEI that are anchored in it are derived from Ajzen's (1991) Theory of planned behavior and his taxonomy on attitudes toward behavior, subjective norms, and perceived behavioral control. Consequently, SEIs can be based on empathy, moral judgment, social self-efficacy, and the presence of social support (Mair & Noboa, 2006; Hockerts, 2015).

One of the most important characteristics of social entrepreneurs is empathy. Empathy usually means an individual's ability to empathize with other people, and to understand other people's feelings (Preston et al., 2007). A social entrepreneur needs to have the ability to empathize with the problems of others and to communicate effectively so that he can identify opportunities for entrepreneurship that will at the same time positively affect certain social groups. In this sense, empathy is an emotional driver that provokes the intention of a social entrepreneur to help others or protect the environment (Korte et al., 2018). Numerous studies have recognized and highlighted the importance of empathy in social entrepreneurs (Mair & Noboa, 2006; Hockerts, 2015; Korte et al., 2018).

As social entrepreneurs engage in business activities in order to solve certain social problems and create social value, they are mostly associated with strong ethical principles and high morals (Bornstein, 2004; Bacq et al., 2011; Bull & Ridley-Duff, 2018). Standards of right and wrong or good and bad behavior are defined through the ethical and moral principles of individual behavior (Fischer, 2004). Moral principles determine the ideals of moral behavior defined by society, which, together with other customs, rules, and traditions, are passed on to future generations. The very nature of social entrepreneurship leads to the expectation that a social entrepreneur is a moral person characterized by qualities such as honesty, reliability, behavior in accordance with moral principles, and possession of values that connect a social entrepreneur with the community. Therefore, adherence to moral standards and personal moral values are essential attributes for entrepreneurs engaged in social missions (Hockerts, 2015).

The model proposed by Mair and Noboa (2006) also suggests self-efficacy as a feature important for social entrepreneurs. Self-efficacy refers to the belief that with the help of one's own abilities,

certain behavior can be successfully reported (Bandura, 1977). The self-efficacy of social entrepreneurs, as individuals who help solve certain social problems, is a very important characteristic, since they face numerous challenges, both when establishing social enterprises and during the business. These challenges (suspicion towards the social concept, limited access to financial resources, poor employment potential, lack of entrepreneurial culture, unrealistic expectations from the state) can have a disincentive effect on potential entrepreneurs when thinking about founding a social enterprise. Therefore, social self-efficacy is a prerequisite for the existence of SEIs.

Social support also has a very important role for potential social entrepreneurs, that is, the support that an individual expects from his environment (Mair & Noboa, 2006). The importance of social enterprise support systems and networks is especially stressed during their establishment when access to finance and other resources needs to be provided. Lack of trust in local authorities and business partners and lack of their support can be a serious constraint for social enterprises (Ivanović Đukić et al., 2020).

2.2. Characteristics of a social entrepreneur

While one group of research shows that members of the younger generation are more inclined to start social ventures, which reflects the interest of the young population (university age, usually) in social issues and problems that arise in their environment and their growing need to find the right solutions (Harding & Cowlong, 2006; Leahy & Villeneuve-Smith, 2009), others argue that social entrepreneurs are mostly wealthy individuals who engage in social entrepreneurship at a later age (Bacq et al., 2011). This group of research shows that older people who intend to become social entrepreneurs, based on their life experiences and perceived problems in society, seek practical solutions to address them (Corner & Ho, 2010; Nicolás et al., 2018).

In addition to personal qualities and skills, social entrepreneurs also need certain knowledge. Engaging in social entrepreneurship often requires knowledge in the field of project management, the ability to negotiate with local authorities, specific knowledge in accounting and financial management, etc. (Sharir & Lerner, 2006; Haugh, 2007). The factor that can significantly influence the intentions of founding a social enterprise is the knowledge and experience of the founders in running the business.

The impact of education has not been fully examined, so it cannot be said with certainty whether the level of education increases the likelihood of engaging in social entrepreneurship (Harding & Cowling, 2006). However, some authors argue that a higher level of education can affect an individual's higher social commitment (Lepoutre et al., 2013) because a higher level of education and a higher level of knowledge and skills makes an individual more socially oriented (Corner & Ho, 2010). Often, social entrepreneurs are people of non-economic education (journalists, sociologists, artists, etc.), who do not have enough experience in marketing, sales, financial management, business performance monitoring, business negotiation which brings with it numerous problems (poor organization, poor approach to defining the marketing mix, etc.) (Ivanović Đukić, et al., 2020).

In addition, previous work and life experience may also have an impact on later entrepreneurial choices and prosocial behavior (Kautonen et al., 2010; Hockerts, 2015;). For example, for individuals who have prior knowledge of social problems (Ernst, 2011), experience in social work, recycling, volunteering, or if they have encountered certain problems throughout their lives, such as poverty, unemployment, limited educational opportunities, etc., they are more likely

to be motivated to engage in some social mission (Yiu et al., 2014). Although prior experience could influence the development of SEI, Hockerts (2015) proved that it is also a predictor of empathy, moral obligations, social self-efficacy, and perceived social support.

Humane orientation measures the degree to which society encourages and rewards traits such as justice, caring for others, altruism, generosity, and kindness to others (House et al., 2004). Previous research has found a positive link between humane orientation and entrepreneurship (Stephan & Uhlaner, 2010; Zhao et al., 2012), as such orientation can help companies to cope with risks through social support, which is especially important for a society that is at a low level of economic development (Calza et al., 2020; Nedeljković-Knežević & Pavluković, 2020). Moreover, a person's thoughtfulness, consideration, and sensitiveness to social injustice are found to be an important predictor of personal reasons to be a social entrepreneur (Calza et al., 2020; Rieger et al. 2021).

Therefore, the following research hypotheses arise from a previous review of the literature:

H1a: Empathy mediates the relationship between prior experience and SEI.

H1b: Empathy mediates the relationship between humane orientation and SEI.

H2a: Moral obligation mediates the relationship between prior experience and SEI.

H2b: Moral obligation mediates the relationship between humane orientation and SEI.

H3a: Social self-efficacy mediates the relationship between prior experience and SEI.

H3b: Social self-efficacy mediates the relationship between humane orientation and SEI.

H4a: Perceived social support mediates the relationship between prior experience and SEI.

H4b: Perceived social support mediates the relationship between humane orientation and SEI.

3. METHODOLOGY OF DATA ANALYSIS

3.1. Participants

A web-based questionnaire was spread among students of economics from the department of management in tourism. As it was used Google form for administrating the questionnaire, there were no missing data and only totally completed questionnaires were recorded. Therefore, the sample size was 70 respondents. The sample is part of the larger group of respondents and it was extracted from the group of 350 participants in the research made up of students of economics from all departments. It should be pointed out that it was used the convenience sampling technique, meaning that the target population was students of one faculty at the University of Niš and that all of them were enrolled in the studies of economics. The majority of respondents were female (75.7%), while men encountered 24.3% of respondents. The average age of respondents was 22.59 (SD=4.116) years. The respondents had both urban (74.3%) and rural (25.7%) residences. When it comes to the level of study, 62.9% of students were enrolled in bachelor studies, while 37.1% were students of postgraduate studies. Furthermore, 62.7% of respondents had already some knowledge in entrepreneurship and attended courses at the faculty on this topic and 37.1% did not have such a courses experience. Lastly, 30.0% of respondents stated that they have entrepreneurs among close family members and 70.0% do not.

3.2. Measures

The original versions of the questionnaires are translated into Serbian language and their context is adjusted to achieve the maximum understanding of surveyed students. The participants ranged their responses on the 5-point Likert response scale ranging from 1- 'strongly disagree'

to 5- 'strongly agree' for the items measuring prior experience, empathy, moral obligation, social self-efficacy, perceived social support, and SEI. Humane orientation as cultural value is measured on the 7-point Likert scale from 1- 'very' to 7- 'not at all'. Therefore, these answers are recorded in order to achieve the same direction of items.

In this research, the authors controlled multiple demographic variables which were entered into the model as covariates. In this regard, gender (0 = male, 1 = female), age was stated in number of respondents' years, place of residence (0 = urban, 1 = rural), study level (0 = undergraduate, 1 = postgraduate), entrepreneurship education (0 = yes, 1 = no) and entrepreneur in a family (0 = yes, 1 = no). In numerous researches, these variables reported a significant influence on SEIs (Hockerts, 2015; Fragoso et al., 2020; Rieger et al., 2021). The research model (Figure 1) contains predictor variables, namely prior experience, and humane orientation, mediating variables empathy, moral obligation, social self-efficacy and perceived social support, and dependent variable SEI. The measurement scales for these variables are presented in the following.

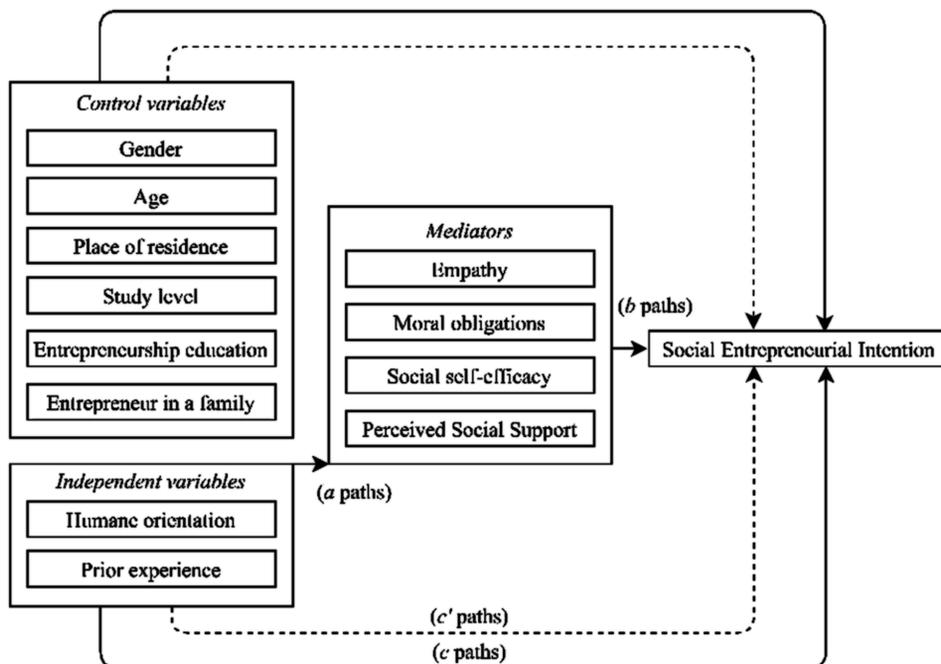


Figure 1. Theoretical model

Source: Authors

Humane orientation as a variable is extracted from the set of GLOBE Culture Dimensions as a degree to which a person is encouraged by society to which belongs to be caring, sympathetic, sensitive to social injustice, fair and similar (House et al., 2004). These variables include measurement of the state in the society 'as is' and values 'as should be', so in this research, it is measured cultural values in the everyday practices 'as is' and it was applied 5-item survey to rate these practices. An example of a question is: 'In this society, people are generally tolerant of mistakes'. The Cronbach's alpha for this variable is 0.867 (Table 1).

Prior experience in this research is an ascendant of SEI where an experience with social problems will be expected to influence the intention of a person to be a social entrepreneur. This variable is assessed using a 3-item scale where one was 'I have volunteered or otherwise worked with social organizations' (Hockerts, 2015). The internal consistency of this scale is 0.771.

Empathy as a variable is considered by Hockerts (2015) as “an ability to recognize and propensity to react to other person’s emotional state” (p. 4). It is measured by a 3-item questionnaire and the obtained reliability was satisfactory ($\alpha = 0.778$). An example item includes: ‘Seeing socially disadvantaged people triggers an emotional response in me’.

Moral obligation refers according to Hockerts (2015) to moral responsibilities that one person fills and that drives him to provide help to another person in social need. This 3-item scale accounted high reliability of $\alpha = 0.866$. One of the questions in this scale is: ‘We are morally obliged to help socially disadvantaged people’.

Social self-efficacy is assessed using Hockerts’ (2015) 3-item scale designed to capture a person’s potential to solve social problems. An example of an item is: ‘I could figure out a way to help solve the problems that society faces’. The Cronbach’s alpha for this scale is 0.686.

Perceived social support as a variable refers to back-up from other entities that social entrepreneur expects (Hockerts, 2015). The 3-item version of the questionnaire also included the item ‘If I planned to address a significant societal problem people would back me up’. The Cronbach’s alpha of this scale is 0.860.

Social entrepreneurial intention is the dependent variable in current research and it is measured by the application of Hockerts’s (2015) 3-item scale. The Cronbach’s alpha of the scale is 0.682. An intention is anticipated to be a predictor of a person’s behavior (Ajzen, 1991) and as such, it is crucial to identify its predictors. One of the items used for measuring SEI is ‘I have a preliminary idea for a social enterprise on which I plan to act in the future’.

3.3. Procedure

After exploring frequencies in order to present socio-demographic characteristics of the sample, descriptive statistics of the researched variables and Pearson two-tailed correlations between them were calculated. The cutoff point for all significant data was taken as a p-value smaller than 0.05. Furthermore, we have employed PROCESS macro v3.5 (Hayes, 2017) for testing the mediation effect between hypothesized factors of SEIs of students. Using a calculation of 5,000 bootstrap iterations, it was tested theoretical model (Figure 1) in which gender, place of residence, study level, entrepreneurship education, entrepreneur in a family were entered into the model as control variables, prior experience, and humane orientation as cultural value were considered as independent variables and SEI as the dependent variable.

In the stated model, empathy, moral obligation, social self-efficacy, and perceived moral support were mediating variables between independent and dependent variables. Total, direct and indirect effects were tested and lately analyzed. The identified indirect effect through mediating variable between independent and dependent variable is further confirmed by the Sobel test. Prior to conducting regression analysis, the assumptions of the analysis were checked, especially multicollinearity which could be harmful to regression analysis. Previously listed analyses were conducted via program the Statistical Program for Social Sciences (SPSS v23).

4. RESULTS

Table 1 shows descriptive statistics and the reliability of the measurement scales used in this study. Having in mind that for humane orientation, the minimum value of responses is 1.20, while the maximum was 7, and that 4 is the neutral attitude toward defined items of humane orientation, screening the mean data indicates that respondents showed moderately high humane orientation (Mean = 4.837, SD = 1.336). On contrary, students rated their previous experience in helping others in social need on a 5-point Likert scale with a mean value of 3.072 (SD = 1.121). The mean value is under the value of 3 which implies a neutral attitude and indicates that they have some experience in providing support to others. Variables such as empathy (Mean = 3.943, SD = 0.911), moral obligation (Mean = 3.771, SD = 1.011), social self-efficacy (Mean = 3.729, SD = 0.952) and perceived social support (Mean = 3.272, SD = 0.970) scored above the threshold of point 3 as neutral attitude. Lastly, respondents on a scale of one to five showed lower SEI (Mean = 3.124, SD = 1.022), which indicates the existence of an intention to be a social entrepreneur.

Table 1. Descriptive statistics of the researched variables

Variable	Mean	SD	Minimum	Maximum	α
Age	22.59	4.116	19	32	n/a
Humane Orientation	4.837	1.336	1.20	7.00	0.867
Prior Experience	3.072	1.121	1.00	5.00	0.771
Empathy	3.943	.911	2.00	5.00	0.778
Moral Obligation	3.771	1.011	1.33	5.00	0.866
Social self-efficacy	3.729	.952	1.33	5.00	0.686
Perceived Social Support	3.272	.970	1.00	5.00	0.860
Social Entrepreneurial Intention	3.124	1.022	1.00	5.00	0.682

Source: Authors

Table 2. Correlation analysis results

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	1												
2. Age	.000	1											
3. Residence	-.048	-.044	1										
4. Study level	-.254*	.483**	-.046	1									
5.	-.254*	.136	-.046	.266*	1								
6.	-.007	-.158	-.043	-.077	.181	1							
7.	-.153	.030	-.072	.006	-.032	.122	1						
8. Prior	-.096	-.117	-.046	-.048	-.194	-.032	.421**	1					
9.	.143	.162	-.054	.030	-.119	.042	.467**	.441**	1				
10. Moral obligation	.124	.044	-.038	-.036	-.113	.101	.327**	.332**	.749**	1			
11. Social	.060	.195	-.061	.076	-.097	-.151	.290*	.363**	.632**	.552**	1		
12. Perceived Social Support	-.080	.008	.047	-.021	.020	.067	.337**	.364**	.435**	.333**	.510**	1	
13. Social	-.075	-.010	-.022	.132	.076	.084	.600**	.623**	.476**	.330**	.378**	.583**	1

Note: ** significant at the .01 level; * significant at the .05 level

Source: Authors

The intercorrelations between researched variables are presented in Table 2. Humane orientation is positively correlated with empathy ($r = .467$, $p < .01$), moral obligation ($r = .327$, $p < .01$), social self-efficacy ($r = .290$, $p < .01$), perceived social support ($r = .337$, $p < .01$) and SEI ($r = .600$, $p < .01$). Prior experience is positively related to empathy ($r = .441$, $p < .01$), moral

obligation ($r = .332, p < .01$), positively related to social self-efficacy ($r = .363, p < .01$), perceived social support ($r = .364, p < .01$) and SEI ($r = .623, p < .01$). Empathy is positively and statistically significantly related to other three antecedents of SEI, i.e., moral obligation, social self-efficacy, perceived social support ($r = .749, p < .01, r = .632, p < .01$, and $r = .435, p < .01$, respectively), lastly with a SEI ($r = .476, p < .01$). Moral obligation is positively related to social self-efficacy ($r = .552, p < .01$), perceived social support ($r = .333, p < .01$) and SEI ($r = .330, p < .01$). Social self-efficacy is positively related perceived social support ($r = .510, p < .01$) and SEI ($r = .378, p < .01$). Perceived social support and SEI are significantly positively correlated ($r = .583, p < .01$).

Table 3. Results of the single mediator regression analysis

Effect	Humane orientation				Prior experience			
	B	SE	p	95% CI	B	SE	p	95% CI
<i>Control variables</i>								
Gender	.165	.247	.505	-.33;.66	.265	.231	.256	-.20;.73
Age	.006	.028	.825	-.05;.06	.006	.026	.813	-.05;.06
Residence	-.006	.227	.980	-.46;.45	.146	.213	.497	-.28;.57
Study level	.148	.248	.552	-.35;.64	.047	.232	.838	-.42;.51
Entrepreneurship Education	.430	.222	.057	-.01;.87	.679	.211	.002	.26;1.10
Entrepreneur in a Family	-.105	.224	.639	-.55;.34	-.001	.208	.997	-.42;.42
<i>Mediator - Empathy</i>								
IV on Mediator (a path)	.319	.072	.000	.17;.46	.382	.092	.000	.20;.56
R2	.306		.001		.295		.002	
Mediator to SEI (b path)	.312	.126	.016	.06;.56	.276	.117	.021	.04;.51
Direct effect of IV on SEI (c' path)	.362	.082	.000	.20;.53	.522	.094	.000	.33;.71
R2	.468		.000		.533		.000	
Total effect of IV on SEI (c path)	.462	.075	.000	.31;.61	.627	.086	.000	.45;.80
R2	.414		.000		.491		.000	
Indirect effect IV-SEI (ab path)	.100	.043	2.16 (p=0.031)	.02;.19	.105	.057	2.05 (p=0.040)	.01;.23
<i>Mediator - Moral obligation</i>								
IV on Mediator (a path)	.245	.087	.006	.07;.42	.324	.106	.003	.11;.54
R2	.189		.061		.204		.040	
Mediator to SEI (b path)	.165	.108	.132	-.05;.38	.124	.102	.230	-.08;.33
Direct effect of IV on SEI (c' path)	.421	.078	.000	.26;.58	.587	.092	.000	.40;.77
R2	.435		.000		.503		.000	
Total effect of IV on SEI (c path)	.462	.075	.000	.31;.61	.627	.086	.000	.46;.80
R2	.414		.000		.491		.000	
Indirect effect IV-SEI (ab path)	.040	.031	1.34 (p=0.179)	-.01;.11	.040	.041	1.13 (p=0.259)	-.03;.13
<i>Mediator - Social self-efficacy</i>								
IV on Mediator (a path)	.202	.084	.018	.03;.37	.298	.101	.004	.10;.50
R2	.154		.148		.189		.062	
Mediator to SEI (b path)	.241	.110	.033	.02;.46	.180	.106	.096	-.03;.39

Direct effect of IV on SEI (c' path)	.413	.076	.000	.26;.56	.574	.090	.000	.39;.75
R2	.456		.000		.513		.000	
Total effect of IV on SEI (c path)	.462	.075	.000	.31;.61	.627	.086	.000	.45;.80
R2	.412		.000		.491		.000	
Indirect effect IV-SEI (ab path)	.049	.033	1.62 (p=0.105)	-.01;.13	.054	.045	1.47 (p=0.141)	-.01;.17
<i>Mediator – Perceived Social Support</i>								
IV on Mediator (a path)	.246	.085	.005	.08;.42	.351	.102	.001	.15;.56
R2	.164		.117		.202		.041	
Mediator to SEI (b path)	.438	.098	.000	.24;.63	.385	.096	.000	.19;.58
Direct effect of IV on SEI (c' path)	.354	.070	.000	.21;.49	.492	.084	.000	.32;.66
R2	.558		.000		.597		.000	
Total effect of IV on SEI (c path)	.462	.075	.000	.31;.61	.627	.086	.000	.46;.80
R2	.414		.000		.491		.000	
Indirect effect IV-SEI (ab path)	.107	.052	2.43 (p=0.015)	.01;.22	.135	.060	2.61 (p=0.009)	.04;.27

Source: Authors

The proposed hypotheses were tested using a single mediation regression analysis. The direct, indirect, and total effects of regressed variables are presented in detail in Table 3, as well as an influence of control variables from the total effect regression analysis output. It was found that in the case when empathy is mediating variable and humane orientation is independent, and when empathy is mediating variable and prior experience is the independent variable, both mediation models are upheld ($\beta = .100$, 95% CI [.02, .19], and $\beta = .105$, 95% CI [.01; .23]). Additionally, the Sobel test confirmed the mediating effect, and it can be stated that hypotheses H1a (2.16, $p=0.031$) and H1b (2.05, $p=0.040$) are confirmed. Secondly, two models in which first had humane orientation and second prior experience as an independent variable, and moral obligation was mediating variable were not supported ($\beta = .040$, 95% CI [-.01, .11], and $\beta = .040$, 95% CI [-.03; .13]) and that 95% bias-corrected bootstrap confidence interval that includes zero.

Thirdly, the hypothesis H3a that social self-efficacy will mediate the relationship between humane orientation and SEI ($\beta = .049$, 95% CI [-.01, .13]), and H3b that social self-efficacy will mediate the relationship between prior experience and SEI ($\beta = .054$, 95% CI [-.01, .17]) were not supported, which are presented in Table 3. Fourthly, the single mediator analysis revealed that perceived social support mediates the relationship between humane orientation and SEI and thus hypothesis H4a is confirmed ($\beta = .107$, 95% CI [.01, .22]). Lastly, perceived social support mediates the relationship between prior experience and SEI, and thus hypothesis H4b is confirmed ($\beta = .135$, 95% CI [.04, .27]). The Sobel test supported previous conclusions (2.43, $p=0.015$, and 2.61, $p=0.009$, respectively). In models where the prior experience was predicting variable and only mediating variables were changed, there were identified the statistically significant influence of entrepreneurship education ($\beta = .679$, $p < .01$, 95% CI [.26, 1.10]). Meaning that an upgrade in the knowledge about entrepreneurship would make a positive influence on SEIs of students.

5. DISCUSSION

The previous research is founded on postulates of Ajzen's (1991) Theory of Planned Behavior (TPB) and the research of Mair and Noboa (2006) who adapted it according to the context of social problems and SEI which develops from it. The inferences of the TPB are that intentions are susceptible to influences of exogenous variables such as cultural values or personality traits through mediators (attitudes toward behavior, subjective norms, and perceived behavioral control). The adaptation of TPB for social entrepreneurship surrounding was made in transforming mediators of intent to empathy, moral obligation, social self-efficacy and perceived behavioral control. Lastly, Hockerts (2015) added prior experience with social problems to be antecedent of mediation variables of SEI. Therefore, the authors' research combined previous concepts and examine the influence of tourism management students' prior experience and humane orientation as the cultural value on SEI, and the mediating role of empathy, moral obligations, social self-efficacy, and perceived social support in these relationships.

Humane orientation and prior experience play a crucial role in evolving process of SEIs in students. There is a very small number of researches that put its focus on the relationship between prior experience, humane orientation, empathy, moral obligation, social self-efficacy, and perceived social support, and their influence on SEI. Therefore, this study tries to merge these concepts. In all regression models, humane orientation and prior experience had a significant influence on SEI, meaning that their increase should cause an increase in the dependent variable. Entrepreneurship education loaded a significant effect on SEI where the prediction variable was a prior experience. Moreover, there is a statistically significant mediation of empathy between humane orientation and SEI, and between prior experience and SEI, thus confirming hypotheses H1a and H1b. When mediating variable was changed to perceived social support, hypotheses H4a and H4b were confirmed, and imply that this mediator explains additional variations in SEI. The contemporary literature supports these conclusions. Firstly, the existence of entrepreneurship education is a commonly significant predictor of entrepreneurial intent (Nguyen et al., 2019; Rieger et al., 2021). The findings of Hockerts (2015) are partially aligned with the result of the authors. Hockerts (2015) indicates that in a single mediation regression analysis all four antecedents of SEI mediate the relationship between prior experience in social problems and intent. His research indicates that not only previous experience but also antecedents explain the additional variability of SEI. Evidence of Rieger et al. (2021) suggests that socially supportive cultural norms, such as pleasantness and helpfulness, are important predictors and mediators that help the transition of personal feasibility and desirability of the social venture to SEI.

In contrast to our expectation no mediating effect of moral obligations and social self-efficacy was identified between prior experience and humane orientation, on the one side, and SEI, on the other side. For example, Hockerts (2015) results are somewhat contradictory to the authors' research because social self-efficacy in his analysis marked a high mediating effect. Still, in the case of social self-efficacy, it was identified direct effect on SEI, indicating that this variable has a positive effect on intent and its increase will lead to an increase in intent.

In the context of Serbia, entrepreneurial orientations in tourism such as work ethic, innovativeness, empathy, autonomy, and risk readiness are influenced by a diverse number of Globe cultural values (uncertainty avoidance, performance orientation, group collectivism, assertiveness, and gender equality), but no influence of humane orientation was recorded (Nedeljković-Knežević & Pavluković, 2020). Therefore, the theoretical implication of the chapter is that

prior experience and humane orientation as a cultural value are marked as significant predictors of SEI of tourism management students, while that effect is mediated by empathy and perceived social support. The second implication is that this chapter overcomes the lack of research on this topic, combines two exogenous variables of SEI, and shows that prior experience and humane orientation are embedded in SEI through empathy and perceived social support. This further means that antecedents of SEI interact and explain its variations to a greater extent. The third theoretical contribution of the research is the inclusion of cultural components in Hockerts's (2015) model of SEI. As such, the novelty of the chapter is that if the perception of kindness, fairness, and generosity of a person is promoted as highly acceptable and recognized among members of a society, it will contribute to the person intended to be an entrepreneur.

Practical implications of the chapter derive from the fact that entrepreneurship education is marked as the influential factor of SEI of tourism management students. It could be used in a way that through education students could acquire knowledge on how to unite profit-oriented objectives and objectives to target some vulnerable group or a social need by starting their social venture in the tourism sector. Through education, students could gain various skills important for future business activities (Spear et al., 2013). Krstić et al. (2017) denote the importance of education as a motivational factor to establish a social enterprise and enhance employment opportunities. Secondly, social entrepreneurship is recognized as one of the unexploited areas in Serbia and there is room for improvement but that improvement is connected to cultural change. As seen, the research results indicate humane orientation has a decisive effect on SEI, albeit the Serbian society is marked as distrustful when it comes to social enterprises (Spear et al., 2013). Accordingly, policymakers are challenged to develop policies that will target the transformation of cultural legacy which does not support social entrepreneurship by raising awareness of social problems, humane values, and how future entrepreneurs could address these problems in different areas such as the tourism sector. Especially, rural tourism was recognized as an area where social entrepreneurship in Serbia could emerge (Matović et al., 2020). Again, the role of education and training could be notable in creating a positive atmosphere for humane orientation development at students' early age and knowledge acquisition on social entrepreneurship in the tourism industry. Lastly, the creation and promotion of opportunities to gain experience in working with people in social need or resolving the common social problem are of main importance for the development of both social and sole entrepreneurial spirit in students. When it comes to tourism and the place of social entrepreneurship in it, the research results could serve policymakers and educators in the creation of programs for providing opportunities for obtaining prior experience and identifying students with high humane orientation in order to direct them toward education on how to establish own social venture in the tourism sector such as agrotourism and social tourism (Spear et al., 2013).

6. FUTURE RESEARCH DIRECTIONS

The present research has its limitations that could drive future research in the area of social entrepreneurship in Serbia. First, the study researched the single mediation effect of four antecedents of social entrepreneurship intent as in Hockerts's (2015) research. However, Hockerts (2015) continued his research in the direction of multiple mediations of previously mentioned antecedents. Therefore, future research could examine the multiple mediation effect of empathy, moral obligation, social self-efficacy, and perceived social support between prior experience and humane orientation and SEI of students. Secondly, following the research of Rieger et al. (2021), and Nedeljković-Knežević and Pavluković (2020), not only humane orientation may be the predicting variable of SEI, so future research could put its focus on broadening the list of cultural values as possible

influential factors of intent to be a social entrepreneur. Thirdly, the sample frame of the study is completely focused on students enrolled in studies of tourism management so the sample size has its limitation. In order to achieve generalizability of research results, rather than just obtaining indicative results, it is of great importance to extend the research to the whole student population of one faculty or university as in the research of Hockerts (2015) and Rieger et al. (2021).

7. CONCLUSION

The positive and negative societal effects of a tourism industry development have been broadly researched by many scholars (Pollock, 2016; de Lange & Dodds, 2017). With the emerging trend of social entrepreneurship development, the tourism sector paved its way to tackling social problems and having significant economic benefits for the business, and thus expanding the boundaries of its positive outcomes. Hence, it is of the utmost importance to identify what are the main drivers of a person's intent to set up his own social venture. Therefore, the focus of this paper was put on the research of the SEI and its antecedents. One person can develop compassion or empathy for another person's social problems which can be an antecedent of the intent to develop social enterprise. People's intent to establish social enterprise can also be driven by ethical principles and moral obligations. It is a characteristic of the social entrepreneur that he or she understands and believes in his own competencies to solve some social problem by starting a social enterprise, namely, the belief in possessing social self-efficacy. Lastly, the perception of social support by external bodies, such as the government and local community, could positively influence SEI development. Except for previously mentioned antecedents of SEI derived directly from Ajzen's (1991) TPB, future social entrepreneurs can develop intent under the influence of some prior experience or cultural values (Hockers, 2015; Rieger et al. 2021).

This chapter aimed to examine whether prior experience and humane orientation as cultural values affect the development of SEI and is that relationship mediated by empathy, moral obligations, social self-efficacy, and perceived social support. The results indicate that empathy and perceived social support mediate the effect of prior experience and humane orientation on SEI. Moreover, in the case where prior experience is a predicting variable of SEI, entrepreneurship education appears as a positive predictor too. As the research was conducted on the sample of students of economics engaged in studies of tourism management, the results are indicated in the way that if policymakers want to develop social entrepreneurship in the tourism sector in Serbia, it should consider the importance of students' prior experience and humane orientations when designing education and training programs. Actions for cultural changes pointed toward overcoming the distrust in social entrepreneurship are also very much needed in Serbia in order for citizens to adhere to humane orientations. Both government and educational institutions are challenged to recognize students with empathy and belief in the social support of other persons and point them toward education and training in social entrepreneurship.

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REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Altınay, L., Sigala, M., & Waligo, V. (2016). Social value creation through tourism enterprise. *Tourism Management*, 54, 404–417. <https://doi.org/10.1016/j.tourman.2015.12.011>
- Aquino, R.S., Lück, M., & Schänzel, H.A. (2018). Tourism social entrepreneurship for sustainable community development: Review and conceptual framework, In T. Young, P. Stolk, & G. McGinnis (Eds.), *CAUTHE 2018: Get Smart: Paradoxes and Possibilities in Tourism, Hospitality and Events Education and Research* (pp. 369-379). Newcastle, Australia: The University of Newcastle.
- Bacq, S., & Janssen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23(5–6), 373–403. <https://doi.org/10.1080/08985626.2011.577242>
- Bacq, S., Hartog, C., Hoogendoorn, B., & Lepoutre, J. (2011). Social and commercial entrepreneurship: Exploring individual and organizational characteristics. *Scales Research Reports, EIM Business and Policy Research*, 1(1), 3-49.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191–215.
- Beauchamp, T. L., Bowie, N. E., & Arnold, D. G. (Eds.). (2004). *Ethical theory and business*. London, UK: Pearson Education.
- Boluk, K. (2011). Revealing the discourses: White entrepreneurial motivations in black South Africa. *Tourism Planning & Development*, 8(2), 199-213. <http://dx.doi.org/10.1080/21568316.2011.573922>
- Bornstein, D. (2004). *How to Change the World: Social Entrepreneurs and the Power of New Ideas*. New York: Oxford University Press.
- Bull, M., & Ridley-Duff, R. (2018). Towards an appreciation of ethics in social enterprise business models. *Journal of Business Ethics*, 159(3), 619-634. <https://doi.org/10.1007/s10551-018-3794-5>
- Calza, F., Cannavale, C., & Nadali, I. Z. (2020). How do cultural values influence entrepreneurial behavior of nations? A behavioral reasoning approach. *International Business Review*, 29(5), 101725. <https://doi.org/10.1016/j.ibusrev.2020.101725>
- Chamberlain, P., Gillis, K., Prindiville, T., Bechard,., Ulhaq, M., Elson, P. R. & Hall, P. (2015). *Enterprising Change: Report of the 2015 social enterprise survey for Ontario*. Toronto: The Canadian Community Economic Development Network.
- Corner, P.D., & Ho, M. (2010). How Opportunities Develop in Social Entrepreneurship. *Enterp. Theory Pract.* 34, 635–659. <https://doi.org/10.1111/j.1540-6520.2010.00382.x>
- Cvejić, S., Babović, M., & Vuković, O. (2008). *Mapiranje socijalnih preduzeća u Srbiji*, Beograd: UNDP.
- De Lange, D. & Dodds, R. (2017). Increasing Sustainable Tourism through Social Entrepreneurship. *International Journal of Contemporary Hospitality Management*, 29(7), 1977-2002. <https://doi.org/10.1108/IJCHM-02-2016-0096>
- Ergul, M., & Johnson, C. (2011). Social entrepreneurship in the hospitality and tourism industry: An exploratory approach. *Consortium Journal of Hospitality & Tourism*, 16(2), 40–46.
- Ernst, K. (2011). *Heart over mind—An empirical analysis of social entrepreneurial intention formation on the basis of the theory of planned behaviour*. Unpublished dissertation, University Wuppertal
- European Commission. (2011). *The Communication on the Social Business Initiative (SBI)*. <https://ec.europa.eu/docsroom/documents/14583/attachments/3/translations/en/renditions/pdf>

- Fischer, J. (2004). Social Responsibility and Ethics: Clarifying the Concepts. *Journal of Business Ethics*, 52(4), 381–390. <https://doi.org/10.1007/s10551-004-2545-y>
- Fragoso, R., Rocha-Junior, W., & Xavier, A. (2020). Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business & Entrepreneurship*, 32(1), 33-57. <https://doi.org/10.1080/08276331.2018.1551459>
- George, M. (2013). Social entrepreneurship: Creating positive impacts on society and the environment. *Schwab Foundation for Social Entrepreneurship*, 1-14.
- Harding, R., & Cowling, M. (2006). *Social Entrepreneurship Monitor*. London: London Business School.
- Haugh, H. (2007). Community-led social venture creation. *Entrepreneurship Theory and Practice*, 31(2), 161-182. <https://doi.org/10.1111/j.1540-6520.2007.00168.x>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford publications.
- Hockerts, K. (2015). Determinants of Social Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 41(1), 105-130. <https://doi.org/10.1111/etap.12171>
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, California: Sage publications.
- Ivanović-Đukić, M., Petrović Randelović, M. & Talić, M. (2020). An Analysis of Factors Influencing the Development of Social Enterprises in the Republic of Serbia. *The European Journal of Applied Economics*, 17(2), 1-18. <https://doi.org/10.5937/EJAE17-27375>
- Kautonen, T., Luoto, S., & Tornikoski, E.T. (2010). Influence of work history on entrepreneurial intentions in “prime age” and “third age”: A preliminary study. *International Small Business Journal*, 28(6), 583–601.
- Korte, R., Smith, K., & Li, C. (2018). The role of empathy in entrepreneurship: A core competency of the entrepreneurial mindset. *Advances in Engineering Education*, 7(1), 1–10.
- Krstić, G., Aleksić-Mirić, A., & Žarković-Rakić, J. (2017). Profile of social entrepreneur in Serbia: Motivation and socio-demographic characteristics. *Sociologija*, 59(1), 62-80. <https://doi.org/10.2298/SOC1701062K>
- Leahy, G. & Villeneuve-Smith, F. (2009). *State of Social Enterprise Survey*. London: Social Enterprise Coalition
- Lepoutre, J., Justo, R., Terjesen, S., & Bosma, N. (2013). Designing a global standardized methodology for measuring social entrepreneurship activity: The Global Entrepreneurship Monitor social entrepreneurship study. *Small Business Economics*, 40(3), 693-714. <https://doi.org/10.1007/s11187-011-9398-4>
- Mair, J., & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In *Social entrepreneurship* (pp. 121-135). Palgrave Macmillan, London.
- Matović, I. M., Pavlović, M., & Dabetić, Đ. (2020). Current State of Social Entrepreneurship in Tourism Sector of the Republic of Serbia. *Modern Management Tools and Economy of Tourism Sector in Present Era*, 5, 361-373. <https://doi.org/10.31410/tmt.2020.361>
- Nedeljković-Knežević, M., & Pavluković, V. (2020). The influence of GLOBE culture dimensions on entrepreneurial orientation in tourism and medical service sectors in Serbia. *Geographica Pannonica*, 24(2), 157-167. <https://doi.org/10.5937/gp24-24303>
- Newbert, S. L., & Hill, R. P. (2014). Setting the stage for paradigm development: A ‘small-tent’ approach to social entrepreneurship. *Journal of Social Entrepreneurship*, 5(3), 243–269. <http://dx.doi.org/10.1080/19420676.2014.889738>

- Nguyen, A. T., Do, T. H. H., Vu, T. B. T., Dang, K. A., & Nguyen, H. L. (2019). Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review, 99*, 186–193. <https://doi.org/10.1016/j.childyouth.2019.01.039>
- Nicolás, C., Rubio, A., & Fernandez-Laviada, A. (2018). Cognitive Determinants of Social Entrepreneurship: Variations According to the Degree of Economic Development. *J. Soc. Enterp. 9*, 154–168. <https://doi.org/10.1080/19420676.2018.1452280>
- OECD (1999). *Social Enterprises*. Paris: OECD.
- Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *The Columbia Journal of World Business, 41*(1), 56–65. <https://doi.org/10.1016/j.jwb.2005.10.007>
- Pollock, A. (2016). *Social Entrepreneurship in Tourism. The Conscious Travel Approach*. TIPSE Tourism. <http://www.conscious.travel/wp-content/uploads/2018/03/Conscious-Tourism-TIPSE-2016-1.pdf>
- Porter, B. A., Orams, M. B., & Lück, M. (2018). Sustainable entrepreneurship tourism: An alternative development approach for remote coastal communities where awareness of tourism is low. *Tourism Planning & Development, 15*(2), 149–165. <https://doi.org/10.1080/21568316.2017.1312507>
- Preston, S. D., Bechara, A., Damasio, H., Grabowski, T. J., Stansfield, R. B., Mehta, S., & Damasio, A. R. (2007). The neural substrates of cognitive empathy. *Social neuroscience, 2*(3-4), 254-275. <http://dx.doi.org/10.1080/17470910701376902>
- Rieger, V., Gründler, A., Winkler, H. J., Tschauner, B., & Engelen, A. (2021). A cross-national perspective of compassion's role in driving social entrepreneurial intentions. *Journal of International Management, 27*(1), 100824. <https://doi.org/10.1016/j.intman.2021.100824>
- Sharir, M., & Lerner, M. (2006). Gauging the success of social ventures initiated by individual social entrepreneurs. *Journal of world business, 41*(1), 6-20. <https://doi.org/10.1016/j.jwb.2005.09.004>
- Sheldon, P., Pollock, A., & Daniele, R. (2017). Social entrepreneurship and tourism: Setting the stage. In P. J. Sheldon & R. Daniele (Eds.), *Social entrepreneurship and tourism: Philosophy and practice* (pp. 1–18). Cham, Switzerland: Springer International Publishing.
- Sloan, P., Legrand, W., & Simons-Kaufmann, C. (2014). A survey of social entrepreneurial community-based hospitality and tourism initiatives in developing economies: A new business approach for industry. *Worldwide Hospitality and Tourism Themes, 6*(1), 51–61. <https://doi.org/doi:10.1108/WHATT-11-2013-0045>
- Spear, R., Aiken, M., Noya, A., & Clarence, E. (2013). Boosting social entrepreneurship and social enterprise creation in the Republic of Serbia. *OECD Local Economic and Employment Development (LEED) Working Papers, 2013/12*, OECD Publishing. <http://dx.doi.org/10.1787/5k3xz6lswcwl-en>
- Statistical Office of the Republic of Serbia, SORS. (2014). *Economic Impact of Social Enterprises in the Republic of Serbia*. Belgrade: Statistical Office of the Republic of Serbia.
- Stephan, U., & Uhlaner, L. (2010). Performance-based vs socially supportive culture: A cross-national study of descriptive norms and entrepreneurship. *Journal of International Business Studies 41*(8), 1347–1364. <https://doi.org/10.1057/jibs.2010.14>
- von der Weppen, J., & Cochrane, J. (2012). Social enterprises in tourism: An exploratory study of operational models and success factors. *Journal of Sustainable Tourism, 20*(3), 497–511. <https://doi.org/10.1080/09669582.2012.663377>
- Yiu, D.W., Wan, W.P., Ng, F.W., Chen, X., & Su, J. (2014). Sentimental drivers of social entrepreneurship: A study of China's Guangcai (Glorious) Program. *Management and Organization Review, 10*(1), 55–80.
- Zhao, X., Li, H. & Rauch, A. (2012). Cross-country Differences in Entrepreneurial Activity: The Role of Cultural Practice and National Wealth. *Frontiers of Business Research in China, 6*(4), 447–474. <https://doi.org/10.3868/s070-001-012-0021-0>



CO₂ Neutrality of Small and Medium-Sized Hotels – Publicity Stunt or Sustainable Competitive Advantage?

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Abstract: *The topic of climate protection is steadily gaining importance in public discussion. This paper shows that CO₂ emissions are also gaining significant influence on booking behaviour in tourism. At the same time, it can be demonstrated in the context of a large-scale survey that with a growing desire for CO₂ neutrality, higher accommodation rates are also accepted.*

Large hotel chains already regularly have integrated sustainable thinking into their daily routine. SMEs currently have some catching up to do. While hotel groups are accused of greenwashing, SMEs can generate a competitive advantage through individual, traceable measures.

1. INTRODUCTION

Tourism is an important sector for many economies. Among European countries, tourism is particularly important in Austria, Spain, Greece, Cyprus, and Malta (Augsbach, 2020). However, the exact weight of tourism cannot be determined thanks to economic indicators. Schrader and Laaser (2020) attribute this to the fact that in tourism-related sectors such as gastronomy, retail or culture, it is not possible to clearly distinguish between generally available and tourism-induced purchasing power (Schrader & Laaser, 2020). This agrees with Spörel (1993), who laments the lack of generally accepted methods and definitions for quantifying tourism as an economic factor (Spörel, 1993). Nevertheless, there is now a consensus that tourism brings positive economic effects and is therefore an effective component of regional development (Mayer & Stoll-Kleemann, 2020). The positive impulses also indirectly contribute to strengthening other economic sectors, such as crafts and agriculture. A development that has strengthened continuously in recent years until the outbreak of the Corona pandemic (Bundesministerium für Wirtschaft und Energie, 2020). For example, annual tourism consumption in Germany alone increased by 3.2% between 2010 and 2015, corresponding to an increase of 8.9 billion euros. The directly resulting gross value added recorded a nominal growth of 8.5% in the same period (Mattes, Becker, & Neumann, 2017). This result is generated by 2.9 million employees working in occupations directly related to tourism. This means that the tourism industry provides a similar number of jobs to the health care sector or the retail trade (Mattes et al., 2017). If the indirect profiteers are also considered, the gross value added increases by another 76 billion euros. In addition, the number of employees will then grow by a further 1.25 million (Federal Ministry for Economic Affairs and Energy, 2020).

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Despite these positive framework conditions, according to Wiener (2020), the industry was already in crisis before Corona (Wilke, 2009). According to Škodová Parmová (2017), this can be attributed to increasingly dynamic and complex market activity (Spielhagen, 1996). On the one hand, tourists act very price-sensitive. A development that, according to Laesser & Bieger (2020), is further intensified by the negative impact of the Corona pandemic on private incomes (Laesser & Bieger, 2020). On the other hand, technological progress ensures increasing competition among destinations (Bohnenstengel et al., 2011; Milanez-Schenk, 2013). For example, the expansion of transport infrastructure ensures that destinations that were previously unreachable become accessible. Another example is booking and rating portals on the Internet. These provide extensive transparency in terms of prices and services (Moser, 2011). While, according to Moser (2011), this poses a threat to the existence of many hotel businesses, establishments that are well-positioned in online marketing can generate an advantage here. This is because targeted marketing communication can generate authentic reviews, which can lead to better findability online and even to a significantly higher booking rate (Hummel, Pfeiler, & Kleina, 2020).

All in all, these changes mean that tourism SMEs and international tourism groups have to compete more and more in the favour of the limited number of overnight guests (Enz & Škodová Parmová, 2020). According to Sdrolias et al. (2016), it is, therefore, necessary to develop an individual profile to compete (Sdrolias et al., 2016). Theoretically, competition is desirable in an economy, as it forces suppliers to permanently improve their products, services, and processes. Consumers thus permanently benefit from better or more affordable goods (Leschke, 2020). However, competition in the hotel industry now goes far beyond what Adam Smith called for in the 'concept of the invisible hand'. Therefore, the outcome is no longer the optimal allocation of overnight accommodation, which is in the overall interest (Keim, 2020). Instead, Enz & Škodová Parmová (2020) observe destructive market tendencies. These lead to a consolidation of the market (Enz & Škodová Parmová, 2020). As a result, small and medium-sized hotel businesses are increasingly disappearing (Will, 2018). In particular, the existence of providers who fail to convey a USP is at risk (Zehrer, 2020). They are bought up by investors and integrated into national or supranational groups (Altendorfer, 2020; Tophotel, 2019).

If small and medium-sized hotel businesses want to sustain their position in this market environment, they must expand their competitiveness (Hoffmann, Lennerts, Schmitz, Stölzle, & Uebernickel, 2016; Pfeil, 2016; Rauch, 2019). Large hotel chains also pursue this goal. In doing so, they focus on growth and mergers, whereby synergy effects can be used and higher efficiency can be achieved (Maurer, 2015). SMEs, however, can develop a USP by sharpening their profile and consistently aligning their range of services with their central target groups (Gardini, 2020).

One of the greatest challenges of the 21st century is climate change. This has a major impact on tourism demand (Pröbstl-Haider, Lund-Durlacher, Olefs, Damm, & Stolba, 2021).

On this ground, both government measures to reduce CO₂ emissions and changed private preferences are leading to a change in booking behaviour. This is particularly important for the hotel industry. According to Gössling et al. (2021), a significant proportion of tourism-related greenhouse gas emissions is attributable to accommodation (Gössling, Lund-Durlacher, Anton-schmidt, Peters, & Smeral, 2021). For this reason, particularly strong effects are to be expected there when it comes to reducing the societal as well as individual ecological footprint. The resulting consequences are discussed heterogeneously. In addition to negative effects, positive impulses are also expected from the new behaviour of consumers (Böhm, 2008; Pröbstl-Haider,

Haider, Wirth, & Beardmore, 2015). This suggests that accommodation businesses with a sustainable orientation can achieve a competitive advantage. For example, CO₂ neutrality could be used as a selling point. On the one hand, this requires that consumers consider the carbon footprint of a destination in their booking decision. Conversely, the willingness of consumers to accept an additional price for a sustainably designed hotel operation is required. Whether this is the case is clarified in this chapter.

2. THEORETICAL BACKGROUND

The aim of the research project described here is to determine, whether SMEs in the hotel industry can attract and retain overnight guests better than conventionally positioned providers through CO₂ neutrality. Making business operations climate-neutral is a serious intervention in entrepreneurial thinking and action. It is therefore of particular importance to provide the management of small and medium-sized enterprises with an empirically verified basis for decision-making, as in SMEs, decisions are often not made rationally. Moreover, the business management expertise of managers who have come into function, not infrequently for family reasons, is not commensurate with their position (Enz, 2019). Nevertheless, there is a consensus that SMEs are the basis of a stable and successful market economy (Bondareva & Zatrochová, 2014; Dobošová, Hupková, Beňuš, Mihálová, & Synetska, 2020).

3. DEFINITION OF SMES

Even if there is agreement today on the importance of SMEs for an economy, the definition of this term is still the subject of much debate. As early as 1991, Kosmider identified over 200 approaches to describing SMEs (Kosmider, 1991). This multitude results from the multifaceted nature of the companies to be defined. Thus, the spectrum ranges from the Ich-AG (Kinne, 2020) to globally operating hidden champions (Röhl & Engels, 2021). Therefore, the idea of a universally valid definition can be considered discarded today. Instead, the pragmatic approach has prevailed, according to which an appropriate definition is made in each individual case (Becker & Ulrich, 2011; Enz & Škodová Parmová, 2020). Qualitative, as well as quantitative criteria, are considered (Botzkowski, 2017). This paper defines a company as an SME if it meets the criteria set by the European Union. Accordingly, a company is classified as an SME, if it employs a maximum of 250 people and its annual turnover does not exceed the limit of 50 million euros (Enz, 2020; Enz & Škodová Parmová, 2020).

4. DEFINITION OF SUSTAINABLE HOTEL OPERATION

Today, the term ‘sustainability’ is an integral part of the vocabulary of business administration (Biermann & Erne, 2020). In the public perception, sustainable thinking is equated with environmental protection and social conscience (Dämon, 2016; Schareika, 2019). This perception dates back to the Brundtland Report published in 1987. There, guiding principles for sustainable development as we understand it today were formulated for the first time (Krause, 2021). This represents a concretization of the demands for managing global growth made in 1972 by Meadows et al. in the Club of Rome’s report on the state of humanity (Meadows, Meadows, & Randers, 2000).

However, as Ott (2020) points out, many definitions exist for the term sustainability (Ott, 2020). Sustainable thinking in management is not automatically a commitment to a better world but follows purely economic considerations. For example, Landesbank Baden-Württemberg (2021)

points out that sustainability can be a competitive advantage that allows enforcing higher margins. Furthermore, the state bank emphasizes that sustainable management does not necessarily lead to poorer returns (Landesbank Baden-Württemberg, 2021). In this context, Drucker (2021) points out that lasting competitiveness and lasting profitability are key sustainability goals from a business perspective (Drucker, 2021). However, there is no contradiction behind this; rather, a social maturation process emerges, as outlined by Maslow in the development of his pyramid of needs in the mid-20th century (Rother, 2021). While rich economies can afford to worry about animal welfare and environmental protection, in developing countries providing for the population is at the top of the agenda.

Governments have an advantage here: they are unrivalled in their territory. The situation is different with private-sector companies. They may compete with less demanding social competitors or have to serve consumers who are not willing to purchase products and services more expensively for higher moral standards. According to Krause (2021), companies can therefore only pursue social and ecological aspects of the social community that supports this and if an appropriate market environment is created (Krause, 2021).

For this research, the term ‘sustainability’ is used in the sense of a common definition. The authors understand sustainable action as measures that contribute to bringing the economic activity into harmony with the interests of humans, animals, and nature and are thus suitable for reducing the ecological footprint of a hotel. It is therefore about concepts that go beyond economics and also take ecology and social issues into account (InfraCert GmbH Institut für Nachhaltige Entwicklung in der Hotellerie, 2020).

From the perspective of sustainability, energy consumption and the associated CO₂ emissions as well as water consumption and waste generation are of decisive importance in hotel operations (Smola, 2021). Furthermore, purchasing behaviour, regionality, mobility and dealing with cultural heritage play an important role (InfraCert GmbH Institut für Nachhaltige Entwicklung in der Hotellerie, 2020). Since a large part of the other aspects is considered when preparing a carbon footprint at the company level, this paper focuses on this aspect. In this prioritization, the authors also consider that CO₂ emissions are a delineated issue that is easy for consumers to understand.

5. REVIEW OF THE IMPORTANCE OF CO₂ EMISSIONS FOR SMALL AND MEDIUM-SIZED HOTELS

The debate about climate change and its consequences has intensified noticeably in recent years. At the same time, calls for more effective climate protection are growing louder. Klein et al. (2020) attribute this to the fact that the consequences of climate change are now also being openly felt in Central Europe (Klein, Schwalb, Ruhbaum, Fricke, & Grotewold, 2020). However, Poushter & Huang (2019) find that the expression of fear of climate change is strongly influenced by the individual political worldview. Thus, supporters of bourgeois parties are far less concerned about climate change than people who feel they belong to the left spectrum (Poushter & Huang, 2019). Against this background, Schaller & Carius (2019), in agreement with Lockwood (2018), see the danger that climate protection could become an issue of the elites, while large parts of the population get the feeling that only further expenses are to be shifted onto them (Lockwood, 2018; Schaller & Carius, 2019). Against this backdrop, a market review is undertaken. This is intended to show the current state of knowledge of the importance of sustainability for hoteliers and overnight guests.

6. SUSTAINABILITY IN THE ACCOMMODATION SECTOR

Both holidaymakers and business travellers are now more aware of climate change and the associated sustainable thinking. They are increasingly paying attention to or demanding compliance with environmental standards (Meier, 2021; Smola, 2021). This has led to the fact that hosts can no longer avoid the topic of sustainability. Therefore, the aspect of ecology is currently relevant for product marketing in the hotel industry (Škodová Parmová, Dvořáková Líšková, Kain, & Korousová, 2017).

6.1. Hotel groups in dealing with sustainability goals

As a result, national and international hotel groups have already positioned themselves. They already have extensive experience with socially critical issues. For example, extensive compliance obligations are part of everyday life for groups, especially for listed companies (Schockenhoff, Roßkopf, & Arnold, 2021). High-profile compliance with these regulations has now emerged as an effective marketing tool (Gilbert, 2020). This is because, as Kehl (2015) agrees with Gaul (2001), ethical behaviour can contribute enormously to corporate success (Gaul, 2001; Kehl, 2015). According to Gilbert (2020), with neutral certification and appropriate customer communication, this can be developed towards a differentiation advantage in Porter's sense (Gilbert, 2020; Porter, 2009). Building on these experiences, hotel chains now are openly committing to general, often international standards of sustainability. It is not uncommon for this to extend to the publication of sustainability reports. For example, Steigenberger Hotels AG is committed to sustainability as part of a corporate social responsibility strategy. The central goal is to make the hotel group climate-neutral by the year 2050. This is to be achieved through resource-saving building standards as well as through activities in the procurement of food and beverages (Steigenberger Hotels AG, 2021). The sustainability goals of Maritim Hotels are formulated similarly. These focus on energy consumption, sustainable purchasing and waste separation (Maritim Hotelgesellschaft mbH, 2021). ACCOR SA, Six Continents Hotels Inc. and Marriott International Inc. are also committed to sustainability in these areas (Accor SA; Marriott International; Six Continents Hotels, 2021). All chains also consider and claim ethical treatment of staff as a sustainability issue. Even if there are brand-specific differences in the focus of the sustainability goals and the way of dealing with them, all hotel chains have one thing in common: they want to promote sustainability where it also offers a business benefit in monetary terms or an advantage in recruitment. This phenomenon can be seen in other industries as well. It can contribute to the seriousness of the efforts being questioned and the associated measures being reduced to a marketing tool such as greenwashing (Groneweg & Reckordt, 2020; Rauterberg, 2020).

6.2. SMEs in dealing with sustainability goals

In contrast to the manageable number of hotel groups, the hotel industry in Germany is divided into small parts. The Federal Statistical Office (2020) recorded 12,343 hotels as well as 6,802 bed and breakfasts, and 4,940 guest houses. In addition, there are youth hostels, recreation and holiday homes, holiday flats and private room rentals (Graefe, 2020b). The market is similarly atomistic in other European countries. In 2019, for example, a total of 9,383 accommodation establishments were registered in the Czech Republic (Graefe, 2020a), while in Austria there were approximately 68,400 (Mohr, 2021).

Because of the large number of market participants at the SME level, the authors of this paper decided to conduct the qualitative review based on German hotel associations. Synonymous to the term ‘hotel association’, the term ‘hotel cooperation’ can also be found in the literature. These are voluntary associations of economically and legally independent hotel businesses, which often call themselves private hotels. The history of these alliances partly goes back to the 1970s. Originally, they were advertising associations or purchasing associations (Flair Hotels e. V., 2021b). Today, the spectrum also includes aspects of management consulting as well as training measures and further education offers for owners and employees (AKZENT Hotels e.V., 2021a). In Germany, 60% of the hotels are currently operated as private establishments that do not belong to a chain. Approximately 30% of them belong to hotel cooperations (HSI Hotel Suppliers Index GmbH, 2021).

Within the framework of qualitative content analysis, the central websites of the hotel cooperations were examined to see whether they indicate that the affiliated accommodation establishments show sustainable commitment in the sense of this research work. For this purpose, the website was searched for relevant content. To find sub-pages that might not be recognizable, an additional search was carried out using Google. The hotel cooperation was queried with the term ‘sustainability’. The results were then evaluated. If it was recognizable that this was a general goal of the hotel association, the category was evaluated as fulfilled — independent of the question of how many of the cooperation hotels implement this aspect.

Table 1. Which modules are used centrally in a comprehensible way?

	Climate neutrality	Energy	Sustainable purchasing	Disposal	Water	Ethical handling of personnel	External certification	Further measures	E-charging	Points achieved
AKZENT HOTELS	✓	×	×	×	×	×	✓	×	×	2
Best Western Hotels Germany	✓	✓	×	×	✓	✓	×	✓	✓	6
CPH Hotel Marketing GmbH	×	×	×	×	×	×	×	×	×	0
Flair Hotels e.V.	✓	×	✓	×	×	×	✓	✓	×	4
Landidyll Hotels e.V.	×	×	✓	×	×	×	×	×	×	1
PrivateCityHotels	×	×	×	×	×	×	×	×	×	0
Relais & Châteaux Hotels Germany	×	×	×	×	×	×	×	×	×	0
Ringhotels Germany	×	×	✓	×	×	×	×	×	×	1
Romantic hotels	×	×	✓	×	×	×	✓	×	×	2
Wellness Hotels Germany	×	×	×	×	×	×	×	×	×	0

Source: Authors

The evaluation presented in Table 1: Which modules are used centrally in a comprehensible way? shows that the hotel cooperations currently deal with the challenge of sustainability in very different ways. As many as four out of ten alliances have not defined the topic as a central component of their work. In the case of CPH hotels, which are strongly oriented toward business travellers, this can still be explained by the fact that corporate buyers are in many cases concerned with keeping the costs of business trips as low as possible (Schulz, 2021). The interest in aspects besides the room rate can therefore be classified as low among these buyers. However, it

is striking that with PrivateCityHotels, Relais & Châteaux Hotels Germany and Wellness Hotels Germany, three providers of the sophisticated accommodation segment have not yet listed any central measures for sustainability. The highest score of six points is achieved by ‘Best Western Hotels Germany’ — an association of independent German hotels that is, however, integrated into international hotel cooperation.

At the same time, the review makes clear that numerous SME hotels are dealing with the topic of sustainability without having already found a clear line. CPH Hotelmarketing GmbH, for example, has published a brochure with best practice examples — without defining concrete measures or formulating guidelines (Gratenau, 2021). In contrast, the AKZENT cooperation has positioned itself. It allows guests to make a hotel stay CO₂-neutral for an extra charge. In addition, member companies are encouraged to be certified in terms of sustainable operations. However, it is not comprehensible how many bookings are actually processed in a CO₂-neutral manner — and how the additional costs are made up. The criteria considered within the framework of hotel certification are also not comprehensible. Aspects such as the use of regionally produced food or attractive working conditions are not apparent to the guest — although they are part of the philosophy of the cooperation hotels (AKZENT Hotels e.V., 2021b). Only Flair Hotels communicate stringently here. Everything that contributes to distinguishing the culinary offer as high-quality and regional from the competition is also included in the sustainability balance. However, energy consumption and the treatment of staff are not the subjects of the association’s communication (Flair Hotels e. V., 2021a). This may be because these are primarily operational topics — which, from the hoteliers’ point of view, are not relevant to the booking decision of the guests.

As the qualitative market analysis has shown, hotel chains already deal with the topic of sustainability consistently and internally. Here, the hierarchical directive relationships within the groups prove to be advantageous, as all brands and houses belonging to a hotel group can be committed to implementation (Yalcin, 2020). By contrast, it could be a disadvantage that groups can only take measures that can also be reliably implemented in all branches.

The private hotels do not yet use the topic ‘sustainability’ to a large extent at all or hardly as a sales argument in customer communication. This contradicts the position of the German Hotel and Restaurant Association. With Viabono, this association has created its umbrella brand for the marketing of sustainable hotels. In addition, the German Federal Association of Gastronomy offers its certification and consulting system (Meier, 2021). In addition, two new Pan-European hotel cooperations have emerged, Greenline Hotels (GreenLine Hotels GmbH, 2021) and Biohotels (be-oh Marketing GmbH, 2021), which have declared sustainable hotel management to be a central feature.

In summary, it can be stated that almost all SME hotels today deal with sustainability issues. However, this is largely done unconsciously within the framework of hotel management. Cost pressure ensures that measures are taken to save water or detergents. Self-produced food is used to deliver special quality. Photovoltaic systems and charging columns are set up because there are extensive subsidies available. Holistic thinking that bundles these necessities into a sustainability concept to create a resilient sales argument, in contrast, is still largely desideratum. This can be attributed to the personal characteristics of SME owners. They have a fundamentally different willingness to change than is found in corporations (Stejskalová, Štrach, & Rolinek, 2018).

Since private hotels can optimally exploit individual circumstances, there is the potential to develop sustainable thinking into a competitive advantage over hotel chains — which, for their part, want to deal with the topic as efficiently as possible from a business point of view. To generate a competitive advantage, however, it is necessary that hotel guests also attach importance to the topic of sustainability and are willing to pay for it.

7. DATA AND METHODS

This paper aims to clarify whether sustainable action can be developed into a competitive advantage for SMEs in the hotel sector. For this purpose, a large-scale survey of German consumers was conducted in August 2021. A total of 223 respondents took part in the survey. The survey was conducted online using the SurveyMonkey survey software. To achieve a good participation rate, the survey focuses only on the module ‘CO emissions’. Building on Woratschek (2021) and Kettl et al. (2021), focusing on one characteristic avoids overwhelming the participants (Kettl, Schäfer, & Buchauer, 2021; Woratschek, 2021). Moreover, CO₂ emissions are precisely a central tourism issue (Hennig, 2021). This is because the consequences of tourism on climate change are of concern to many holidaymakers (Müller, 2020). In particular, the question arises how the currently particularly climate-damaging travel types ‘cruise’ (Neumeier, 2019; Rieger, 2021) and ‘skiing holiday’ (Bayerischer Rundfunk, 2020; WWF Germany, 2013) are perceived by consumers.

According to Kettler (2021), rational arguments have lost much of their effectiveness in sales. In contrast, empathy, appreciation, and understanding of the customer have become key success factors (Kettler, 2021). In contrast, purchasing decisions are strongly influenced by personal characteristics such as lifestyle, personality, and self-image of consumers. Especially concerning leisure behaviour, personal preferences are crucial (Walsh, Deseniss, & Kilian, 2019). Against this background, it needs to be clarified how important consumers currently consider CO₂ neutrality in travel accommodation. This results in the hypothesis to be tested:

H_A: The relevance of CO₂ emissions when deciding on accommodation has not increased in the last three years.

To identify the development of relevance, the respondents were asked how significant they currently consider CO₂ neutrality to be for their booking behaviour. At the same time, they were asked how important they considered this aspect to be for their booking behaviour three years ago. The evaluation could be made on a scale from ‘1’ (absolutely unimportant) to ‘6’ (crucial for booking). Compared to three years ago, the relevance of the CO₂ neutrality of the accommodation was rated on average 1.03 (95%-CI [0.87, 1.19]) points higher on the 6-point Likert scale (median 1, SD=1.22). This difference is significantly different from zero according to the paired t-test ($t(222)=12.656$, $p<.001$, $n=223$). All p-values in this article are Bonferro-ni-Holm-corrected for multiple testing. The effect size according to Cohen (1992) is $d=0.848$ (95%-CI[0.7, 1], $nboot=1000$) and can be considered strong. Therefore, the formulated hypothesis H_A must be rejected. The influence of the carbon footprint of overnight accommodation on the booking decision has increased significantly over the last three years.

Whether this is a relevant change for the hotel industry cannot yet be deduced from this. Therefore, in a second step, the respondents are asked how much they agree with the statement “The CO₂ balance of a holiday will be decisive for my travel decision in the future”. Here, too, a

6-point Likert scale was used for evaluation. The distribution of responses is shown in Figure 1. The analysis shows that 70.4% disagree with the statement.

In addition to whether an issue is considered in the purchasing decision, there is a second important issue for the hospitality industry. This is the willingness to pay for a certain service. For this reason, the willingness to pay more for CO₂ neutrality in the future is also queried. The willingness to pay more for CO₂-neutral accommodation was surveyed on a scale from 1 (not at all willing) over 5% increments up to 11 (as much as necessary to achieve CO₂-neutrality).

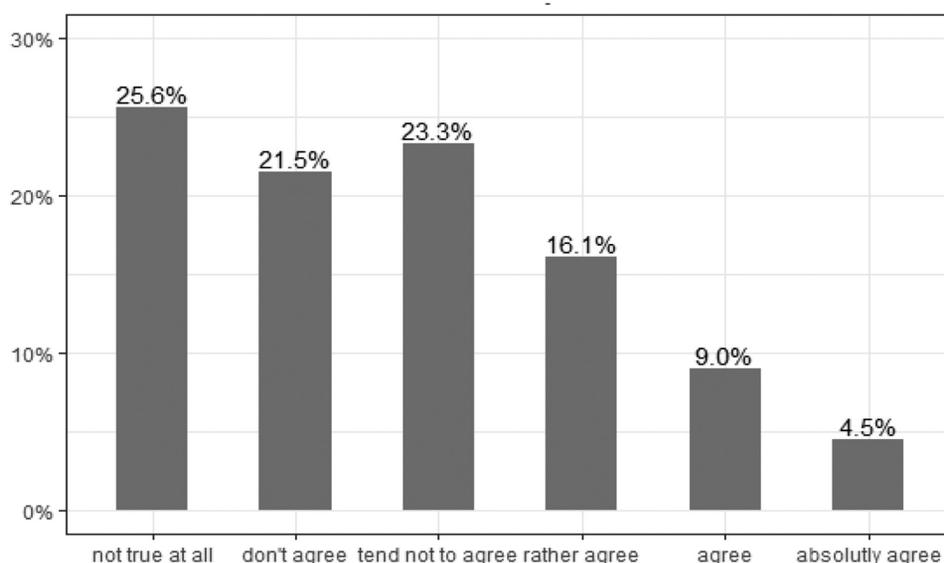


Figure 1. Distribution of agreement: Statement “CO₂ balance will be decisive for my travel decision”

Source: Own research

The result is shown in Figure 2. It becomes clear that 18.47% of the test persons are not willing to pay a surcharge for CO₂ neutrality. A further 40.54% are prepared to accept a surcharge of up to 15% compared to the current price level. However, almost half of the respondents (40.99%) are also prepared to accept a higher surcharge. A total of 6.76% of the respondents state that they are prepared to pay as much extra as is necessary to achieve CO₂ neutrality.

However, since 40.99% of the respondents state that they would also pay more than 15% for more climate protection, the result is analysed further. This involves the clarification of the hypothesis

H_B: There is no correlation between the strength of the desire for a CO₂-neutral accommodation option and the willingness to accept a higher surcharge for it.

Due to fewer responses at the highest level of the desired variable and strong similarity of responses at the lowest levels in terms of willingness to pay, the desired variable was grouped as follows:

- 1+2= "unimportant",
- 3= "rather unimportant",
- 4= "rather important",
- 5+6= "important".

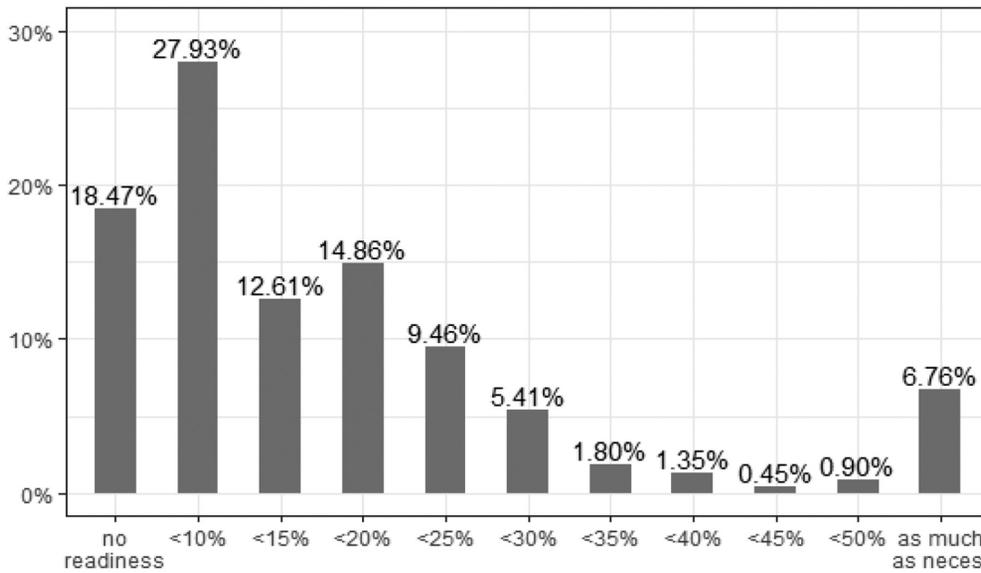
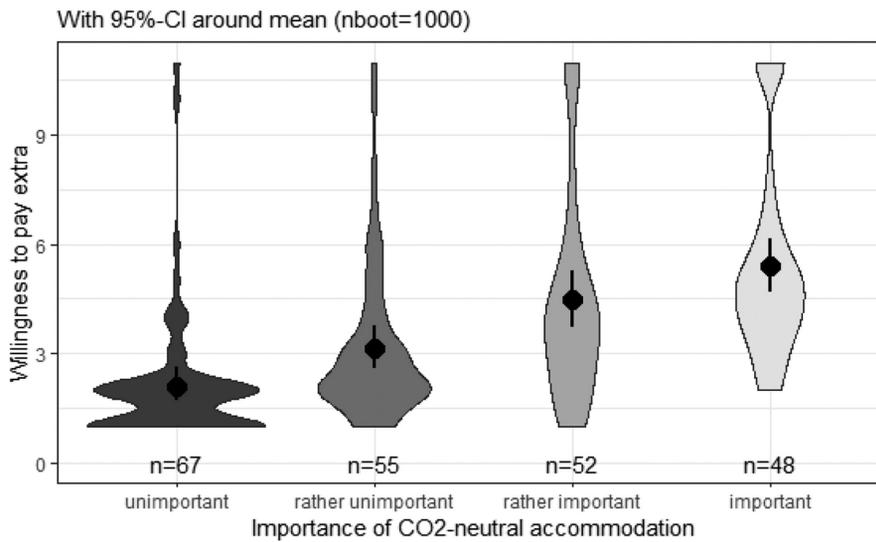


Figure 2. How much of a surcharge would be acceptable to achieve CO₂ neutrality?

Source: Own research



	MW	Sd	M	N
Unimportant	2.09	1.82	2	67
Rather unimportant	3.13	2.13	2	55
Rather important	4.48	2.93	4	52
important	5.4	2.68	5	45

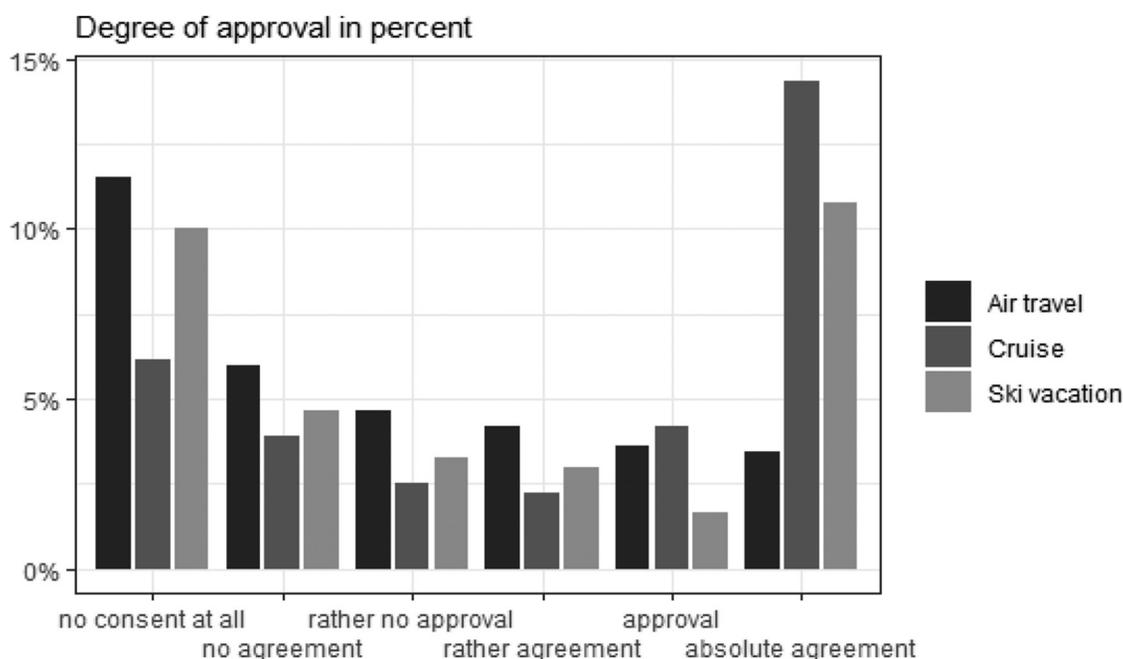
Figure 3. Desire for CO₂ neutrality and willingness to pay extra

Source: Own research

A significant linear trend was demonstrated by planned contrasts via Yuen's test with Welch-Satterthwaite correction ($t(169.993)=7.898$, $p<.001$, $r_{\text{contrast}}=0.4717$), with a greater desire for CO₂-neutral accommodation also increasing willingness to pay extra.

Thus, the formulated hypothesis H_B must be rejected. With the strength of the desire for CO₂-neutral accommodation, the willingness to pay more for this property also increases.

To verify the general willingness to make a climate-oriented change in travel behaviour, three further questions are asked. These are intended to determine the willingness to forego cruises, tourist air travel, or skiing holidays in the future due to the poor CO₂ balance. The level of agreement was again assessed using a 6-point Likert scale. As can be seen in Figure 4, this ranged from ‘no agreement at all (1) to ‘I agree 100%’ (6).



	Cruise	Cumulative approval	Air travel	Cumulative approve	Ski vacation	Cumulative approve
No consent at all	18.39		34.53		30.04	
No consent	11.66		17.94		13.90	
Rather no consent	7.62	37.65	13.90	66.37	9.87	53.81
Rather agreement	6.73		12.56		8.97	
Approval	12.57		10.76		4.93	
Absolut agreement	43.05	62.35	10.31	33.63	32.29	46.19

Figure 4. Willingness to forgo certain types of travel to protect the environment

Source: Own research

The descriptive representation in Figure 4 shows that the willingness to forego different forms of travel varies. The values on which the diagram is based are shown in detail in Table 3.

A closer look at the figures shows that in the cruise sector alone, a majority (62.35%) would consider giving up certain types of travel to protect the climate. Concerning skiing holidays, 46.19% agree with a possible waiver. For air travel, the approval rating even drops to 33.63%.

8. RESULTS

This paper deals with the question of whether small and medium-sized hotels can achieve a competitive advantage through sustainable thinking and action. This could contribute to achieving a better occupancy rate, achieving higher margins, and thus ultimately maintaining the company. Within the scope of an analysis of the German hotel market, it could be determined that the industry has already become aware of the topic. In particular, large hotel chains have already taken measures to relieve their customers of the concern that travel could be unjustifiable for ecological reasons. Furthermore, it has been shown that SMEs also already are active in certain areas.

To clarify whether these measures are in line with increasing demand, a large-scale survey of private hotel guests was carried out. The aim was to clarify whether climate protection is a relevant product feature for customers, or whether the development is merely due to the general spirit of the times. As an example, the importance of CO₂ neutrality in the selection of tourist accommodation was examined.

The analysis clearly shows that tourists have developed a stronger awareness of climate protection within the last three years. Thus, a significant increase in the importance of CO₂ neutrality with the choice of accommodation could be demonstrated. At the same time, however, 70.4% of the respondents state that the CO₂ balance is not a decisive factor for future travel planning. At the same time, the majority of respondents tolerate a price surcharge of a maximum of 15% for reasons of climate protection (59.01%). Nor is there a strong willingness to forego air travel (33.63%) or skiing holidays (46.19%) in the future for environmental reasons. Only the acceptance of cruises is estimated to be lower in the future. In this case, 62.35% of respondents said they would be willing to forego cruises in the future for climate reasons.

The survey only provides a mood picture. How the actual booking behaviour would be, cannot be clarified in this work. For example, the share of cruises in the total travel market is currently 2.85% (Herrmann & Wetzel, 2018). At the same time, the share of German skiers in the total population is currently 17.6% at 14.61 million (Vanat, 2020). Against this background, the higher willingness to forego cruises and ski holidays compared to air travel could be influenced by the fact that a high proportion of the subjects want to avoid taking any of these trips for other reasons and are now legitimizing this with consideration for climate change.

9. CONCLUSION

This study shows that people have become aware of climate protection. However, there is currently no significant willingness to restrict individual travel behaviour for this reason.

At the same time, this paper makes clear that 81.53% of the respondents are willing to accept a surcharge for the CO₂ neutrality of their chosen accommodation provider. While 40.54% of the respondents would pay a maximum surcharge of 15%, 40.99% stated that they would also agree to a significantly larger price increase. This means that the issue is developing into a general quality feature, as service quality already is today, for example. Hotels that want to generate a lasting competitive advantage must meet and exceed customer expectations in such business areas (Škodová Parmová, Dvořáková Líšková, & Kain, 2018).

However, a gap exists between morality and behaviour. According to Lange (2019), knowledge of one's misconduct experimentally provides a temporarily reduced self-image. This induces a need for moral remediation, 'moral cleansing' (Gilchrist & Schnall, 2018). As O'Connor et al. (2020) agree with Lange, this could lead to the theoretical willingness to accept higher prices identified here being lower in reality (Lange, 2019, 98 ff; O'Connor, Effron, & Lucas, 2020). In addition, climate neutrality generally has different values for different target groups. For example, Novacka et al. (2019) show that sustainable action is more in demand by tourists from Western countries than by travellers from CE countries (Novacka, Pícha, Navratil, Topaloglu, & Švec, 2019).

This paper thus contributes to explaining the actions of the large hotel groups. Currently, larger investments in climate protection in tourism cannot be justified with additional revenues that can be realized in the short term. However, where measures that make economic sense anyway can also be attributed to climate protection, they provide an additional sales argument. This helps hotel guests with little interest in CO₂ emissions to justify their holidays to themselves and society. However, a target group seriously interested in improving the CO₂ balance runs the risk of being accused of greenwashing. In addition, Navratil et al. (2019) were able to prove that not all measures to reduce CO₂ emissions are equally accepted by hotel guests (Navratil et al., 2019).

At the same time, the present work confirms the assumption that climate protection and CO₂ balance are gaining importance among holidaymakers. Already within the last three years, significant growth could be identified. Likewise, it could be proven that with the growing desire for CO₂ neutrality, the willingness to pay a higher accommodation price for this also increases. Against this background, this paper is an indication that SMEs can develop a future competitive advantage with individual, credible measures to reduce their corporate ecological footprint. On the one hand, it results from the additional sales argument that arises from this. On the other hand, it results from the possibility of being able to enforce a higher margin in target groups with an affinity for sustainability.

Concerning moral cleansing, the present study also makes it clear that further research is needed for a detailed assessment of the economic significance of climate protection. In particular, the actual willingness to accept higher accommodation costs for climate protection would be an important aspect. In general, the willingness to pay is higher for purchase inquiries than for price inquiries. In addition, a binding design of price and purchase inquiries has a significant effect on the expressed maximum willingness to pay (Müller, Voigt, & Erichson, 2009). Here, a binding purchase query or the empirical evaluation of real purchase decisions could verify and deepen the developments identified in this research. This could provide accommodation operators in the SME segment with a basis for investment decisions. At the same time, it could clarify the question whether CO₂ neutrality in the hotel industry should more sensibly be offered as an optional feature — or can best be represented by general pricing. In this context, the present work also provides the incentive to develop a methodology for implementing sustainable choices in the management of small and medium-sized hotels (Stejskalová et al., 2018). This is even more significant as accommodation businesses operate in a turbulent market environment. This is because businesses and customer needs are changing at an increasing rate. If SMEs want to generate or maintain a competitive advantage, they need to constantly innovate (Jindřich, Vrchota, & Rolínek, 2018).

REFERENCES

- Accor SA. The Planet 21 program. Retrieved from <https://novotel.accor.com/de/discovering-novotel-hotel/earthcheck.shtml>
- AKZENT Hotels e.V. (2021a). Internal training academy. Retrieved from <https://www.hotelkooperation.de/interne-weiterbildungsakademie/>
- AKZENT Hotels e.V. (2021b). Offset your stay for only 1€ per person and night! How CO₂OL is that? Retrieved from <https://www.akzent.de/nachhaltigkeit>
- Altendorfer, A. (2020). Bayerische Versorgungskammer invests in hotels again. Retrieved from <https://www.institutional-money.com/news/vermischtes/headline/bayerische-versorgungskammer-investiert-wieder-in-hotels-201521/>
- Augsbach, G. (2020). *Tourism and sustainability: the sustainability of tourism in the 21st century. Essentials*. Wiesbaden: Springer Fachmedien Wiesbaden GmbH.
- Bayerischer Rundfunk (2020). Is it still allowed to ski? Retrieved from <https://www.br.de/nachrichten/bayern/faktenfuchs-wie-klimaschaedlich-ist-eigentlich-skifahren,RC0NgkF>
- Becker, W., & Ulrich, P. (2011). *Middle class research: concepts, relevance and consequences. Mittelstand and small business research*. Stuttgart: Kohlhammer.
- Be-oh Marketing GmbH (2021). BIO HOTELS - more than a hotel: The original for your sustainable hotel stay. Retrieved from <https://www.biohotels.info/>
- Biermann, B., & Erne, R. (2020). *Sustainable product management: How to integrate sustainability aspects into product management*. Wiesbaden: Springer Gabler.
- Böhm, R. (2008). *Hot air: irritant climate change; facts - fears - business*. An analysis. Vienna: Ed. Va Bene. Retrieved from http://deposit.d-nb.de/cgi-bin/dokserv?id=3039069&prov=M&dok_var=1&dok_ext=htm
- Bohnenstengel, K., Heyne, M., Mering, P. v., Ölschläger, M., Wolf, R., & Zarse, A. (2011). *The world as a guest in Hamburg: A ten-year strategy for Hamburg tourism*. Hamburg: Hamburg Chamber of Commerce.
- Bondareva, I., & Zatrochová, M. (2014). Financial Support for the Development of SMEs in the Slovak Republic. *Procedia - Social and Behavioral Sciences*, 110, 541-548. <https://doi.org/10.1016/j.sbspro.2013.12.898>
- Botzkowski, T. (2017). *Digital transformation of business models in SMEs: Theory, empirics and recommendations for action. Unternehmensführung & Controlling*. Wiesbaden: Springer Gabler. Retrieved from <http://dx.doi.org/10.1007/978-3-658-20333-7>
- Federal Ministry for Economic Affairs and Energy (2020). Tourism: Tourism Policy. Retrieved from <https://www.bmwi.de/Redaktion/DE/Dossier/tourismus.html>
- Demon, K. (2016). Sustainable companies are more successful: sustainability. *WirtschaftsWoche*. (27). Retrieved from <https://www.wiwo.de/erfolg/management/nachhaltigkeit-nachhaltige-unternehmen-sind-erfolgreicher/13826034.html>
- Dobošová, L., Hupková, D., Beňuš, O., Mihálová, V., & Synetska, Y. (2020). Management of Receivables and their Monitoring in the Small and Medium Sized Farms in the Slovak Republic. In Faculty of Economics, University of South Bohemia in České Budějovice (Ed.), *Proceedings of the 13th International Scientific Conference INPROFORUM: Innovations, Enterprises, Regions and Management* (pp. 20-27). České Budějovice: Faculty of Economics, University of South Bohemia in České Budějovice.
- Druker, K. (2021). *Managing economic crises in German professional football. Research*. Wiesbaden: Springer Fachmedien Wiesbaden.
- Enz, C. (2019). Special requirements for corporate communications in geographically defined markets using the example of the sale of construction financing in rural areas. In Bevanda,

- V. (Ed.): *International Scientific Conference ERAZ - Knowledge Based Sustainable Development, Book of Abstracts: Part of ERAZ Conference Collection* (p. 9). Association of Economists and Managers of the Balkans, Belgrade, Serbia. Retrieved from https://eraz-conference.com/wp-content/uploads/2020/04/ERAZ_BoA-WEB.pdf
- Enz, C. (2020). The Decision Cause Matrix - A tool to increase efficiency in the corporate communications of SMEs with a geographically limited business area. In Faculty of Economics, University of South Bohemia in České Budějovice (Ed.), *Proceedings of the 13th International Scientific Conference INPROFORUM: Innovations, Enterprises, Regions and Management* (pp. 28-34). České Budějovice: Faculty of Economics, University of South Bohemia in České Budějovice.
- Enz, C., & Škodová Parmová, D. (2020). Significance of digital communication channels for tourism providers in holiday regions. *DEUROPE - The central European Journal of regional development and tourism*, 12(2), 140-165.
- Flair Hotels e. V. (2021a). Sustainability in the hotel: Already five Flair Hotels are certified with the GreenSign. The seal certifies a special sustainability in the hotel. Retrieved from <https://www.flairhotel.com/nachhaltigkeit-im-hotel-2/>
- Flair Hotels e. V. (2021b). What is a hotel cooperation? Retrieved from <https://www.flairhotel.com/rund-um-flair>
- Gardini, M. A. (2020). *Fundamentals of the hotel industry and hotel management: hotel industry - hotel operations - hotel real estate* (3rd revised and updated ed.). Munich: Oldenbourg/De Gruyter. Retrieved from http://www.degruyter.com/search?f_0=isbnissn&q_0=9783486780017&searchTitles=true
- Gaul, R. (2001). The sum of cultures: On corporate citizenship in the age of globalization. *BusinessWeek*. (11), 30.
- Gilbert, D. U. (2020). Social accountability 8000. in T. Beschorner, A. Brink, B. Hollstein, M. C. Hübscher, & O. Schumann (Eds.), *Business and corporate ethics* (pp. 777-798). Wiesbaden: Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-16205-4_63
- Gilchrist, P. T., & Schnall, S. (2018). The paradox of moral cleansing: When physical cleansing leads to increased contamination concerns. *Journal of Behavior Therapy and Experimental Psychiatry*, 61, 38-44. <https://doi.org/10.1016/j.jbtep.2018.06.002>
- Gössling, S., Lund-Durlacher, D., Antonschmidt, H., Peters, M., & Smeral, E. (2021). Accommodation. In U. Pröbstl, D. Lund-Durlacher, & M. Olefs (Eds.), *OPEN. Tourism and climate change* (pp. 75-92). Berlin: Springer Spektrum.
- Graefe, L. (2020a). *Number of accommodation establishments in the Czech Republic from 2009 to 2019*. Luxembourg: Statista GmbH.
- Graefe, L. (2020b). *Domestic trade, hotels and restaurants, tourism: July 2020*. slide 2.1. Wiesbaden: Statista GmbH.
- Gratenau, H. (2021). *Creating experiences: A collection of ideas for the 2021 relaunch*. Shaping the future together with suppliers and partners and offering guests something authentic. Hamburg: CPH Hotels.
- GreenLine Hotels GmbH (2021). Holidays with a clear conscience. Retrieved from <https://www.greenline-hotels.com/>
- Groneweg, M., & Reckordt, M. (2020). Between serious efforts and greenwashing. In A. Brunengräber & T. Haas (Eds.), *Baustelle Elektromobilität: Social science perspectives on the transformation of (car) mobility* (pp. 255-278). Bielefeld: transcript Verlag. <https://doi.org/10.14361/9783839451656-012>
- Hennig, A. (2021). *Nachhaltige Hotellerie: Entwicklung eines Hotelkonzepts mit Nachhaltigkeitsanspruch für ein zukunftsorientiertes Gastgewerbe auf der Insel Rügen*

- (Bachelor-Thesis). Bremen University of Applied Sciences, Bremen. Retrieved from <https://media.suub.uni-bremen.de/bitstream/elib/4838/6/Bachelor-Thesis%20Nachhaltige%20Hotellerie.pdf>
- Herrmann, H.-P., & Wetzel, P. (2018). Is the current cruise boom overestimated? In H.-P. Herrmann & P. Wetzel (Eds.), *Wanderlust and wanderlust - forays into tourism psychology* (pp. 139-145). Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-56502-5_26
- Hoffmann, C., Lennerts, S., Schmitz, C., Stölzle, W., & Uebernicket, F. (Eds.) (2016). *Business innovation: The St. Gallen model. Business Innovation University of St. Gallen, Business Innovation profile area*. Wiesbaden: Springer Gabler. Retrieved from <http://dx.doi.org/10.1007/978-3-658-07167-7>
- HSI Hotel Suppliers Index GmbH (2021). Hotel cooperations worldwide - cooperative hotel industry. Retrieved from <https://www.hotelier.de/lexikon/h/hotelkooperation>
- Hummel, R., Pfeiler, A., & Kleina, M. (2020). *iiQ-Check: Your individual assessment and quality manager*. Goslar: ConsultiiQ GmbH.
- InfraCert GmbH Institute for Sustainable Development in the Hotel Industry (2020). *Creating sustainable experiences and inspiring guests: so simple, so important, so Greensign!* Berlin.
- Jindřich, F., Vrchota, J., & Rolínek, L. (2018). Impact of the Importance of Innovation in SMES on a Systematic Approach to their Management. In European Academic Research Consortium (Chair), *Global summit on Applied Business, Economics, and Social Science (AES-18)*, Barcelona.
- Kehl, F. R. (2015). *Corporate Social Responsibility (CSR): social responsibility as a competitive advantage? Corporate Social Responsibility (CSR): social responsibility as a competitive advantage? An analysis of the concept of CSR and its relevance for corporate success* (Bachelor thesis). University of Applied Sciences Mittweida, Mittweida. Retrieved from https://monami.hs-mittweida.de/frontdoor/deliver/index/docId/5765/file/BA_KEHL.pdf
- Keim, M. (2020). Adam Smith. In H. Janusch (Ed.), *Trade policy and world trade in international political economy: an overview in the history of ideas* (pp. 13-23). Wiesbaden: Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-28656-9_2
- Kettl, J., Schäfer, K., & Buchauer, N. (2021). Privacy matters: what is the value of personal data protection in online current accounts? *HMD Praxis der Wirtschaftsinformatik*. Advance online publication. <https://doi.org/10.1365/s40702-021-00738-8>
- Kettler, J. (2021). How customers make their buying decisions. In J. Kettler (Ed.), *Edition sales excellence. Selling with empathy: Emotional intelligence as sales code - how to find the best approach to the customer* (pp. 31-47). Wiesbaden: Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-32419-3_4
- Kinne, P. (2020). Organizations shape our lives. In P. Kinne (Ed.), *Unleashing sustainability!* (pp. 105-110). Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-61021-3_11
- Klein, A., Schwalb, L., Ruhbaum, C., Fricke, C., & Grotewold, L. (2020). Climate change mitigation as a design task for civil society. *Social Movements Research Journal*, 33(1), 67-90. <https://doi.org/10.1515/fjsb-2020-0007>
- Kosmider, A. (1991). *Controlling in medium-sized enterprises: an investigation of the design and application of controlling in medium-sized industrial enterprises. Schriftenreihe der Wissenschaftlichen Hochschule für Unternehmensführung Koblenz Forschung: Vol. 5*. Stuttgart: Poeschel.

- Krause, J. (2021). Sustainable supply chain management in mechanical engineering - a holistic view with the Matryoshka model. In W. Wellbrock & D. Ludin (Eds.), *Sustainable consumption: best practices from science, corporate practice, society, administration and politics* (pp. 505-520). Wiesbaden: Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-33353-9_31
- Laesser, C., & Bieger, T. (2020). *Assessing the future of tourism in the wake of the relaxation of SARS-CoV-2 measures: Small steps towards a temporary new "normal"*. St. Gallen: University of St. Gallen.
- Landesbank Baden-Württemberg (2021). Why sustainable companies are more successful: Sustainability can also pay off economically for companies. Sustainability and investment, competitive advantage, margin. Retrieved from https://www.lbbw.de/artikelseite/maerkte-verstehen/warum-nachhaltige-unternehmen-erfolgreicher-sind_7az2nfam2_d.html
- Lange, L. (2019). *Shall want and shall not want: The gap between morality and behavior*. Wiesbaden: Springer Fachmedien Wiesbaden.
- Leschke, M. (2020). Development and collective action: Market economy, democracy, governance. In M. Leschke & N. Otter (Eds.), *Writings on economic governance. Growth, development, stability: governance problems and solutions* (pp. 1-20). Berlin: De Gruyter Oldenbourg. <https://doi.org/10.1515/9783110696745-001>
- Lockwood, M. (2018). Right-wing populism and the climate change agenda: exploring the linkages. *Environmental Politics*, 27(4), 712-732. <https://doi.org/10.1080/09644016.2018.1458411>
- Maritim Hotelgesellschaft mbH (2021). Sustainability in the company: All hotels take individual circumstances into account. Retrieved from <https://www.maritim.de/de/umweltschutz>
- Marriott International, I. Our Commitment to the Environment: Our Commitment. Retrieved from <https://www.marriott.de/hotels/hotel-information/details-1/hkgsi-sheraton-hong-kong-hotel-and-towers/>
- Mattes, A., Becker, L. S., & Neumann, F. (2017) *Tourism as an economic factor in Germany: Key figures of a high-turnover cross-sectional industry*. Report on results. Berlin: Federal Association of the German Tourism Industry (BTW).
- Maurer, P. (2015, December 17). Mergeritis is rampant among major hotel chains. *ImmobilienZeitung*. Retrieved from <https://www.immobilien-zeitung.de/134492/unter-grossen-hotelketten-grassiert-fusionitis>
- Mayer, M., & Stoll-Kleemann, S. (2020). Tourism and regional development inside and outside eastern German large protected areas. In S. Becker & M. Naumann (Eds.), *Regional development in eastern Germany: dynamics, perspectives and the contribution of human geography* (pp. 481-495). Berlin: Springer.
- Meadows, D. L., Meadows, D., & Randers, J. (2000). *The limits to growth: report of the Club of Rome on the state of humanity* (17th ed.). Stuttgart: Deutsche Verlags-Anstalt.
- Meier, M. (2021). Environment and sustainability. Retrieved from <https://www.dehoga-bundesverband.de/ueber-uns/umwelt-und-nachhaltigkeit/>
- Milanez-Schenk, K. (2013). *Tourism as an economic factor of South Africa* (Bachelor thesis). University of Applied Sciences Mittweida, Mittweida. Retrieved from <https://www.hk24.de/blueprint/servlet/resource/blob/1151490/889aa43a2c0ff0a69d03c629f93f9deb/welt-zugast-in-hamburg-10-jahres-strategie-data.pdf>
- Mohr, M. (2021). *Number of accommodation establishments in Austria from 2009/2010 to 2019/2020*. Vienna: Statistics Austria.
- Moser, M. (2011). *Die Bedeutung der Online-Bewertungsplattformen für die Hotellerie - Buchen, beschwören, weiterempfehlen - Verbraucherverhalten im Wandel: Mit Beispiel:*

- Seminarhotel Ammerhauser in Anthering* (Bachelor-Thesis). University of Applied Sciences Mittweida, Mittweida.
- Müller, H., Voigt, S., & Erichson, B. (2009). *Survey-based methods for price response functions: Willingness to pay or willingness to buy? FEM Working Paper No. 27, August 2009*. Magdeburg: Otto von Guericke University Magdeburg.
- Müller, M. (2020). Digital Tourism 2020. *The Public Company*, 65(8), r110-r111. <https://doi.org/10.9785/ag-2020-650809>
- Navratil, J., Picha, K., Buchecker, M., Martinat, S., Svec, R., Brezinova, M., & Knotek, J. (2019). Visitors' preferences of renewable energy options in "green" hotels. *Renewable Energy*, 138, 1065-1077. <https://doi.org/10.1016/j.renene.2019.02.043>
- Neumeier, F. (2019, November 26). Environmental and climate protection in cruising - a current overview. Retrieved from <https://www.cruisetricks.de/umwelt-und-klimaschutz-in-der-kreuzfahrt-ein-aktueller-ueberblick/>
- Novacka, L., Picha, K., Navratil, J., Topaloglu, C., & Švec, R. (2019). Adopting environmentally friendly mechanisms in the hotel industry: A perspective of hotel managers in Central and Eastern European countries. *International Journal of Contemporary Hospitality Management*, ahead-of-print(ahead-of-print), 2488-2508. <https://doi.org/10.1108/IJCHM-04-2018-0284>
- O'Connor, K., Effron, D. A., & Lucas, B. J. (2020). Moral cleansing as hypocrisy: When private acts of charity make you feel better than you deserve. *Journal of Personality and Social Psychology*, 119(3), 540-559. <https://doi.org/10.1037/pspa0000195>
- Ott, N. (2020). *Sustainability Benchmarks - Der Einfluss von Nachhaltigkeitsbewertungen auf das Management von Immobilienportfolios in der Schweiz* (Master-Thesis). University of Zurich UZH, Zurich. Retrieved from https://www.curem.uzh.ch/dam/jcr:ee3aff6f-2dc5-429f-89f4-bbf790ab5b23/Ott_Noemi_AbAr_Lg19-20.pdf
- Pfeil, S. (2016). *Value orientation and employer choice in changing generations* (Doctoral dissertation). Springer Fachmedien Wiesbaden GmbH.
- Porter, M. E. (2009). *Competitive strategy: methods for analyzing industries and competitors. Leadership Classics: Vol. 3*. Frankfurt am Main: Campus Verlag.
- Poushter, J., & Huang, C. (2019). *Climate Change Still Seen as the Top Global Threat, but Cyberattacks a Rising Concern: Worries about ISIS and North Korea persist, as fears about American power grow*. Washington: Pew Research Center.
- Pröbstl-Haider, U., Haider, W., Wirth, V., & Beardmore, B. (2015). Will climate change increase the attractiveness of summer destinations in the European Alps? A survey of German tourists. *Journal of Outdoor Recreation and Tourism*, 11(4), 44-57. <https://doi.org/10.1016/j.jort.2015.07.003>
- Pröbstl-Haider, U., Lund-Durlacher, D., Olefs, M., Damm, A., & Stolba, P. (2021). Introduction. In U. Pröbstl, D. Lund-Durlacher, & M. Olefs (Eds.), *OPEN. Tourism and climate change* (pp. 1-16). Berlin: Springer Spektrum.
- SMOKE, K. (2019). *Information grading and linkage in the group management report: an empirical analysis of risk reporting. Auditing and Accounting Studies*. Wiesbaden: Springer Gabler.
- Rauterberg, H. (2020). Greenwashing: the art of hypocrisy. In N. Sievers, U. Blumenreich, S. Dengel, & C. Wingert (Eds.), *Yearbook of cultural policy 2019/20: Theme: Culture. Power. Heimaten. Home as a cultural policy challenge* (pp. 153-158). transcript Verlag. <https://doi.org/10.14361/9783839444917-020>

- Rieger, D. (2021). Unsustainable for climate, environment and health: How the shipping industry makes profit at the expense of people and nature. Retrieved from <https://www.nabu.de/umwelt-und-ressourcen/verkehr/schifffahrt/kreuzschifffahrt/14069.html>
- Röhl, K.-H., & Engels, B. (2021). Mehr Kooperation von Start-ups und Mittelstand als Chance für Digitalisierung und Innovationen [More Cooperation Between Startups and SMEs as an Opportunity for Digital Transformation and Innovation]. *Wirtschaftsdienst*, 101(5), 381-386. <https://doi.org/10.1007/s10273-021-2922-5>
- Rother, J. (2021). No new normal without purpose. In U. Bihler & F. Müller (Eds.), *Modern reputation management: Good reputation as the key to success* (pp. 91-109). Wiesbaden: Springer Gabler.
- Schaller, S., & Carius, A. (2019). *Convenient Truths: Mapping climate agendas of right-wing populist parties in Europe*. Study. Berlin: Adelphi Consult GmbH.
- Schareika, N. (2019). Why more and more companies want to be “good”: Sustainability. *WirtschaftsWoche*. (2). Retrieved from <https://www.wiwo.de/erfolg/management/nachhaltigkeit-warum-immer-mehr-unternehmen-gut-sein-wollen/23850962.html>
- Schockenhoff, M., Roßkopf, G., & Arnold, M. (2021). Group compliance in light of new sanctions laws. *Die Aktiengesellschaft*, 66(2), 66-74. <https://doi.org/10.9785/ag-2021-660211>
- Schrader, K., & Laaser, C.-F. (2020). Recovery through freedom to travel: why southern Europe needs tourism in the Corona crisis. *Kiel Policy Brief*. (144).
- Schulz, A. (2021). 9. business travel. In A. Schulz, B. Eisenstein, M. A. Gardini, T. H. Kirstges, & W. Berg (Eds.), *Fundamentals of tourism* (3rd ed., pp. 465-484). Berlin: De Gruyter Oldenbourg. <https://doi.org/10.1515/9783110641219-009>
- Sdrolias, L., Kakkos, N., Škodová-Parmová, D., Rolinek, L., Cudlínová, E., Aspridis, G., Kazantzi, V. (2016). Cultural Product and Cultural Communication as a Dynamic Bipolar Interaction and Creative Contribution to the Structural Recompilation of the Local Cultural Units. In V. Katsoni & A. Stratigea (Eds.), *Springer proceedings in business and economics. Tourism and Culture in the Age of Innovation: Second International Conference IACuDiT, Athens 2015* (1st ed., pp. 47-67). Cham: Springer.
- Six Continents Hotels, I. (2021). Responsible corporate governance. Retrieved from <https://www.ihg.com/content/de/de/about/corporate-responsibility>
- Škodová Parmová, D., Dvořáková Líšková, Z., & Kain, R. (2018). Raising the Quality of Tourism Firms - Case study from the Czech Republic. In M. Bezpatochnyi (Ed.), *Transformational processes the development of economic systems in conditions of globalization: scientific bases, mechanisms, prospects* (pp. 233-242). Riga.
- Škodová Parmová, D., Dvořáková Líšková, Z., Kain, R., & Korousová, M. (2017). PROFILE OF VISITORS IN THE NATIONAL PARK ŠUMAVA AND THEIR ATTITUDE TO ENVIRONMENTALLY FRIENDLY TOURISM OFFERS. In Bevanda, V. (Ed.), *INTERNATIONAL SCIENTIFIC CONFERENCE: ITEMA 2017* (pp. 167-173). Belgrade: Association of Economists and Managers of the Balkans.
- Smola, M. (2021). Green Hotels - Sustainable engagement at Best Western. In W. Wellbrock & D. Ludin (Eds.), *Sustainable consumption: best practices from academia, corporate practice, society, government and politics* (pp. 871-882). Wiesbaden: Springer Fachmedien Wiesbaden.
- Spielhagen, E. (1996). *Stattfernsehen - Stadtfernsehen: Local TV channels in Brandenburg - an investigation of 15 city channel programmes hosted in Brandenburg cable networks. Schriftenreihe der MABB, Medienanstalt Berlin-Brandenburg: Vol. 4*. Berlin: Vistas-Verlag.

- Spörel, U. (1993). 1. German tourism statistics. In G. Haedrich, C. Kaspar, K. Klemm, & E. Kreilkamp (Eds.), *Tourism management: Part 1* (pp. 135-154). Berlin: De Gruyter. <https://doi.org/10.1515/9783110888096-011>
- Steigenberger Hotels AG (2021). Corporate Social Responsibility: Our Roadmap. Retrieved from <https://www.steigenberger.com/landingpages/sustainable-fair>
- Stejskalová, I., Štrach, P., & Rolinek, L. (2018). Establishing continuous innovation processes in SMEs: Methodology. In E. Horská, Z. Kapsdorferová, & M. Hollová (Eds.), *International Scientific Days 2018: Towards Productive, Sustainable and Resilient Global Agriculture and Food Systems. Conference Proceedings* (pp. 2697-2708). Wolters Kluwer ČR, Prague.
- Tophotel (2019, July 8). B&B takes over hotel in Graz. Retrieved from <https://www.tophotel.de/oesterreich-bb-uebernimmt-hotel-in-graz-39117/>
- Vanat, L. (2020). 2020 International Report on Snow & Mountain Tourism. Retrieved from <https://de.statista.com/statistik/daten/studie/247654/umfrage/die-herkunft-von-wintersportlern-nach-laendern-in-absoluten-zahlen/>
- Walsh, G., Deseniss, A., & Kilian, T. (2019). *Marketing: an introduction based on case studies* (3rd ed. 2019). Berlin: Springer Berlin. Retrieved from <http://www.springer.com/>
- Wilke, J. (2009). The second pillar of the “dual system”: Private broadcasting. In Federal Agency for Civic Education (Ed.), *Supplement to the weekly newspaper Das Parlament: 9-10. From Politics and Contemporary History: Public service broadcasting* (pp. 12-19). Berlin.
- Will, R. (2018). Corporate design as an effective means of strengthening the SEW-EUROD-RIVE brand. In C. Baumgarth (Ed.), *B-to-B brand management: fundamentals - concepts - best practice* (2nd ed., 523-). Wiesbaden: Springer Gabler.
- Woratschek, H. (2021). Ticket prices in sports - Can conjoint analyses help to avoid fan protests? In D. Baier & M. Bruschi (Eds.), *Conjoint analysis: methods - applications - practical examples* (pp. 347-359). Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-63364-9_15
- WWF Germany (2013). Skiing - Winter sports with consequences. Retrieved from <https://www.wwf.de/aktiv-werden/tipps-fuer-den-alltag/umweltvertraeglich-reisen/skifahren-wintersport-mit-folgen>
- Yalcin, Y. (2020). *Konzerncontrolling: State of the art and current challenges - a qualitative analysis* (Master's thesis). Johannes Kepler University Linz, Linz. Retrieved from <https://epub.jku.at/obvulihs/download/pdf/5687711?originalFilename=true>
- Zehrer, A. (2020). Structure, significance and challenges of family firms in community-type Alpine tourism destinations. In H. Pechlaner (Ed.), *Entrepreneurial management and location development, perspectives for companies and destinations. Destination and habitat: perspectives on tourism development: 20 years of tourism research by Eurac Research* (pp. 24-38). Wiesbaden: Springer Gabler.



Measuring Environmental Performance in the Cruise Sector Using GRI Standards

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Abstract: *Globally, the cruise sector has had quick growth and high revenues in the last twenty years. However, this issue affected tourist destinations and natural resources, causing a steady deterioration. Particularly, there is a growing opinion that the sustainability of this mass tourism is a problem that needs to be addressed and resolved through accountability tools. For this reason, the implementation of sustainable tourism practices has stimulated cruise lines to develop sustainability reports, according to some international tools and in most cases, these companies adopt the GRI Standards.*

This study aimed to highlight the evolution and awareness of the impacts in the cruise sector by analyzing the sustainability reports drawn up according to the consolidated GRI standards. In particular, in this chapter, some values of the GRI standards, belonging to the 300 series, named "Top-specific Standard - in environment", have been analyzed and compared. The purpose is firstly to analyze the environmental impacts of the cruise industry, starting from the identification and evaluation phases. Secondly, it highlighted how much a tool, such as the GRI can allow for comparative analysis.

Furthermore, this chapter presents a comparison between three cruise companies, on the basis of some values associated with the GRI environmental indicators. Finally, for a specific company, the sustainability reports were compared over the years, to evaluate the company's approach to the environmental, economic and social performance through the GRI standards. Particularly, the authors identified two hypotheses to be verified: hypothesis 1. The GRI implementation allows an improvement of the environmental performance; hypothesis 2. The cruise ship is equivalent to a city with identified requirements in terms of environmental impacts.

1. INTRODUCTION

Since the last decades of the last century, the tourism sector has shown rapid growth on a global scale and no sign of slowing down. This is particularly true for the cruise industry, whose global embarked passenger traffic has grown by 700% from 1990 to 2018.

However, considering the global cruise traffic in the last ten years, except for the 2020 and 2021 stopped by the pandemic, 2009 registered 17.8 million passengers (Fig.1), which almost doubled in 2019 (CLIA, 2020). Particularly, considering the first global area involved in mass cruise, the Mediterranean area has also seen a strong increase, particularly in the last twenty years, from

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8.6 million to around 28 million passengers carried; Italy, which accounts for around 40% of Mediterranean cruise traffic, had over 11 million passengers in 2018 (Paiano et al., 2020). However, while this trend has allowed important revenue margins; on the other side, it has also put excessive pressure on tourist destinations and resources, causing their gradual deterioration.

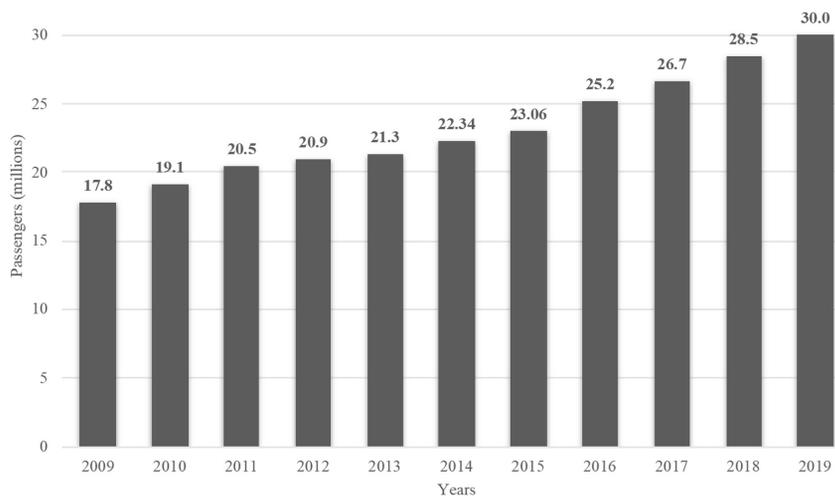


Figure 1. Passengers' capacity snapshot (2009-2019)

Source: Authors' elaboration on data Clia (2020)

There is a growing opinion that the sustainability of tourism activities, especially mass tourism, is a problem that needs to be addressed with methodologies that go well beyond the local and regional spheres, considering that supply and demand have an increasingly international dimension mainly in the cruise sector, which today represents an important share of the tourism market. Only recently Di Vaio et al. (2022) examined the role of accounting disciplines in evaluating and promoting corporate social performance (CSP). In fact, they analyzed how non-financial reporting positively affects promoting practices and results within the cruise sector.

Furthermore, a lack of scientific research interest in the cruise sector was observed, especially from the point of view of studies on environmental impacts.

Therefore, the application of sustainable tourism practices implies, in the medium-long term, the implementation of planning activities, well-marking practices aimed at improving competitiveness, adequacy in the management of a tourist destination and strategic regional, national, and supranational governmental plans.

Analytical information and evaluation indicators of tourist destinations, including local indicators, indeed, are needed to capture the different subjective perspectives of the stakeholders (Kamble et al., 2018; Beier et al., 2020). It is important to point out that the sector of cruise tourism has peculiarities that differentiate it from other tourism offers. It is multi-destination tourism, as it includes calls at numerous intermediate ports, chosen in relation to their tourist attractiveness to satisfy the needs expressed by a more specific demand.

This chapter presents some of the impacts generated by cruise ships (Carić, 2010), identified through the data reported in the scientific literature of the sector and, above all, in the sustainability reports drawn up by some cruise lines. Sustainability reports are the tools used by companies today to communicate the impacts associated with their activities.

It was used non-financial communication tools, published by the cruise lines on their commercial web pages and elaborated according to some indicators, the Global Reporting Initiative - GRI Standards (Fig.2) (Gallego-Alvarez and Vicente-Villardón, 2012; Global Reporting Initiative, 2016), which show the “impact” that an organization has on the economy, the environment and/or society, and therefore, in terms of contribution (positive or negative) to sustainable development (Gallelo-Álvares et al., 2018).

UNIVERSAL STANDARDS (GRI 100)	ECONOMIC STANDARDS (GRI 200)	ENVIRONMENTAL STANDARDS (GRI 300)	SOCIAL STANDARDS (GRI 400)
<ul style="list-style-type: none"> - GRI 101: Foundation - GRI 102: General Disclosures <ol style="list-style-type: none"> 1. Organizational profile 2. Strategy 3. Ethics and integrity 4. Governance 5. Stakeholder engagement 6. Reporting practice - GRI 103: Management Approach 	<ul style="list-style-type: none"> - GRI 201: Economic performance - GRI 202: Market presence - GRI 203: Indirect economic impacts - GRI 204: Procurements practises - GRI 205: Anti-corruption - GRI 206: Anti-competitive-behaviour 	<ul style="list-style-type: none"> - GRI 301: Materials - GRI 302: Energy - GRI 303: Water and effluents - GRI 304: Biodiversity - GRI 305: Emissions - GRI 306: Effluents and waste - GRI 307: Environmental compliance - GRI 308: Supplier environmental assessment 	<ul style="list-style-type: none"> - GRI 401: Employment - GRI 402: Labour management relations - GRI 403: Occupational health and safety - GRI 404: Training and education - GRI 405: Diversity and equal opportunity - GRI 406: Non discrimination - GRI 407: Freedom of association and collective bargaining - GRI 408: Child labour - GRI 409: Forced or compulsory labour - GRI 410: Security practises - GRI 411: Rights of indigenous peoples - GRI 412: Human rights assessment - GRI 413: Local communities - GRI 414: Supplier social assessment - GRI 415: Public policy - GRI 416: Customer health and safety - GRI 417: Marketing and labelling - GRI 418: Customer privacy - GRI 419: Socioeconomic compliance

Figure 2. Modular set of Global Standards for Sustainability Reporting

Source: Authors' elaboration on data Global Reporting Initiative (2016).

Particularly, GRI standards:

- 1) offer a complete and replicable implementation manual for companies,
- 2) indicate the standardization procedures for defining priorities of problems, risks and opportunities,
- 3) use stakeholder inputs and company information to determine material problems and report content (Font et al., 2016).

Therefore, through a structured analysis of the sustainability reports of three companies in the sector, it was possible to make a comparison among them, concerning specific impacts and some natural resources (Adams and Kuasirikum, 2000), such as water. Some Global Reporting Initiative (GRI) belonging to *I 300* series were analyzed and compared.

The goal is twofold: to highlight the magnitude of impacts related to cruise ships that, because of their concentration in time and space, need to be identified and quantified; the second level of analysis, on the other hand, aims to verify how to which extent a tool such as the (GRI) is suitable for comparative analyses and can be useful to companies in planning their activities.

In the chapter, firstly a comparison between three companies in the cruise sector was made, regarding 4 GRI of the 300 series and, secondly within the same company, Costa Crociere S.p.A (henceforth Costa Crociere for the sake of brevity), a comparison between the two reference years, 2015 and 2018.

So, it was possible to highlight the importance that the company has attributed to environmental performance (Al-Tuwajiri et al., 2004; Liu and Anbumozhi, 2009) compared to those expressed in other GRI standards (economic and social) (Gray et al., 1995; 2001; Richardson and Welker, 2001; Reverte, 2009) during the period considered.

Particularly, the authors identified two hypotheses to be verified:

Hypothesis 1. The GRI implementation allows an improvement of the environmental performance;

Hypothesis 2. The cruise ship is equivalent to a city with identified requirements in terms of environmental impacts.

Among the main reasons behind this chapter, especially nowadays, there is a concern about big cruise line brands that still don't report and others that are reporting bad as highlighted by Font et al. (2016), although sustainability reporting is a common practice among the largest companies in every industry.

Furthermore, this chapter presents a methodology application that can be replicated despite the presence of different tools. As a matter of fact, 15% of those who prepare the sustainability reports did not cite a particular current reference framework for their sustainability reports (for example the GRI) even though they regularly publish this report.

2. LITERATURE REVIEW

There is an important body of literature related to cruise environmental impacts ecosystem, potential sustainable practices, or studies on quality services (Butt et al., 2007; Strazza et al 2015; Shi et al., 2016; Simonsen et al., 2018; Yoon et al., 2020; Di Vaio et al., 2020) but few articles concerning the magnitude of environmental impacts of the cruise sector. It is possible to cite Bonilla-Priego, et al. (2014), who analyzed sustainability reports in the cruise sector examining the difference between the level of the information reported both on websites and in the disclosures, highlighting the main difference in presenting environmental performance and socio-economic performance. The research considered 84 environmental indicators and 110 socio-economic indicators. The study concludes that there is a lack of standardization in the sustainable report, driving companies to report scarce information on environmental indicators, as water consumption, emission reductions, waste minimization, or assessing social performances. This issue displays that the cruise industry is in the early stages to implement sustainability reporting.

Another evidence of the shortage of transparent and clear information on the disclosure in the cruise sector is described by De Grosbois, 2015 who analyzed 50 cruises' websites and their sustainability reports. From the analysis emerges that there is missing information on the environmental and social performance highlighting the difficulty in making data comparable among companies.

Jones et al (2017), reviewed the disclosure of two major ocean cruising companies, namely, Carnival Corporation and Royal Caribbean Cruises. The study revealed that the elaboration of environmental reporting is mainly attributable to the pressure of media, investors, stakeholders, and both companies based their sustainability reporting on the GRI G4 guidelines framework, helping them in planning sustainable development agendas. Also, the study of Aureli et al., 2017 analyzed and compared the sustainability report of two cruise companies - Carnival and PLC, with the goal to understand how the negative events such as the Costa Concordia shipwreck, influenced the sustainability communication of both companies. The analysis of the

brand reputation dropping of Costa cruise is attributable to the lack of information in environmental information after the negative event and this suggests the importance of the sustainability disclosure in showing not only the environmental and social commitment to stakeholder but also the capacity to face negative events.

Font et al, (2016) studied the importance of a materiality analysis based on the development of the G4 sustainability reporting guidelines in the cruise sector for indexing environmental issues and developing a new managerial process. The authors analyzed 63 material indicators divided into social (25), economic (12) and environmental indicators (12), whereas were added other indicators such as labor and management relations diversity, and equal opportunities and materials. This emphasizes how the sustainability reporting can become a tool of marketing illustrating the actions taken to preserve and safeguard the biodiversity and at the same time avoiding greenwashing procedures. The results of the research study put in evidence the usefulness of environmental disclosures in maintaining a transparent and correct brand reputation as well as the importance of materiality reporting to facilitate the elaboration of the sustainability reporting. Konnola et al, 2020, differently analyzed which kind of environmental indicators can be considered and adapted by comparing different green certifications such as Green Globe, Green Key BREEM and GRI framework, showing that the GRI is the most suitable for exploring sustainability because it can give more detailed information.

3. MATERIALS AND METHODS

3.1. Materials

Firstly, as above stated, the data for each company was analyzed and then the various values needed for our calculations were estimated, such as the average number of passengers (guests and crew) equal to 4500, 4000 and 3500 per ship, respectively for Costa Cruises, Princess Cruise Lines and Aida Cruises.

This chapter assessed the sustainability reports, drawn up according to GRI criteria (Global Reporting Initiative, 2016), of three companies above-cited operating in the sector, which differ in terms of nationality (Italian, German and the US respectively) but all belong to the Carnival group. These three companies were chosen, from the same company, because they mainly deal with family and/or mass cruises, with a similar average capacity. Hence, they present comparable data.

The Guidelines used are those of GRI-G41 issued by the Global Reporting Initiative, with an “in accordance-core” level of compliance, intending to launch a process that combines corporate responsibility (Reynolds and Yuthas, 2008; Vanhamme and Grobbsen, 2009; Dragomir and Cristina, 2009; Shvarts et al., 2016), with a reading key more oriented towards the value shared with corporate stakeholders (Hughes et., 2001) (Fig.3).

It should be noted that the issues described in the GRI - report are related to the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda, which is a conceptual framework that guides the company’s responsible innovation choices.

The in-depth analysis of specific topics has also considered the issues covered by Legislative Decree no. 254/2016, which transposes the European Directive on non-financial reporting into Italian law.

The choice of indicators, to better represent the company’s performance, is consistent with environmental issues and the cruise tourism sector. In this chapter, therefore, some of the environmental GRI standards 300 series will be analyzed (Fig.3).

Universal Standards	Foundation	GRI 101	To inform about the principles and methods of reporting	
	General Disclosures	GRI 102	To indicate contextual information about an organization	
	Management Approach	GRI 103	To indicate the management approach for each topic	
Topic - Specific	Economic	GRI 200	To indicate specific information on each topic	GRI 201 - 206
	Environmental	GRI 300		GRI 301 - 308
	Social	GRI 400		GRI 401 - 419

Figure 3. Summary sheet of the GRI Standards

Source: personal elaboration by the authors on data GSSB, 2019

3.1.1. GRI 300-environmental standard

The GRI 300 series includes topic-specific standards used to report information on an organization’s material impacts related to environmental topics. It consists of a set of eight subcategories listed below:

- I. The GRI-301 standard - called Materials, of which 301-1 concerns the total weight and/or volume of materials used to produce and package primary products/services; 301-2 deals with the use of recycled inputs and 301-3 focuses on recycled products and their packaging materials;
- II. The GRI-302 - Energy standard, of which 302-1 considers the energy consumption within the organization and it is included in our analysis, 302-2 the energy consumption outside of the organization and 302-3 the energy consumption intensity, that is included in our analysis too, 302-4 the reduction of energy consumption and 302-5 the reductions in energy requirements of products and services;
- III. The GRI-303 - Water and wastewater standard, is made up of five information about the management methods (303-1, the water withdrawal by source and 303-2, the water sources significantly affected by withdrawal of water) and specificities as 303-3, that refers to the water withdrawal, 303-4, the water drain and 303-5 the water consumption;
- IV. The GRI-304 standard, called Biodiversity, provides for four pieces of information to be reported and in particular, the 304-1 contemplates the operating sites owned, rented, managed or adjacent / external), the 304-2 presents the significant impacts of activities, products/services on the biodiversity; 304-3 on protected or restored Habitats; finally, 304-4 on conservation species with habitats in the areas affected by the operations;
- V. The GRI-305 Emissions standard, are direct (scope 1) GHG emissions, 305-2 the energy indirect (scope 2) GHG emissions, 305-3 other indirect (scope 3) GHG emissions, 305-4 GHG emissions intensity and 305-5 Reduction of GHG emissions, 305-6 emissions of substances that reduce the ozone layer, 305-7 nitrogen oxides (NOx), sulfur oxides (SOx) and other significant atmospheric emissions;
- VI. GRI 306 presents water discharges and waste in the form of water discharges by quality and destination (306-1), waste by type and disposal method (306-2), significant spills

- (306-3), transport of hazardous waste (306-4), water bodies affected by discharges and/or water runoffs 306-5;
- VII. The GRI-307 is based on Environmental Compliance, of which 307-1 regards the non-compliance with environmental laws and regulations;
- VIII. The GRI-308 suppliers' environmental assessments are divided concerning new suppliers selected using environmental criteria and 308-2 on negative environmental impacts in the supply chain.

3.2. Methods

Briefly, sustainability disclosures represent how companies report and make public their environmental, social and economic impacts and performances. According to the definition of the Global Reporting Initiative, indeed, “sustainability reporting is the practice of measuring, disclosing and being accountable to internal and external stakeholders for performance organizational objectives towards the goal of sustainable development” as highlighted by Di Vaio et al. (2022).

The methodology adopted consists of a materiality analysis already placed at the center of the sustainability reporting guidelines of the Global Reporting Initiative (GRI), like Font et al. (2016).

Particularly, the analysis of the information contained in the sustainability reports published by cruise companies on their official digital platforms has identified several GRIs of interest for the purpose of this chapter, in particular, the information to be reported on some of the standards listed above:

- GRI 303-1, Drinking water consumption;
- GRI 306-2, Waste generation;
- GRI 302-1, Energy consumption;
- GRI 305-1, Total greenhouse gas emissions.

The in-depth study of the specific issues that the companies deal with also takes into account the issues covered by the legislation: as above mentioned, in Italy, for example, the Legislative Decree 254/2016 transposes in Italy the European Directive on non-financial information created through tools such as the GRI.

Additionally, in compliance with the principle of clarity the structure and language of the financial statements are aligned with the corporate communication of the company to simplify its use and identification of the contents. Where appropriate, the document refers to contents and issues found in other company documents and sites or references external to the company.

In terms of balance and comparability, however, the data allow us to value the trends relating to different three-year periods. The indicators representing the results reflect the measurement of performance, regardless of the improvement or worsening compared to previous periods. The data without comparison measures are attributable to information not present in previous years, collection of which would have represented an excessive burden and use of calculation methods different than those of previous years.

Furthermore, some indicators are reported with only the qualitative value. For the principles of exactness, accuracy, and reliability, the non-financial statement is the product of a drafting process shared with the relevant functions and the top management of the Group and is also

approved by the legal representatives of Costa Crociere S.p.A. The document is subjected to external and independent verification by PricewaterhouseCoopers (PWC). In terms of timeliness: the non-financial statements are published in an electronic version, downloadable from the company's website and distributed to the relevant stakeholders (Costa Cruises, 2019).

For each of these, the daily values per capita were considered because they are more comparable than the absolute values almost always reported in sustainability reports, given the differences between the various companies in terms of fleet, routes, distances covered, and many passengers carried.

All the available information was analyzed, and the average number of passengers transported per year, the average number of passengers per ship and the average number of days the ships of the different companies were in operation were estimated to calculate the daily values per capita used in this chapter.

In addition, the following GRIs were also assessed for Costa Cruises and Princess Cruise Lines:

1. GRI 302-3, Fleet fuel consumption trends;
2. GRI 305-4, GHG emission intensity related to the fleet.

The values of which are expressed in ALB/km and CO₂eq/km, thus also allowing adequate terms of comparison.

For a time-based assessment, the sustainability reports of the three companies mentioned above were examined, concerning the latest year available, 2018 for Costa Cruises and Aida Cruises and 2017 for Princess Cruise Lines, and the 2015 reports of all three companies, to highlight the various changes that have taken place over the last four years.

Finally, to detect the weight given to the environmental performance compared to those expressed by the other GRI standards, a synthetic evaluation model was created which assigns a score, from 0 to 4 by the number of citations, respectively:

- 0/n.a.,
- 1, 2, 3 and ≥ 4 , for each GRI mentioned within the sustainability report (Skouloudis et al., 2009; Mendes et al., 2019).

Following the identification of the indicators and scoring criteria, the benchmark model was applied to the sustainability reports published by one of the three companies (Costa Crociere) again for the two reference years, 2015 and 2018.

The Italian company Costa Cruises, which has been promoting a business model oriented towards sustainable development and value creation for several years, has been identified for our case study and its sustainability reports, arranged according to the GRI criteria, have been evaluated.

In particular, Costa Cruises' sustainability reports were drawn up according to the GRI-G41 Guidelines for Sustainability Reporting issued by the Global Reporting Initiative, with an "in accordance-core" compliance level. They aim to implement a path that combines corporate responsibility with an interpretation that is more oriented towards the representation of shared value with corporate stakeholders (Costa Cruises, 2016).

All the non-financial statements are drawn up annually by the Sustainability Department of Costa Crociere S.p.A., an internal corporate body responsible for central coordination of the reporting process and the involvement of the company functions concerned. The data and information displayed in the sustainability reports come from the information systems and databases used by the company, validated by their respective data owners. The topics covered in the non-financial reports concerning the activities carried out in the context of Costa Cruises in the years 2008-2018 (in our case study) and only in some areas (specified below) include references to the Group.

In relation to the economic-financial data included in this report, it should be noted that they refer to the statutory financial statements closed on November 30 of each calendar year of Costa Crociere S.p.A. as approved by the Shareholders' Meeting. Moreover, it has underlined that the data included in the reporting perimeter refer exclusively to the Costa Cruises Group. Summarizing the indicators involved in the Sustainability Report, information is provided on the environmental aspects (which we have focused on in this chapter), on board and ground personnel and the supply chain (Costa Cruises, 2016).

The results were then aggregated by GRI macro-series to facilitate benchmarking.

4. RESULTS AND DISCUSSIONS

The results show an improvement in environmental performance for all three companies considered (Fig. 4), which is very significant especially for water consumption, in particular for Costa Cruises. Particularly, the daily waste production per passenger also showed a reduction. The daily waste production per passenger also showed a reduction, but it is lesser than the previous one. Energy consumption remains significant, especially for the US company Princess Cruise Lines, which shows values almost double those of Costa Cruises and almost triple those of the German Aida Cruises. Emissions of Greenhouse gases (GHG) are consequently in the trend of energy consumption (Comyns, 2016), therefore higher for Princess Cruise Lines. The same applies to the data per km, both of fuel and GHG emissions, albeit with reductions in the period considered for both companies.

The environmental data relating to the cruise sector however show consistent quantities, often comparable with the inhabitant/day data of a medium-sized city, for example, Ferrara, whose data relating to the production of waste is just under 2 kg (Municipality of Ferrara, 2017).

The data regarding the consumption per capita/day relating to water are also comparable, equal to 228 L. This consideration testifies to the impact of a cruise ship that is often referred to as a "floating city". Therefore, the second hypothesis was verified.

As regards the results relating to the relevance (in terms of citations) of the GRI 300 series relating to environmental performance in the context of sustainability reports, the application of the model made it possible to detect a weight of 23.8% for Costa Cruises in 2018, up compared to 2015, when it stood at 22.4%.

The other social and economic performances weigh, respectively, 12% (2018) and 9% (2015) and about 8% (2018) and just over 4% (2015). There is, therefore, a clear prevalence of data and environmental issues over other social (GRI 400 series) and economic (GRI 200 series) performances.

The research highlights some limitations also due to concerns that Sustainability Reports while representing a useful tool (Clarkson et al., 2008; Monteiro & Aibar-Guzman, 2010), do not always provide sufficient data and information (Meng et al., 2001).

Furthermore, a lack of scientific research interest in the cruise sector was observed, especially from the point of view of studies on environmental impacts (Bag et al., 2020; Paiano et al., 2020). Moreover, the results presented are biased because this study is the subject of a broader discussion already in the drafting phase. In the next research, we will enlarge the number of hypotheses to be verified to provide a wide range of environmental impacts of the sector investigated.

		Princess Cruise L.		Costa Crociere		Aida Cruises	
GRI		2015	2017	2015	2018	2015	2018
303-1	Drinking water consumption (L)	239	239	221	211	169	160
306-2	Waste production (kg)	2.9	2.6	4.36	3.77	3.9	4.16
302-1	Energy consumption (Gj)	2.08	2.15	1.42	1.2	0.79	0.76
305-1	Global GHG emissions (t CO ₂ eq)	0.16	0.17	0.11	0.09	0.06	0.05

Figure 4. Comparison of environmental performance (passenger/day)

Source: Authors' elaboration on data Princess Cruise Lines, 2017; Costa Crociere, 2018 and 2015; Aida Cruises, 2019 and 2016.

*ALB-km means “*Available Lower Berth*” kilometers: this is a common parameter in the cruise sector that measures the kilometers travelled by a factor that takes into account the low berths available at the fleet level and the days of operation of the ships: capacity standard of the ship is expressed as the number of guests who can occupy the first two beds in each cabin (Fig.5).

		Princess Cruise L.		Costa Crociere	
GRI		2015	2017	2015	2018
302-3	Fleet fuel consumption trend (g/ALB*-km)	90	83.8	78.3	75.4
305-4	Intensity of GHG emissions related to the fleet (CO ₂ eqKg/ALB-km)	0.285	0.265	0.247	0.236

Figure 5. Comparison of environmental performance between different fleets

Source: personal elaboration by the authors on data Princess Cruise Lines, 2017; Costa Crociere, 2018 and 2015.

The increase in the demand for transparency derives from two different points of view: the first is associated with the requirements of responsibility that have expanded in corporate governance to include ethical elements relating to personnel; secondly, the sustainability report, initially focused mainly on the environment, was later enlarged to include ethical/social issues, relating to employees and communities, to the organizational structure in place to control all this and the financial aspects.

Currently, sustainability reporting includes ethical, environmental and social issues on “corporate social responsibility” or towards the so-called “triple bottom line” which concerns people, the planet and profit as Morioka et al. suggested in 2016.

Briefly, hypothesis 1 was verified, since the use of GRI made it possible to:

- 1) identify aspects and themes of the triple bottom line (inside and outside the company);
- 2) apply the principles of sustainability and stakeholder engagement such as Messier et al. in 2005;
- 3) given priority to the use of the principles of materiality and inclusiveness of the stakeholders represented by the Materiality Matrix such as Murningham, 2013);
- 4) ensure that the report provides balanced triple bottom line impacts, using the principles of stakeholder inclusiveness;
- 5) review the result using the principles of sustainability and stakeholder engagement by reviewing the relevant aspects in the previous reporting period (for example, such as the reporting presented in the sustainability reports which includes at least the values achieved in the previous three years) (Font et al., 2016).

5. CONCLUSION AND FUTURE IMPLICATIONS

The quick and steady growth of cruise tourism spurs prompt and accurate monitoring and transversal management and coordination, beyond territorial dimensions, from technical, political, economic and environmental perspectives.

The gathering of data and the publication of the sustainability reports address the need for a positive relationship between business and the environment. Moreover, they underline the demand for suitable institutional communication and corporate governance efficacy of the public utilities (Jenkins and Yakovleva, 2006; Zeng et al., 2010; Blasco and King, 2017). Particularly, they claimed they need to provide a complete and homogeneous set of information in order to communicate the responsibility implementation and the economic, environmental and social results achieved.

The GRI use encourages the standardization and comparison of data to be utilized in companies of different both sizes and sectors. In this chapter, the GRIs useful to measure the environmental impacts of cruise tourism have been considered, allowing comparison among several companies and time horizons. Furthermore, the analysis of the contents in GRI 302-1 Energy consumption, GRI 305-1 Total direct GHG emissions, GRI 302-3 Energy intensity and GRI 305-4 GHG Emissions Intensity, mainly contains quantitative information that highlights the achievement of the goals 6,7 and 8 of Agenda 2020. However, the complete analysis of the Sustainability Report allows a more accurate analysis of the quantitative information as it also presents, in its format, a summary comparison of the environmental performance of the last three years (Di Vaio et al., 2022).

This type of study, analysis and communication model can contribute to greater transparency and adequate monitoring of activities characterized by a significant environmental impact, addressing the need to provide data and tools to all stakeholders involved in the sector.

This chapter contributes to the knowledge of the issue of sustainability reporting in the tourism sector. In particular, it highlighted the gap still currently present between corporate intentions and the wishes of stakeholders in sustainability reporting for the cruise sector.

Finally, the two hypotheses, identified in this research, were verified and they allowed to highlight the significance of GRI as a suitable tool to monitor, measure and compare the environmental performance of different businesses and/or institutions of various dimensions and levels.

REFERENCES

- Adams, C.A., Kuasirikum, N. (2000). A comparative analysis of corporate reporting on ethical issues by UK and German chemical and pharmaceutical companies. *European Accounting Review*, 9 (1), 53-79.
- Aida Cruises (2016). Statistical data. Retrieved October 10, 2019, from <https://www.aida.de/?L=1>
- Aida Cruises (2019). Aida Cares 2019. Retrieved October 10, 2019, from <https://www.aida.de/?L=1>
- Al-Tuwajjri, S.A., Christensen, T.E., Hughes, H.E. (2004). The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach. *Accounting, Organizations and Society*, 29 (5-6), 447-471. [https://doi.org/10.1016/S0361-3682\(03\)00032-1](https://doi.org/10.1016/S0361-3682(03)00032-1).
- Aureli, S., Medei, E., Supino, E., Travaglini, C. (2017), Sustainability disclosure and a legitimacy crisis: Insights from two major cruise companies, *European Journal of Tourism Research*, 17 149-163
- Bag, S., Telukdarie, A., Pretorius, J.H.C., Gupta, S. (2018). Industry 4.0 and supply chain sustainability: framework and future research directions'. *Benchmarking: An International Journal*, <https://doi.org/10.1108/BIJ-03-2018-0056>.
- Beier, G., Ullrich, A., Niehoff, S., Reißig, M., Habich, M. (2020). Industry 4.0: how it is defined from a sociotechnical perspective and how much sustainability it includes-A literature review. *Journal of Cleaner Production*, 259, 120856. <https://doi.org/10.1016/j.jclepro.2020.120856>.
- Blasco, J.L., King, A. (2017). The Road Ahead: the KPMG Survey of Corporate Responsibility Reporting 2017. *KPMG International*. Retrieved December 13, 2021, from <https://assets.kpmg/content/dam/kpmg/be/pdf/2017/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf>
- Bonilla-Priego, MJ and Font, X and Pacheco-Olivares, M.D.R. (2014). Corporate sustainability reporting index and baseline data for the cruise industry. *Tourism Management*, 44. 149 - 160. ISSN 0261-5177 DOI: <https://doi.org/10.1016/j.tourman.2014.03.004>
- Butt, N. (2007). The Impact of Cruise Ship Generated Waste on Home Ports and Ports of Call: A Study of Southampton. *Mar. Policy*, 31, 591-598.
- Carić, H. (2010). Direct pollution cost assessment of cruising tourism in the Croatian Adriatic. *Financial Theory and Practice*, 34 (2) 161-180 Retrieved December 14, 2021, from RePEc: <https://ideas.repec.org/a/ipf/finteo/v34y2010i2p161-180.html>
- Clarkson, P., Li, Y., Richardson, G., Vasvari, F. (2008). Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis. *Accounting, Organizations and Society*, 33, 303-327. <https://doi.org/10.1016/j.aos.2007.05.003>.
- CLIA (2020). State of the cruise industry outlook. Retrieved June 5, 2022, from <https://cruising.org/-/media/research-updates/research/state-of-the-cruise-industry.ashx>
- Comyns, B. (2016). Determinants of GHG reporting: an analysis of global oil and gas companies. *Journal of Business Ethics*, 136 (2), 349-369. DOI 10.1007/s10551-014-2517-9. DOI 10.1007/s10551-014-2517-9. <https://doi.org/10.1080/00014788.1996.9729510>.
- Costa Crociere (2015). *Bilancio di Sostenibilità 2015*. Retrieved October 10, 2019, from <https://web.costacrociere.it/B2C/I/sostenibilita/Pages/bilancio.aspx>
- Costa Crociere (2016). *Il bilancio di sostenibilità 2016*. Retrieved July 15, 2019, from <https://web.costacrociere.it/B2C/I/sostenibilita/Pages/bilancio.aspx>
- Costa Crociere (2018). *Bilancio di Sostenibilità 2018*. Retrieved October 10, 2019, from <https://web.costacrociere.it/B2C/I/sostenibilita/Pages/bilancio.aspx>

- Costa Crociere (2019). *Il bilancio di sostenibilità 2019*. Retrieved July 15, 2019, from <https://web.costacrociere.it/B2C/I/sostenibilita/Pages/bilancio.aspx>
- De Grosbois D., (2016) Corporate social responsibility reporting in the cruise tourism industry: a performance evaluation using a new institutional theory based model, *Journal of Sustainable Tourism*, 24 (2), 245-269, DOI: 10.1080/09669582.2015.1076827.
- Di Vaio, A., Varriale, L., Di Gregorio, A. & Adomako, S. (2022). Corporate social performance and non-financial reporting in the cruise industry: Paving the way towards UN Agenda 2030, *Corp. Soc. Responsib. Environ. Manag.*, 1-23, <https://doi.org/10.1002/csr.2292>.
- Di Vaio, A.; Varriale, L.; Lekakou, M.; Stefanidaki, E (2020), Cruise and container shipping companies: A comparative analysis of sustainable development goals through environmental sustainability disclosure. *Marit. Policy Manag.*, 1–29.
- Dragomir, V.D., Cristina, M. (2009). Corporate governance in the European Union: the implications for financial and narrative reporting. *International Journal of Business Economics*, 9 (1), 53-64.
- Font, X., Guix, M. & Bonilla-Priego, M.J. (2016). Corporate social responsibility in cruising: Using materiality analysis to create shared value, *Tourism management*, 53, 175-186, <http://dx.doi.org/10.1016/j.tourman.2015.10.007>.
- Gallego-Álvares, I., Lozano, B.M., Rodríguez-Rosa, M. (2018). An analysis of the environmental information in international companies according to the new GRI standards. *Journal of Cleaner Production*, 182, 57-66. <https://doi.org/10.1016/j.jclepro.2018.01.240>.
- Gallego-Alvarez, I., Vicente-Villardón, J.L. (2012). Analysis of environmental indicators in international companies by applying the logistic biplot. *Ecological Indicators*, 23, 250-261. <https://doi.org/10.1016/j.ecolind.2012.03.024>.
- Global Reporting Initiative (2016). *Consolidated Set of GRI Sustainability Reporting Standards*, The Netherlands. Retrieved October 10, 2020, from <https://www.globalreporting.org/>
- Gray, R., Javad, M., Power, D.M., Sinclair, C.D. (2001). Social and environmental disclosure and corporate characteristics: a research note and extension. *Journal of Business Finance and Accounting*, 28 (3-4), 327-356.
- Gray, R., Kouhy, R., Simon, L. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8 (2), 47-77. <https://doi.org/10.1108/09513579510146996>
- GSSB (2018). (Global Sustainability Standards Board - Raccolta consolidata dei GRI Sustainability Reporting Standards. Retrieved September 10, 2019, from <https://www.globalreporting.org/standards/gri-standards-translations/gri-standards-italian-translations-download-center/pdf>
- Guthrie, J., Parker, L.D. (1990). Corporate social disclosure practice: comparative international analysis. *Advances in Public Interest Accounting*, 3, 159-176.
- Hughes, S., Anderson, A., Golden, S. (2001). Corporate environmental disclosures: are they useful in determining environmental performance?. *Journal of Accounting and Public Policy*, 20 (3), 217-240.
- Jenkins, H., Yakovleva, N. (2006). Corporate social responsibility in the mining industry: exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, 14, 271-284.
- Jones, P., Hillier, D Confort D. (2017) The two market leaders in ocean cruising and corporate sustainability, *International Journal of Contemporary Hospitality Management*, 29 (1), 288-306.
- Kamble, S.S., Gunasekaran, A., Gawankar, S.A. (2018). Sustainable Industry 4.0 framework: a systematic literature review identifying the current trends and future perspectives. *Business*,

- Process Safety and Environmental Protection*, 117, 408-425. <https://doi.org/10.1016/j.psep.2018.05.009>.
- Könnölä K., Kangas K., Seppälä, K., Mäkelä M., Lehtonen T. (2020) Considering sustainability in cruise vessel design and construction based on existing sustainability certification systems, *Journal of Cleaner Production*, 259.
- Liu, X., Anbumozhi, V. (2009). Determinant factors of corporate environmental information disclosure: an empirical study of Chinese listed companies. *Journal of Cleaner Production*, 17 (6), 593-600.
- Mendes, J. V.; Oliveira, G. R.; De Souza Campos, L. M. (2019). The G-Index: a sustainability reporting assessment tool. *International Journal of Sustainable Development & World Ecology*, (26), 5, 428-438. <https://doi.org/10.1080/13504509.2019.1589595>.
- Meng, X.H., Zeng, S.X., Tam, C.M (2001). From voluntarism to regulation: a study on ownership, economic performance and corporate environmental information disclosure in China. *Journal of Business Ethics*, 116, 217-232.
- Messier, W.F., Martinov-Bennie, N., & Eilifsen, A. (2005). Review and integration of empirical research on materiality: two decades later. *Auditing Journal of Practice and Theory*, 24(2), 153-204. <http://dx.doi.org/10.2308/aud.2005.24.2.153>.
- Monteiro, S.M., Aibar-Guzman, B. (2010). Determinants of environmental disclosure in the annual reports of large companies operating in Portugal. *Corporate Social Responsibility and Environmental Management*, 17, 185-204.
- Morioka, S, N, Evans, S, Monteiro de Carvalho, M (2016). Sustainable business model innovation: exploring evidences in sustainability reporting. *Procedia CIRP* 40, 659-667. doi: 10.1016/j.procir.2016.01.151.
- Municipality of Ferrara (2017). Bilancio ambientale - Consuntivo 2014-2016. Retrieved October 11, 2019, from <https://servizi.comune.fe.it/4160/bilancio-ambientale>
- Murningham, M. (2013). *Redefining materiality II: Why it matters, who's involved, and what it means for corporate leaders and boards. Setting the standard for corporate responsibility and sustainable development*. New York: Accountability. Retrieved June 12, 2022, from https://lifegateedu.it/wp-content/uploads/2021/09/AA_Materiality_Report_Aug2013-FINAL_compressed.pdf
- Paiano, A., Crovella, T., Lagioia, G. (2020). Managing sustainable practices in cruise tourism: the assessment of carbon footprint and waste of water and beverage packaging. *Tourism Management*, 77, 104016. <https://doi.org/10.1016/j.tourman.2019.104016>.
- Princess Cruise Lines (2017). *Sustainability report, 2017*. Retrieved October 12, 2019, from <https://www.princess.com/aboutus/sustainability/>
- Reverte, C. (2009). Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics*, 88 (2), 351-366.
- Reynolds, M., Yuthas, K. (2008). Moral discourse and corporate social responsibility reporting. *Journal of Business Ethics*, 78, 47-64.
- Richardson, A.J., Welker, M. (2001). Social disclosure, financial disclosure and the cost of equity capital. *Economics, Accounting Organizations and Society*, 26 (7), 597-616.
- Shi, T. (2004). Ecological economics as policy science: rhetoric or commitment towards an improved decision-making process on sustainability. *Ecological Economics*, 48, 23-36.
- Shi, Y. (2016). Reducing Greenhouse Gas Emissions from International Shipping: Is It Time to Consider Market-based Measures? *Mar. Policy*, 64, 123-134.
- Shvarts, E.A., Pakhalov, A.M., Knizhnikov, A.Y. (2016). Assessment of environmental responsibility of oil and gas companies in Russia: the rating method. *Journal of Cleaner Production*, 127, 143-151. <https://doi.org/10.1016/j.jclepro.2016.04.021>.

- Simonsen, M., Walnum, W., Gössling S., (2018) Model for estimation of fuel consumption of cruise ships, *Energies*, 11 (5), 1059.
- Skouloudis, A., Evangelinos, K., Kourmoussis, F. (2009). Development of an Evaluation Methodology for Triple Bottom Line Reports Using International Standards on Reporting. *Environmental Management*, 44, 298–311.
- Strazza, C., Del Borghi, A., Gallo, M. (2015) Investigation of green practices for paper use reduction onboard a cruise ship—a life cycle approach. *Int J Life Cycle Assess* 20, 982–993, <https://doi.org/10.1007/s11367-015-0900-0>.
- Vanhamme, J., Grobbsen, B. (2009). Too good to be true! the effectiveness of CSR history in countering negative publicity. *Journal of Business Ethics*, 85, 273-283.
- Yoon, Y.; Cha, K.C., (2020) A Qualitative Review of Cruise Service Quality: Case Studies from Asia. *Sustainability*, 12, 8073. <https://doi.org/10.3390/su12198073>.
- Zeng, S.X., Xu, X.D., Dong, Z.Y., Tam, V.W.Y. (2010). Towards corporate environmental information disclosure: an empirical study in China, *Journal of Cleaner Production*, 18 (12), 1142-1148.

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Pontrandolfo: Data curation, Validation, Collection, Robustness.

Gallucci: Writing a review.



Illegal Migrations through the Applied Theory of Markets and Principles of the Tourism Industry

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Abstract: *Illegal migrations have especially after 2015 been recognized as one of the top priority problems to be solved in the EU. Scattered policies and dissonance among the EU states have mostly been followed by repressive ex-post policies being, however, massively attacked by liberal democracy. Starting from the Arrow - Debreu theory of markets they analyze these processes from the point of the applied theory of markets. Beyond instability and insecurity as push factors on the supply side in these processes of illegal immigrants, there is also the emergence of smuggling businesses. The authors try to prove the hypothesis that illegal refugees smuggling does demonstrate clear elements of the tourist industry, apart from entailing massive fraud practices. The authors will elaborate on the comparison of business models between a tourist agency and a typical illegal business entity dealing with the smuggling of illegal immigrants. Here, the approach of similarity of business process models will be used. The study will outline some policy proposals for the regulation of the migration market. Deriving from the results, the authors consequently propose market intervention policies and measures, so as to try to frame migration processes regarding the level of benefit for sending and host countries.*

1. INTRODUCTION

With illegal immigration reaching great numbers, this flow naturally attracts suppliers and facilitators of these processes. They provide potential immigrants with information on destinations adjusted to their expectations, offer them (often corrupt) means of transport and usually falsely promise their social integration into the country of their destination. For our discussion, it is relevant that they develop and perform most functions typical for a tourist agency like marketing, finance, transportation, or economy. Naturally, providers of such mobility follow their business calculation; they offer different types of services at different prices, resulting in a matching process between the “customer” and the “service provider”. In turn, they strive to profit from dire situations of their “customers”. As expected, the market arises from a disparity between the volume of legal and easily accessible routes of migration and the demand for migration, thereby creating an informal market (Fallone 2021). Illegal immigrants participating in this market purchase a commodity that consists of the expertise in crossing national borders undetected. When purchasing services on the informal market of illegal migration, migrants exercise agency comparison in determining which of the available service providers meets their needs best.

As a theoretical foundation, the authors use Radner’s (1970) interpretation of the Arrow-Debreu model (in Majumdar 1998). Crucial for the functioning of markets is the difference in information between different economic agents which then leads to a competitive market. This way, market equilibrium can be achieved for every commodity. The authors also presume that

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applied theory can be built based on empirical facts and the experience which can be proved. There is no doubt that this is the case with empirical phenomena elaborated in this chapter.

The market by definition consists of supply and demand. In this research, migrants represent the demand side of the market, and the demand for migrant smuggling services is met by several sellers who are smugglers. Migrants on the demand-side are willing to buy the service, i.e. an illegal entry into the chosen country. (Antonopoulos & Winterdyk, 2006). The smuggling services market shares many common characteristics of the regular market, such as competition, trust, reputation, and financing tradition (Campana, 2020). The market clearance rule as understood in times of acceptance of Say's law has been challenged by the opposition in the 1930s led by Keynes. Even though there is no situation where full information would be available for the participants on the market, we see markets not only distributing factors, goods and services, but also evolving – e.g., taking new areas. Considering that the price at which the market is cleared is not a necessary objective, this chapter does not discuss the market clearance rule from the point of price but is based on the simple fact that existing demand triggers supply. Due to the illegal character and non-transparency of the market discussed in this chapter, the equilibrium price would be impossible to assess. Kar and Beladi (2017) conducted research based on illegal migrants, more precisely smuggling, and trafficking in workers. The authors state that in a situation where there is an increase in unemployment benefits, which also does not cause the payment of taxes, illegal workers are faced with a smaller market and ultimately earn lower wages. On the other hand, supervision suffers in a situation where an increase in unemployment benefits reduces tax collection. There is a higher demand for illegal workers to replace legal workers, which can lead to an increase in their market-clearing wage. Roberts et. al (2010) state that rising smuggling costs also indicate an increase in demand for their services with limited supply. Further, they increase the creation of cartels by smugglers which affects changes in market characteristics. As described below, the ICT development provides the demand side with excessive information, so that here the actors interested in relevant information have access to knowledge. The authors do not analyze this. Yet, the gravity of the demand side situation, which without doubt leads to accepting less proven information and risky decisions is also not analyzed. The migrants simply must leave the location endangering their basic safety and economic perspective.

With migration reaching great numbers this flow naturally attracts suppliers and facilitators of migration. They provide potential migrants with information on destinations adjusted to their expectations. In addition, they offer them (often corrupt) means of transport, and usually, falsely promise their integration into the country of their destination. Relevant to our discussion, is the fact that they develop and dispose of most functions typical for a tourist company like marketing, finance, transportation, or economy of scale. Naturally, providers of such mobility follow their business calculations; they offer different types of services at different prices. That results in a matching process between the “customer” and the “service provider”. Of course, they strive to profit from the dire situations of their “customers”. As expected, the market arises from a disparity between the volume of legal and easily accessible routes of migration and the demand to migrate, thereby creating an informal market (Fallone 2021). Migrants participating in this market purchase a commodity: expertise in crossing national borders undetected. When purchasing services on the informal market of illegal migration, migrants exercise agency comparison in determining which of the available service providers meets their needs best.

In 2015 the year of a breakthrough in migrations mostly from the Middle East, more than one million irregular migrants reached the EU (EUROPOL 2016). With irregular migration, we

denote (European Commission. n.d., International Organization for Migration, 2021; Migration Data Portal, 2020) the movement of persons to a new place of residence or transit that takes place outside the regulatory norms (the regulatory norms of the sending, transit, and receiving countries). Migrants without documents often use the entrenchment of the smuggling infrastructure. This was also the case for Syrian refugees seeking refuge within the EU. That has exposed the institutional deficiencies of the EU, which has raised alarm amongst the European media and the public (Aggarwal et.al 2016).

EUROPOL data show (2016), that more than 90% of before mentioned irregular migrants used so-called facilitation services (such as the provision of transportation, accommodation, and fraudulent documents) at some point during their journey. Some of these services, often with false promises of integration into the country of migrant's desire, can be compared to tourist industry services (accommodation, travel). These services were provided by migrant smuggling networks since criminal networks quickly adapted to this development and extensively increased their involvement in migrant smuggling.

A substantial number of criminal networks as well as individual criminal entrepreneurs generate large profits from migrant smuggling. Based on the aforementioned data, in 2015, criminal networks involved in migrant smuggling were estimated to have had a turnover of between 3-6 billion EUR⁴ (EUROPOL-INTERPOL, 2016). The data by Bundeskriminalamt & Bundespolizeipräsidium (2015) show that the number of identified smugglers in Germany was rising continuously in the years from 2011 to 2015. With 4.865 suspects for smuggling foreigners by German law (§ 96 AufenthG08), the increase in the number of suspects reached its peak in 2015 (+ 63%).

Since the migration crisis in 2015, the EU has implemented several measures, such as guarding the external border of the EU, and increasing collaboration with third countries along the main migratory routes, i.e. Turkey and some African countries (Orav 2021), to control migration flows better and more efficiently. Those resulted in the fact that irregular arrivals to the EU were reduced by more than 90% (more than 1 million irregular migrants in 2015 from Central, Eastern, and Western routes⁵, and less than 100.000 irregular migrants from the mentioned routes in 2020) (European Council, 2021). Due to subsided migration flows, also a decrease in criminal activities related to smuggling foreigners was noticed. The data by Bundeskriminalamt (2021) showed a decrease in criminal offenses related to smuggling foreigners by German law (§ 96 and § 97 of the Residence Act) in the years from 2016 to 2020. In the year 2020, an overall decrease of 3.4% related to these offenses can be noted in comparison to the year 2019.

National and international policy measures can lead to a shift in migration routes and a change in the modus operandi, but illegal migration in the destination and transit states will still occur. As long as there are pronounced push and pull factors, illegal migration cannot be completely prevented, and smugglers will benefit accordingly. In Syria, Afghanistan, and Iraq, as well as in many other regions of the Middle East and Africa, no stabilization of the political, economical and humanitarian situation can be expected in the short and medium-term, which will result in ongoing migratory pressure. Criminal smuggling organizations will continue to exploit it (Bundeskriminalamt & Bundespolizeipräsidium, 2017).

⁴ There is only limited intelligence available on the criminal procedures, illicit financial flows or money laundering processes associated with migrant smuggling activities (EUROPOL, 2016).

⁵ For a detailed explanation of the routes see: <https://www.consilium.europa.eu/en/policies/eu-migration-policy/#>.

The central hypothesis of this chapter is that illegal immigrants' smuggling represents the market response to supply realizing the differential in information between demand and supply, which usually connects demand and supply on the market. This would be essential for the formation of a consistent (restrictive) market policy and to stop inconsistent restrictive measures which are predominantly demonstrated by opposite positions of the EU members regarding the illegal practice of border authorities to control the inflow of illegal migrants. In order to overcome stochastic disorder in the field and to look for policy measures that we developed for control of markets, the authors take the following approach: the immigrants trafficking could first be analyzed from the point of tourist businesses and could in this respect be treated as subjects of market regulation. To prove this hypothesis, the authors used the method of comparison related to the business models of tourist agencies and businesses dealing with migrant smuggling.

The following chapter firstly deals with the analysis of the online environment as a facilitator of migrations which is then followed by the presentation of the effects of migrations on the EU labor market. The next chapter presents the business process models of tourism agencies and is followed by the chapter on business process models that apply to the smuggling migrants. The next chapter discusses similarities between the two business process models. In the end, the chapter is summed up by some suggestions for future research outlines and a conclusion.

2. THE ONLINE ENVIRONMENT AS FACILITATOR OF MIGRATIONS

The information technology enables relatively easy access to the data on the desirable destinations. Thus, the population, that wants to migrate also increases. Here we agree with Fallone (2021), arguing that the role of social media is not the drive of migration, but a tool to inform about supposed migration journeys. Messaging apps such as Telegram or WhatsApp are often used for organizing mass migrant movements. They generally facilitate and anonymize the communication between the criminal networks' recruiters in the countries of origin, as well as the organizers, handlers, and guides or drivers in transit and destination countries. In February 2019, Europol and the several EU Member States detected discussion groups based on an internet communication platform that were discussing the organization of mass treks for irregular migrants towards Schengen countries, so-called 'convoys'. One of the group's initial objectives was to facilitate the movement of Syrians in Turkey toward Greece and onward. This is not an isolated case, since there are many more such channels and groups in messaging services and on the social media platforms (European Union Agency for Law Enforcement Cooperation, 2020).

Also, the EUROPOL analysis (2016) confirms that different social media platforms are used by migrant smugglers as well as by irregular migrants to share information on developments along migration routes, changes in asylum procedures, law enforcement activities, or possible unfavorable circumstances in countries of destination. This type of information allows involved parties to adapt to changing conditions. For example, migrant smugglers would adjust their price list in response to developments such as increased border controls. They would be charging higher prices for alternative and safer routes. Additionally, these apps are also used by the migrants and their families who are often dealing with the payment for the facilitation. On the other hand, migrant smugglers often rely on social media to advertise their services. An example stated by the EUROPOL (2016) analysis: *"The cost of a package with travel from Turkey to Libya by air and subsequent sea journey from Libya to Italy costs USD 3.700. For the sea journey, adults cost USD 1.000. Three children cost USD 500"*.

Based on the information collected by Bundeskriminalamt & Bundespolizeipräsidium (2017), social media, especially WhatsApp, Viber, and Facebook, play a crucial role in the planning and organization of smugglers concerning the communication between smugglers/smuggling organizations: corresponding offers, including costs, and routes (examples are noted in Table 1 below).

Table 1. Examples of corresponding offers and routes by smugglers of irregular migrants

Friends of mercy and the blessings of God The way to Europe
1-Turkey to Greece (Dinghy) 1.000 €
2-Turkey to Greece (Jet Ski) 1.600 €
3-Turkey to Greece (Yacht) 2.000 €
4-Turkey to Greece (Flight) 4.000 €
5-Italy to Greece (Yacht) 4.500 €
6-Italy to Turkey (Flight) 7.000 €
7-Turkey to USA (Flight) 9.000 €
8-Scandinavia 11.000 €
9-England and Canada 14.000 €
10-Lebanon to Italy (Ferry) 7.000 €
For more information I'm available at the following Phone Number:

Source: Bundeskriminalamt & Bundespolizeipräsidium, 2017.

One of the concrete threats based on such messaging apps is the use of these apps for the promotion of large-scale fraudulent documents among migrants. False documents are sold on such apps and allow unlawful entry into EU countries under false identities. Based on the data by European Union Agency for Law Enforcement Cooperation (2020), the EMSC (European Migrant Smuggling Centre) within their activities detected dozens of such channels, as well as groups on platforms containing more than 37.000 pictures of around 100.000 different documents on offer. And some of the channels had tens of thousands of followers.

When comparing the aforementioned online activities and other related migration facilitating activities with principles of the tourism industry, particularly with business functions (EUROSTAT 2013), we can find several associations with the following business functions:

- **distribution and logistics:** transportation activities of migration and information about developments along migration routes, developments in border control;
- **marketing, sales, and after-sales services:** market research (favorable or unfavorable conditions in countries of destination), advertising (advertising services concerning migration), direct marketing services (messaging apps for direct communication on organizing migrant movements as well as the use of these apps to promote on fraudulent documents among migrants);
- **information and communication technology (ICT) services:** information technology (IT) services and telecommunication, such as IT services for organization and usage of different online environments considering communication and information sharing;
- **administrative and management functions:** legal services (here the link can be made to the information on changes in asylum procedures, and law enforcement activities), accounting, book-keeping and auditing (which includes the payment for facilitation), human resources management (e.g. training and education of drivers and handlers, staff recruitment via online platforms), etc.

The research of Golovko (2019) related to smugglers in West Africa's migration economy observed that the services provided by persons involved in the migration business in Mali and

Niger are diverse and include the broad category of drivers, ghetto owners, intermediaries between transporters, and network coordinators. There are also several other economic activities supporting the migration economy, like water sellers, operators of call and internet shops, as well as money transfer agencies. Accommodation, transportation to holding places, and collecting clients from meeting points are some of the main services cited by all respondents involved in the above-mentioned research.

3. THE EFFECTS ON THE EU LABOR MARKET

Over the past decades, migration to Europe from third countries has been substantial. Historically, the main pull factors to Europe are the presumed political stability of the EU and its relative economic prosperity. The data collected by Orav (2021) show that between 1960 and 2018 the population of the EU increased, growing from 407 million to 513 million. In addition to legal migration (that covers people arriving in Europe to work, pursue studies, or join family members), the EU faced an unprecedented surge of irregular migration in 2015. As host societies, EU Member States are required to facilitate their integration - this includes their integration into society and ability to access different services, together with the labor market.

In Europe, we are facing a phenomenon of mixed migration where both, genuine asylum seekers (predominantly from Syria, Eritrea, Iraq, and Afghanistan) and economic migrants without documents have been arriving together in unprecedented numbers. Aggarwal et al. (2016) state that, nonetheless, whether asylum seekers or irregular migrants, the current situation of integration policies meant that the informal labor sector⁶ was supposedly the area where most of them would end up eventually. Additionally, migrant smugglers offer a wide variety of often highly expensive services to the migrants. In many cases, irregular migrants are forced to pay for these services by means of illegal labor (EUROPOL, 2016).

Because the majority of the irregular migration flows stem from developing countries and tend to be low-skilled, Aggarwal et. al. (2016) indicate it can be assumed that many irregular migrants are working in the informal sector. Moreover, irregular immigrants tend to be concentrated in southern European countries. One reason is geography since Greece, Italy, and Spain are closer to most emigration countries. Furthermore, southern European countries have more possibilities for irregular workers because they tend to have larger informal economies than their northern counterparts.

Orav (2021) indicated on the basis of the data from the European Commission and OECD in 2016 that refugees are one of the most vulnerable groups of migrants on the labor market. The data indicate that among economically active refugees, 1 in 5 are unemployed and 1 in 8 are unemployed for over a year or longer. Observing this data and the related results of the study, it takes refugees on average up to 20 years to reach an employment rate comparable to that of the native-born population. Such employment rates can be explained by their differing education levels: most asylum-seekers from Syria, Iran, and Iraq have at least upper secondary education, whereas the majority of those from Afghanistan, Eritrea, and Somalia have lower secondary education at best. They are mostly employed in low-skilled jobs. At the same time, the European economy has also foreseen a decline in low-skilled categories of employment.

⁶ Informal work covers all employment relations beyond the formal wage-labor market (like clandestine or illicit work), but it also includes myriad forms of self-employment. Estimates of the proportion concerning informal workers in industrialized economies vary between 2 and 15 percent (Aggarwal et. al. 2016).

Automation, artificial intelligence, and digitization are areas where Europe has a significant advantage. Therefore, it can be expected that low-skilled jobs will decline sharply in the future.

The members of diaspora communities that are part of migrant smuggling networks also have a significant effect on the informal labor sector. In addition to the fact that they provide support in arranging accommodation and travel, they also employ the informal labor market (EUROPOL, 2016). The complexity of the migrant smuggling networks determines also the type of facilitation services. These networks often use low-level contacts as drivers, crew members, scouts, or recruiting agents. Sometimes they are irregular migrants, who, at the same time, pay for their travel. These contacts typically operate as part of the network only for a limited time and are exchanged regularly.

4. BUSINESS PROCESS MODELS OF TOURIST AGENCY

The tourist industry has seen many changes within the business over the past few decades, and the most significant is definitely the accelerated development of the ICT sector. The development of the virtual world has led to the introduction of e-commerce and e-business which have influenced change in business models (Osterwalder 2004). One of the largest industries using internet services as a tool to introduce innovation in e-business is right within the travel sector (Chio et al., 2011). One of the tools is the emergence of online booking systems such as the Customer Reservation System (CRS) (Naqvi & Jia, 2014) and the Global Distribution System (GDS) (Gholami et al., 2017), as shown in Figure 2. This scheme aims to facilitate the business and reduce the perceived disadvantages during the process. It is evident that the client uses the services via intermediaries which can be social media or travel agencies that meet his/her needs. The travel agency may use the services of tour operators or offer its own engagement using CRS or GDS tools to carry out accommodation, transport and other tourist service booking tasks from other service providers.

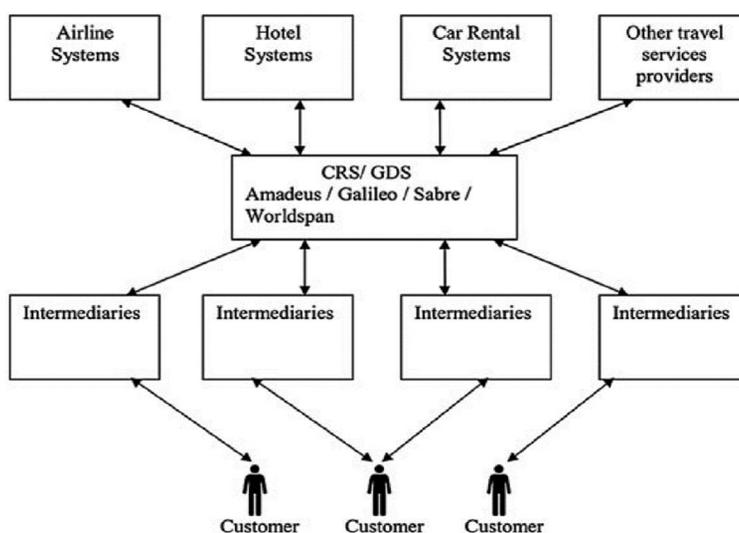


Figure 1. Customer Reservation System in Tourism

Source: Naqvi & Jia, 2014.

According to Corradini et al. (2018), the business process shown in Figure 3 represents a business model by which the travel agency constantly offers clients its services until the moment of positive response. By confirming the reservation, the client accepts one of the offered travel packages. The travel agency then sends a confirmation message and immediately finds a way of payment for the travel. Once the payment has been made, the agency sends a ticket and its activity ends.

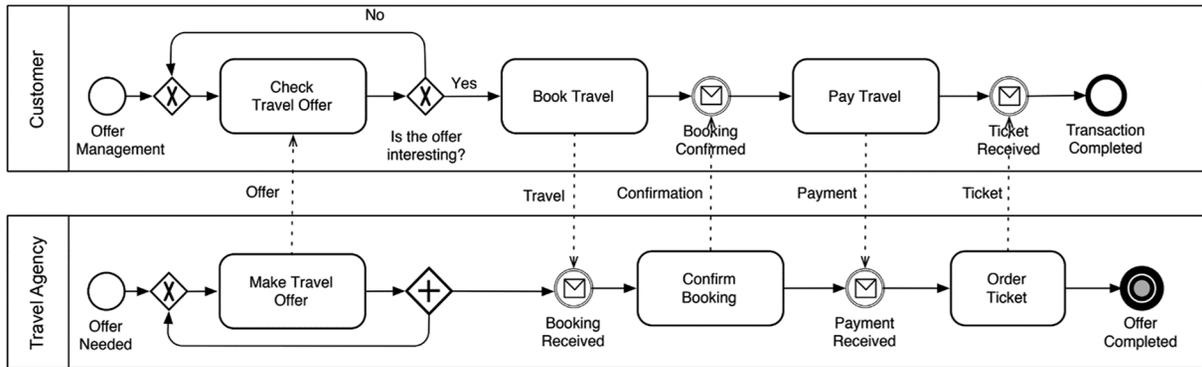
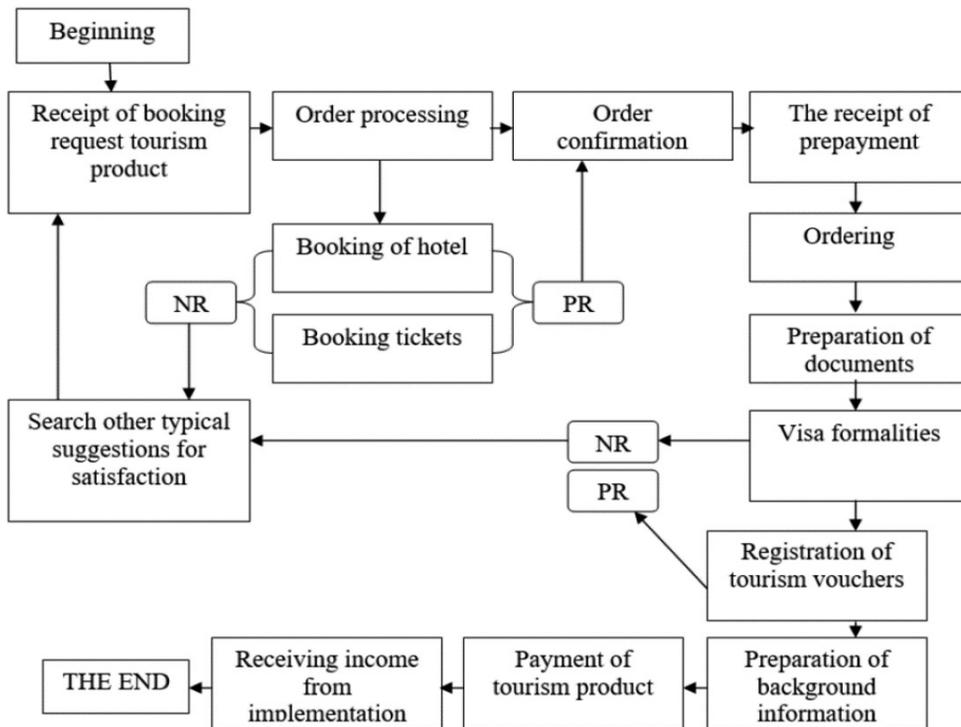


Figure 2. Business process model in Travel industry

Source: Corradini et al., 2018.



Remarks:

NR- negative response

PR- positive response

Figure 3. Structuring of business process implementation of tourist product

Source: Rogovyi et al., 2020.

A similar business model was observed in the Rogovyi et al. survey (2020), which also shows the structure within the implementation of the business process regarding the tourist product (Figure 4). The flow of activities in that case begins with the confirmation of the booking request, the client is offered the opportunity to book the hotel and the positive response to that activity leads to (pre)payment. If the client refuses the hotel reservation services, another form of accommodation is offered to satisfy the expectations. If a negative answer is received at the step related to the formalities for Visa, the course of activities leads to the search for other forms of solution. On the other hand, a positive response leads to the registration of tourist vouchers. Upon completion of the registration and preparation of basic information, the client concludes his/her payment of the tourist product and obtains an invoice for the paid service.

5. BUSINESS PROCESS MODELS OF SMUGGLING MIGRANTS

The migrant smuggling market is driven by the supply and demand of smuggling services to circumvent existing regulations. Advertising of this kind of business takes place in neighborhoods with migrant communities, on social networks, websites, or, for example, in refugee camps. Social-economic conditions, persecution, political instability, and family reunion are the reasons determining the demand for migration. Consequently, the demand for the provision of smuggling services is on the rise due to weak legal channels that are unable to meet the demand for regular migration, or due to the high cost of regular migration (UNODC 2018). Empirical research and evidence from other authors indicate the presence of divided opinions regarding the existence of a unique business model that includes migrant smuggling (Campana 2016).

„The organization of criminal groups and activities” by Carrington (2011) presents criminal networks. The opposite of the usual observation of governance based on hierarchy and market among economic stakeholders is precisely the idea of perceiving networks as a separate form of organization (Podolny & Page, 1998). Networks do not include explicit market criteria or hierarchy paternalism. A key component of the networking form of organization, or so-called business, is trust, and the organization of criminal activities is ideally carried out precisely through networks. The reason for this can be found in the circumstances with high dynamism, flexibility, greater adaptability, and the ability to create alliances between criminals, as well as between corrupt individuals (Williams, 2001). Schloenhardt (2003) relying on the research of other authors, highlights the diversity of smuggling activities and identifies three major categories of human trafficking:

- **Amateur smugglers:** most often provide only one segregated service, such as using their own vehicle or vessel to transport unregulated migrants.
- **International smuggling networks:** criminal organizations operating internationally by providing services from the country of origin, to the country of destination. In addition, the criminal organization provides a full range of services that meet the needs of irregular migrants. Services include the provision of false documents, accommodation, and support from transit countries.
- **Small groups of organized smugglers** - represent a combination of the previous two categories. It includes small, organized groups that specialize in transporting irregular migrants from their country of origin to their country of destination.

How much the smuggling service to another country /for irregular migrant or asylum seeker/ will cost depends on several key factors (Schloenhardt 2003; Bilger et. al., 2006):

- the scope and type of all activities covered by the payment (which transport will be used, whether false documentation is included in the service, or whether bribes to corrupt employees are also involved);
- distance of the destination (whether the migrant buys the service from one destination to another, or pays the services to different smugglers for different sections of the road);
- risk factors;
- countries involved;
- whether the service includes a family or group discount;
- whether a guarantee is also included in the service within which the smuggler undertakes to provide subsequent attempts which free of charge if the first fails.

According to Barker (2012), there is no universal business model for migrant smuggling, but several factors are highlighted from research by other authors: (1) there is a whole range of business models

that are adjusted depending on the circumstances and services, (2) different organizational structures are present, but fluid networks are more widespread than hierarchical organizations, (3) profit is the main motive for migrant smugglers, (4) organizers of the business model of migrant smuggling are highly flexible and adaptable, (5) business model of migrant smuggling is in line with normal market forces and applies to the practice of a classic company (advertising). It follows that smuggling shares common components with other types of organized crime, as well as legitimate markets. Furthermore, there are safe house leaders who also provide accommodation and food service. Logisticians and so-called experts have a key role in the smuggling industry. Logisticians will coordinate all activities and are very localized. On the other hand, there are professionals who are hired according to the needs of their skills (The Global Initiative Against Transnational Organized Crime 2018, 8). In their research, Reitano and Tinti (2015) presented the business model of smuggling through Egypt. Their example includes 50 migrants who paid \$2.000 per head to cross the sea (\$100.000 in total). *Brokers* from that amount are getting \$100 per head (\$5.000 in total) followed by *Mediators* who receive 10-15% of the migrant fee (approx. 14.250), then there are *Smugglers* who are getting 25% of the total money - and the main part of the money goes to the *Boss* (who cooperates with +/- 5 smugglers on average). According to the same authors, profile of the *Boss* represents a nexus between criminal networks and global nexus with smugglers. *Smugglers* possess local knowledge, and the profile can fit an ordinary businessman who is prepared to be violent for the purpose of protecting cargo. The profile of the *Mediators* collects money from the broker and can coordinate transportation. And *Brokers*, who are also important members of that chain, whose job is to take the money for the whole service. According to Yildiz (2017), there are several other important roles in the organizational chain of the business smuggling model. Among other roles mentioned above is *Watchman* who represents the person in charge of evading the control of smugglers by the police. *The owner of the deposit office* is the owner of a legitimate company that collaborates with smugglers. Migrants leave the money for smugglers in the deposit office safe. The money in the safe is a guarantee for the safe arrival of the migrant at the chosen destination. After confirming the safe arrival of the migrant at the destination, the smugglers take over the money stored in the safe. The research also found that some *hotel managers* cooperate with smugglers and treat them as travel agencies that provide them with clients regularly. Consequently, the role of *hotel managers/owners* in providing accommodation services for a particularly large group of migrants was mentioned in the organizational chain. *Small business owners of cafeterias and restaurants* provide a place used for meetings with smugglers. The owners of such restaurants also cooperate with smugglers and offer migrants food and essentials. The author also mentions *boat owners, bus company owners, the local community, and owners of private houses hiding migrants*. A similar model is mentioned in the case of The Global Initiative Against Transnational Organized Crime (2018) where there are two models mentioned, one for wealthy irregular migrants and one model for massive irregular migrant transition.

Full-package smuggling (Figure 5) is the name of a business model used for long-distance travel and crossing through several regions with frequent final destinations in Europe. On the other hand, the pay-as-you-go model represents a business model in which the destination country does not matter or is not even known. With full package service, migrants pay smugglers to organize every part of their journey. Such a business model includes transportation to the site, accommodation during the trip and falsified or illegally obtained documentation, integration support in the form of establishing a connection within the community, employment assistance, enrolment of children into local schools, and protection from authorities. All services within the business process are acceptable only to high-class migrants, given that such service is paid in advance, and costs about tens of thousands of dollars per person plus a fee (price in the Middle East and Africa) (The Global Initiative Against Transnational Organized Crime, 2018).

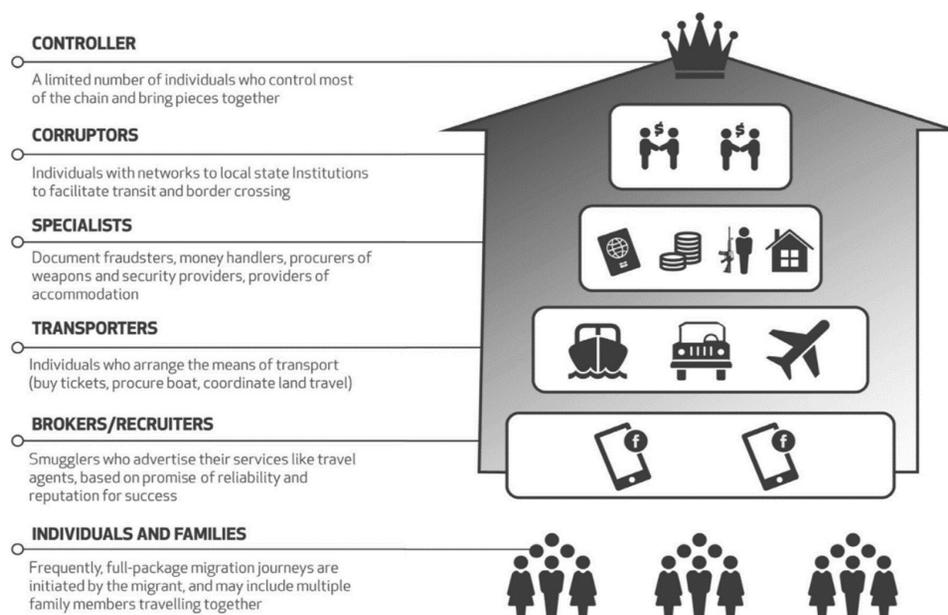


Figure 4. Full-package smuggling

Source: The Global Initiative Against Transnational Organized Crime, 2018.

The pay-as-you-go model (Figure 6). Due to its affordable price, it is a model for mass transport, used by most irregular migrants. All payments for this kind of transit are made in cash, and most of the revenue remains at the local level.

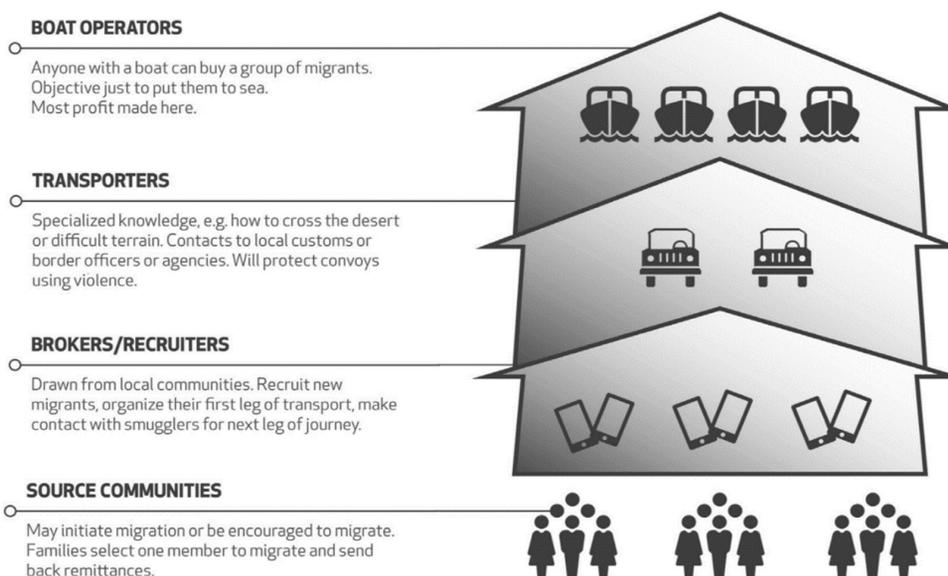


Figure 5. Pay-as-you-go business model

Source: The Global Initiative Against Transnational Organized Crime, 2018.

6. SIMILARITIES BETWEEN THE TWO BUSINESS PROCESS MODELS

This paper develops business model frameworks for migrant smuggling and tourist agency, hence applying the business model canvas (BMC) by Osterwalder and Pigneur (2010). Osterwalder and Pigneur (2010) represent the outline of the business model. This figure explains the business model of the organization through nine blocks and interrelated activities (Osterwalder & Pigneur, 2010): (1) Key partners represent a network of suppliers and partners involved within the business model;

(2) Key activities are understood as a description of the activities that an organization must run for the business model to work (problem-solving, networking, and the like); (3) Key resources represent the most important asset needed to make the business model work; (4) Value propositions represent a set of products and services that make up value for a particular group of customers. Value proposition includes activities such as risk reduction, the performance of work, status, price, cost reduction, accessibility, and usability; (5) Customer relationship determines the type of relationship to be established with the target customer; (6) Channels represent the way to communicate with the target market; (7) Customer segments refer to the target market that is to be covered: it can consist of groups, individuals, or organizations; (8) Cost structure describes all costs incurred to make the business model work; (9) Revenue streams represent the money the organization generates from each block. The three blocks of key resources, key activities and key partnerships are related to internal processes, while customer segments, channels and customer relationships are related to customers. The central part of the description is related to value propositions, while the cost and revenue structure is shown at the bottom of the template (Osterwalder & Pigneur, 2010). As Barker (2012) in her research already mentioned, the business model of migrant smuggling actually possesses the characteristics of legitimate business models referring to companies that are present on the market. Below, in table 1 we present a comparison and similarities between the business model of migrant smuggling and the travel agency.

Table 2. Similarities between the two business process models

Activities	Business model of tourist agency	Business model of migrant smuggling
Key partners	<ul style="list-style-type: none"> • Tour-operator • Hotels • Transport companies • Local entrepreneurs • Attractions • Restaurants • Insurance providers • Resorts • Vacation rentals • Travel agency affiliates 	<ul style="list-style-type: none"> • Corruptors • Specialists for document fraud • Transporters • Brokers/Recruiters/Smugglers • Owner of the deposit office • Hotel managers/owners • Safehouse leaders • Small business owners of cafeterias and restaurants • Local communities
Key activities	<ul style="list-style-type: none"> • Service operation • Service quality • Marketing 	<ul style="list-style-type: none"> • Road organization • Advertising • Transport
Key resources	<ul style="list-style-type: none"> • Human resources • Price • Technology 	<ul style="list-style-type: none"> • Human resources
Value propositions		
	<ul style="list-style-type: none"> • All-inclusive Travel package • Custom Travel Package • Standard average pricing • Personal agent service • Add-on services (insurance) • Cheapest prices • Reduction of risk • Useful app • Useful travel content • Tour guide • Using payment gateway 	<ul style="list-style-type: none"> • Full-package smuggling • The pay-as-you-go model • Tour Guide • Reduction of risk • “Getting the job done”
Customer relationships	<ul style="list-style-type: none"> • Direct communication • e-mail • Feedback • Loyalty program • Want personal assistance • Operational communication 	<ul style="list-style-type: none"> • Direct communication • Communication through mediator

Channels	<ul style="list-style-type: none"> • Online website • Social media • Brochure • Mobile • Head office sales • Partner channels • Franchise agent sales • Traditional brand advertising channels, like TV, radio, magazines 	<ul style="list-style-type: none"> • Social media • Mobile • Internet
Customer segments	<ul style="list-style-type: none"> • Family • Individuals • Student • Young couple • Traveler • Company 	<ul style="list-style-type: none"> • Individuals • Businessman • Family
Cost structure	<ul style="list-style-type: none"> • Human resources (operational cost, salary, marketing campaigns) • Paying service to the Partners' assets 	<ul style="list-style-type: none"> • Human resources • Partners
Revenue streams	<ul style="list-style-type: none"> • Advertising • Partnership • Reservation system 	<ul style="list-style-type: none"> • Partnership • Road organization

Source: Made by authors modeled on Osterwalder and Pigneur (2010) and Nurbadi et al. (2019).

According to the blocks covered in Table 1, it can be concluded that the business model of migrant smuggling and the business model of travel agencies have many common activities in all nine blocks. Business models of migrant smuggling carry out all activities as carried out by a legitimate organization, in this case, a tourist agency.

7. FUTURE RESEARCH DIRECTIONS

One should start with the premise that in the future ICT will only develop and so will social media. So the difference in living conditions and how to bridge it will become more and more visible, thus also causing further action by the nationals in deprived areas. The EU receiving states as well as the EU as a community did not, up to now, demonstrate the ability to regulate migrations as sustainable and legal processes. So it is believed that the phenomenon elaborated in this chapter will require further extensive research mostly in the field of institutional–legal settings. It is important to observe that while the EU taken as an example in this text has been exposed to unwanted developments, the existing legislation(s) on the community as well as on the national levels is/are still prone to evasion. Especially in recent times, the EU is subject to certain instabilities (rejection of renaissance and enlightenment achievements by new members such as Poland, Hungary and Slovenia) and issues (for instance: how to coordinate the environmental policies). So, the EU will have to overcome disintegration processes and move in the opposite direction: the problem of illegal migrations will require deepening of the tolerance towards other (ethical) aspects of our community. This is the “*conditio sine qua non*” for successful legal coordination that should take place. In this respect, some legal research initiated by the Commission or any of the top EU institutions would be quite helpful.

8. CONCLUSION

By using the approach of business model comparison between the tourist company and business unit dealing with immigrant smuggling, this chapter clearly proved that although they should be represented on a different side of legality, both activities follow their business goals.

They are seeking for chances in the market related to the field of human migration. So, in principle, they should adapt to the principles of market regulation. The fact that immigrants' smuggling is illegal, however, requires restrictive measures in the form of prevention of such business operations. This should not exclude this business from the surveillance of market regulation policies. Here, the room for servicing of sustainable migrations approved by sending and host countries should be assured also to those who find themselves in this illegal business. Anyway, before getting included in legal business they should abandon massive fraud practice. Again, one should not misjudge the emerging and functioning activities on the supply side, as practically in all fields of human life they are causing market clearing - when the gaps between demand and supply exist. We should not forget that in this way suppliers overcome the difference in information by which buyers and sellers connect and enter the business.

But first thing first. Following the external costs that immigrant smugglers have been inflicting and are presented in this chapter, the market regulation and prevention (similar to the one with the weapons trade, but hopefully more efficient) should be implemented. Here we are referring to legal measures. The EU legal framework actually started in 1997 by creating an area of freedom, security and justice (AFSJ), as a part of the Treaty of Amsterdam (European Parliament, 2021). It addressed particularly the part of legislation for the prevention of migrant smuggling. Council Framework Decision of 28 November 2002 (European Council, 2002) requires the member states to pass legal measures referring to immigrant smuggling. Apart from the protection of refugees and asylum seekers, the member states' legislation should address the prevention of criminal practice by passing laws and provisions regarding penalties, liability and sanctions of legal persons with these activities as well as their jurisdiction, extradition and prosecution.

Although the EU legal policy is devoted to "dismantling the smuggling networks and undermining their business models" (European Parliament, 2021), as shown in this chapter, harmonization of national laws in member countries has still not reached the level at which it would be able to prevent misunderstandings and inconsistent procedures in individual cases - be it on the national level or even within national borders. Typical here are examples of weak punishment, or even freeing nationals who were caught smuggling illegal immigrants over the Slovenian border (Slovenske novice 2020; Spletni časopis 2019).

Turning back to the main topic of this article we would also urge the EU as well as individual member states to recognize the fact that the processes of illegal migrant smuggling emerged from the situation which made room for the market to appear and function. Apart from preventing these practices by means of a restrictive application of legislative order, there should also exist some regulations related to factors and investment pouring into the illegal activity of migrant smuggling. They could help to find some kind of amnesty by using and complying with the rules of (any) market operation.

REFERENCES

- Aggarwal, V., La China F., and Vaculova L. (2016). *Irregular Migration, Refugees and Informal Labour Markets in the EU: The rise of European Sweatshops?* Brussels: EIAS – European Institute for Asian Studies a.s.b.l.
- Antonopoulos, G. A., & Winterdyk, J. (2006). The smuggling of migrants in Greece: An examination of its social organization. *European Journal of Criminology*, 3(4), 439-461., Retrieved on November 24, 2021, at: <https://journals.sagepub.com/doi/abs/10.1177/1477370806067912>

- Barker, C., (2012). *The people smugglers business model.*, Parliament of Australia, Department of Parliamentary Services, Retrieved on November 04, 2021, at: https://parlinfo.aph.gov.au/parlInfo/download/library/prspub/2262537/upload_binary/2262537.pdf;fileType=application/pdf
- Bilger, V., Hofmann, M., & Jandl, M. (2006). Human smuggling as a transnational service industry: Evidence from Austria. *International Migration*, 44(4), 59-93., Retrieved on November 03, 2021, at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2435.2006.00380.x>
- Bundeskriminalamt. (2021). *Schleusungskriminalität: Bundeslagebild 2020 (Gemeinsames Bundeslagebild des Bundeskriminalamts und des Bundespolizei)*. Wiesbaden: BKA.
- Bundeskriminalamt & Bundespolizeipräsidium. (2015). *Schleusungskriminalität: Bundeslagebild 2015 (Gemeinsames Bundeslagebild des Bundeskriminalamts und des Bundespolizeipräsidiums)*. Wiesbaden: BKA.
- Bundeskriminalamt & Bundespolizeipräsidium. (2017). *Schleusungskriminalität: Bundeslagebild 2016 (Gemeinsames Bundeslagebild des Bundeskriminalamts und des Bundespolizeipräsidiums)*. Wiesbaden: BKA.
- Campana, P. (2016). Explaining criminal networks: Strategies and potential pitfalls. *Methodological Innovations*, 9, 2059799115622748., Retrieved on October 14, 2021, at: <https://journals.sagepub.com/doi/full/10.1177/2059799115622748>
- Campana, P. (2020). Human smuggling: structure and mechanisms. *Crime and Justice*, 49(1), 471-519., Retrieved on November 24, 2021, at: https://www.repository.cam.ac.uk/bitstream/handle/1810/304068/C&J%2049__campana_accepted%20version.pdf?sequence=1
- Carrington, P. J. (2011). Crime and social network analysis. *The SAGE handbook of social network analysis*, 236-255. Retrieved on October 14, 2021, at: <https://books.google.si/>
- Corradini, F., Muzi, C., Re, B., & Tiezzi, F. (2018). A classification of BPMN collaborations based on safeness and soundness notions. *arXiv preprint arXiv:1809.06178.*, Retrieved on October 15, 2021, at: <https://arxiv.org/abs/1809.06178>
- European Commission. (n.d.). *Migration and Home Affairs: Irregular migration*. Retrieved on November 8, 2021, at: https://ec.europa.eu/home-affairs/pages/glossary/irregular-migration_en
- European Council. (2002). *Council framework Decision of 28 November 2002 on the strengthening of the penal framework to prevent the facilitation of unauthorised entry, transit and residence*. Official Journal L 328, 05/12/2002 P. 0001 – 0003
- European Council. (2021). *EU migration policy*. Retrieved on October 11, 2021, at: <https://www.consilium.europa.eu/en/policies/eu-migration-policy/>
- European Parliament. (2021). *Understanding EU action against migrant smuggling*. European Parliamentary Research Service. EU policies – Insights PE 659.450 – January 2021. Retrieved on November 8, 2021, at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/659450/EPRS_BRI\(2021\)659450_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/659450/EPRS_BRI(2021)659450_EN.pdf)
- European Union Agency for Law Enforcement Cooperation. (2020). *EMSC 4th Annual activity report – 2020*. Retrieved on October 10, 2021, at: <https://www.europol.europa.eu/publications-documents/emsc-4th-annual-activity-report-%E2%80%932020>
- EUROPOL. (2016). *Migrant smuggling in the EU*. Retrieved on October 10, 2021, at: <https://www.europol.europa.eu/publications-documents/migrant-smuggling-in-eu>
- EUROPOL & INTERPOL. (2016). *Migrant smuggling networks: Joint Europol-INTERPOL Report*. Retrieved on October 10, 2021, at: <https://www.europol.europa.eu/publications-documents/europol-interpol-report-migrant-smuggling-networks>
- EUROSTAT. (2013). *Glossary: Business functions*. Retrieved on October 11, 2021, at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Business_functions

- Fallone, A. (2021). *Analytical Report. Social Capital and Transnational Human Smuggling: What is the Impact of Counter-Smuggling Policies?* Prague Process Secretariat. Vienna 2021. Retrieved on October 10, 2021, at: <https://www.pragueprocess.eu/en/migration-observatory/publications?task=document.preview&id=293&ml=1&iframe=1>
- Gholami, R., Ravishankar, M. N., Shirazi, F., & Machet, C. (2017). An exploratory study on sustainable ICT capability in the travel and tourism industry: the case of a global distribution system provider. *Communications of the Association for Information Systems*, 40(1), 22.. Retrieved on October 15, 2021, at: <https://aisel.aisnet.org/cais/vol40/iss1/22/>
- Golovko, E. (2019). *Players of many parts: The evolving role of smugglers in West Africa's migration economy*. Dakar: Mixed Migration Centre. Retrieved on October 11, 2021, at: https://mixedmigration.org/wp-content/uploads/2019/06/065_briefing-paper_smugglers_wa.pdf
- International Organization for Migration. (2021). *Key migration terms*. Retrieved on October 11, 2021, at: <https://www.iom.int/key-migration-terms>
- Kar, S., & Beladi, H. (2017). A Model of Smuggling and Trafficking of Illegal Immigrants with a Host Country Policy. *Review of Development Economics*, 21(3), 698-712, Retrieved on November 24, 2021, at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/rode.12307>
- Majumdar, M. (1998). In: Majumdar, M. (Ed.) *Organizations with incomplete information* (pp. 1-19). Cambridge: Cambridge University Press.
- Migration Data Portal. (2020). Irregular migration. Retrieved on October 11, 2021, at: <https://www.migrationdataportal.org/themes/irregular-migration>
- Nurbadi, R., Amyus, A., Pratama, B., Kanz, A. F., Fajar, A. N., & Wang, G. (2019). Implementation of Smart Travel System For Support Travel And Accommodation Industry. In *Journal of Physics: Conference Series* (Vol. 1235, No. 1, p. 012029). IOP Publishing., Retrieved on October 15, 2021, at: <https://iopscience.iop.org/article/10.1088/1742-6596/1235/1/012029/meta>
- Naqvi M.A., Jia H. (2014) *Computer Reservation System, tourism*. In: Jafari J., Xiao H. (eds) *Encyclopedia of Tourism*. Springer, Cham. https://doi.org/10.1007/978-3-319-01669-6_510-1, Retrieved on October 11, 2021, at: https://link.springer.com/referenceworkentry/10.1007%2F978-3-319-01669-6_510-1
- Orav, A. (2021). *Labour market integration of asylum-seekers and refugees*. Brussels: EPRS (European Parliamentary Research Service).
- Osterwalder, A. (2004). *The business model ontology: A proposition in a design science approach*. Institut d'Informatique et Organisation. Lausanne, Switzerland, University of Lausanne, Ecole des Hautes Etudes Commerciales HEC, 173., Retrieved on October 15, 2021, at: <https://www.patrinum.ch/record/15985/usage>
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers* (Vol. 1). John Wiley & Sons., Retrieved on November 4, 2021, at: <https://books.google.hr>
- Podolny, J. M., & Page, K. L. (1998). *Network forms of organization*. *Annual review of sociology*, 24(1), 57-76., Retrieved on October 14, 2021, at: <https://www.annualreviews.org/doi/abs/10.1146/annurev.soc.24.1.57>
- Radner, R. (1970). Problems in the theory of markets under uncertainty. *The American Economic Review*, 60(2), 454-460., Retrieved on October 14, 2021, at: <https://www.jstor.org/stable/1815845>
- Reitano, T., & Tinti, P. (2015). Survive and advance-the economics of smuggling refugees and migrants into Europe. *Institute for Security Studies Papers*, 2015(289), 32., Retrieved on October 15, 2021, at: <https://globalinitiative.net/wp-content/uploads/2015/12/Reitano-Tinti-Survive-and-advance-the-criminal-economy-of-migrant-smuggling-Dec-2015.pdf>

- Roberts, B., Hanson, G., Cornwell, D., & Borger, S. (2010). *An analysis of migrant smuggling costs along the southwest border*. DHS Office of Immigration Statistics Working Paper., Retrieved on November 24, 2021, at: <https://www.dhs.gov/sites/default/files/publications/Smuggling%20Costs%202010.pdf>
- Rogovyi, A., Serbov, M., Korol, S., gizi Akhundova, A. H., & Suzdaliyeva, O. (2020). Features of business processes model building in the field of international tourism business. *International Journal of Entrepreneurship*, 24, 1-7., Retrieved on October 15, 2021, at: <https://www.abacademies.org/articles/features-of-business-processes-model-building-in-the-field-of-international-tourism-business-9154.html>
- Schloenhardt, A. (2003). *Migrant smuggling: Illegal migration and organised crime in Australia and the Asia Pacific region*. Brill Nijhoff., Retrieved on November 3, 2021, at : <https://brill.com/view/title/8821>
- Slovenske novice. (2020). Varnostnica tihotapila migrante. 15.09.2020. Retrieved on November 10, 2021, at: <https://www.slovenskenovice.si/kronika/doma/varnostnica-tihotapila-migrante/>
- Spletni časopis. (2019). Višje sodišče udarilo po mizi: tihotapljenje migrantov ni nobena pomoč ljudem. 08/11/2019. Last updated on: 03/01/2021. Retrieved on November 24, 2021, at: <https://spletnicasopis.eu/2019/11/08/visje-sodisce-svercanje-pakistancev-ni-pomoc-ljudem/>
- The Global Initiative Against Transnational Organized Crime. (2018). Understanding contemporary human smuggling as a vector in migration. Retrieved on October 15, 2021, at: <https://globalinitiative.net/wp-content/uploads/2018/05/TGIATOC-Understanding-Contemporary-Human-Smuggling-1936-hi-res.pdf>
- UNODC (2018). *Global Study on Smuggling of Migrant*. United Nations Office on Drugs and Crime. Retrieved on October 15, 2021, at: https://www.unodc.org/documents/data-and-analysis/glosom/GLOSOM_2018_web_small.pdf
- Williams, P. (2001). Transnational criminal networks. *Networks and Netwars: the future of terror, crime, and militancy*, 1382, 61-97., Retrieved on November 4, 2021, at: <https://books.google.si>

