

**Tertiary Sector Economics**

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**INTERNATIONAL COMPETITIVENESS
OF THE TOURISM SECTOR IN GREECE****Abstract**

The paper analyzes the importance of international competitiveness in the tourism sector during the period of recovery from the pandemic crisis of 2020, in particular the competitiveness of the travel and tourism industry in Greece. Trends in tourist arrivals and receipts from inbound tourism and accommodation facilities show a vigorous performance of the Greek tourism sector before the pandemic, its deep crisis in 2020, and its rapid recovery within the next 2 years under a set of government support measures. Comparative correlation analysis for two samples (global and regional) was used to identify significant factors contributing to the recovery of the relative competitiveness of tourism services exports in 2019-2022. Regression analysis confirmed the significance of improved interest in cultural attractions, environmental sustainability, absence of organized violence, and the substitution effect between inbound and domestic tourism; it also suggested an atypical effect of accommodation capacity growth during the analyzed recovery period. A SWOT analysis conducted using the Travel & Tourism Development Index showed that the Greek tourism sector has more strengths and opportunities than weaknesses and threats. Its strengths include trade and fi-

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nancial openness, security, developed tourism and medical infrastructure, private and public investment in the sector, and high labor productivity in hotels and restaurants; while its main weaknesses are high prices, seasonality, and several other issues.

Key Words:

competitiveness, economy of Greece, inbound tourism, international travels, marketing SWOT analysis, Travel & Tourism Development Index.

JEL: Z33, Z32, M31, D41.

4 tables, 42 references.

Problem Statement

International tourism is an important source of income for Mediterranean countries. Beautiful nature, vast cultural heritage, geographical proximity to the large European market, and the resources for alternative types of tourism became great competitive advantages for Greece. Nevertheless, Greece has to operate in a competitive environment where other neighboring destinations try to attract tourists with both standard options (sun and beach tourism, visits to historical places, etc.) and local peculiarities and pricing.

International tourism has been a growing industry worldwide in recent decades. In Greece, it has helped to smooth the effects of the financial crisis that began in 2008, as many other European countries experienced faster recoveries, leading to spillover effects for Greece through various channels, including inbound tourism. Despite good prospects in the last decade, the COVID-19 pandemic was a major shock for many industries, especially international tourism. Like many other countries reliant on tourism revenue, the Greek economy has suffered substantial damage and struggled for over two years to recover its tourism sector. Nevertheless, Greece's recovery in this sector was faster than average.

The World Economic Forum is a leading source of information on competitiveness indicators in the travel and tourism industry. These indicators facilitate comprehensive assessments of the various factors that affect tourism performance. However, traditional competitiveness factors may have affected the industry differently than usual during the pandemic and in the period of post-pandemic recovery when existing capacities were underutilized. **The aim of this paper** is to verify the determinants of international competitiveness in the tourism industry during the recovery period and to assess recent trends in inbound tourism in Greece, considering both short-term and long-term factors of competitiveness.

Literature Review

The importance of tourism for the Greek economy has stimulated research on its evolution, competitiveness and further development prospects.

The tourism sector contributed 1% to GDP growth in 2013. In 2000-2013, the tourism multiplier was estimated at 1.21, as there were spillover effects on other related industries. For better efficiency, it was recommended to promote those areas of tourism that provide more direct, indirect and induced effects (Kasimati, 2016).

In 2015, Greece, Spain and Tunisia were the most competitive destinations among the Mediterranean countries, as indicated by the index of Tourism Policy and Enabling Conditions. Within the small sample limited to Mediterranean economies, the index did not show significant correlation with tourism income or the number of tourists (Goral, 2016). Conversely, in a large sample comprising 138 countries, the number of tourists and tourism income demonstrated significant positive correlations with the Travel and Tourism Competitiveness Index, while exhibiting negative correlations with the Tourism Price Competition index (Göral, 2016). These findings proved the efficiency of the competitiveness index and highlighted the importance of price competition in addition to competition based on quality.

In general, the Travel Competitiveness Index for EU countries is mostly associated with infrastructure development, natural and cultural resources. In the case of Greece, factors such as favorable environment and tourism policy and enabling conditions also play significant roles (Sklyarenko & Khanova, 2018). Anastasiou et al. (2022) proposed a tourism-specific business expectations sentiment index that can be used to forecast foreign tourist arrivals in Greece. The index is based on managers' expectations of their upcoming business situation (demand for accommodation offered by their companies and reservations of the services of travel agencies and tour operators over the next 3 months). In addi-

tion, changes in tourist arrivals exhibit prolonged effects, proving certain inertia in competitiveness trends.

Menegaki et al. (2019) identified several competitive advantages of Greece as a tourism destination: a knowledgeable and expert labor force, rich culture, 18 UNESCO World Heritage sites, ascending AirBnB sector with more than 100 thousand homes, biodiversity, and absence of terrorist attacks. Common strikes, particularly in the transportation sector, pose a disadvantage. These strikes are announced only a few days before they start and are often organized during holidays to exert more pressure on politicians.

As for accommodation facilities, 43% of the 9,677 Greek hotels were of the 2-star category and targeted toward budget travelers in 2013. Five-star hotels accounted for less than 4%, even though their share of the total number of beds was higher at 15%. The share of 5-star hotels in the total number of rooms increased from 2009 to 2013. Additionally, they operated all year-round, unlike most family-owned 1-star hotels, which suffered more from the crisis (Papatheodorou & Arvanitis, 2014). Belias et al. (2017) observed a shift towards high-quality and competitive tourism services in the years preceding their study.

Cultural heritage with a long history since ancient period plays a particularly important role in Greece. Păzrjol et al. (2018) used a questionnaire method to analyze the interest of mainly Romanian people in cultural tourism in Greece. Forty-eight percent of respondents were interested in the landscapes, 44% in historical buildings, 38% in cultural events, and 36% in places of worship. They mentioned Mount Athos, Acropolis, Meteora, the Venetian Castle in Zakynthos as the main national cultural assets. The respondents found local prices affordable, but 56% noted insufficient promotion of cultural tourism and expected better online promotion efforts.

The level of IT use is insufficient in many Greek tourism providers, which are mostly small family businesses. This hampers their global competitiveness. An intelligent information system was presented to assist consumers of medical tourism services (Halkiopoulos et al., 2021). Dionysopoulou & Tsakopoulou (2021) described the digitalization efforts in Greek small and medium tourism enterprises (including digital skill-building policies, facilitation for start-ups and innovations, e-governance and financial support). Meanwhile, social media have become increasingly important as distribution channels for tourism services, according to a survey of hotel and tour operator managers in Crete (Fountoulaki et al., 2015).

Vourdoubas (2020) examined the link between agriculture and tourism, focusing on the case of the island of Crete. The wider use of local food, together with an information campaign promoting a healthy and tasty Cretan diet, can increase the region's tourism competitiveness and reduce the carbon emissions caused by transporting food from elsewhere.

At the regional level, Greek islands have developed their brands demonstrating their identity and associated with quality of tourism services (Rossidis et al., 2019). Triarchi et al. (2021) used a case study of Epirus to compare its advantages (natural, historical and cultural resources) and disadvantages (insufficient infrastructure, government policy, promotion, stakeholders' collaboration) as a tourist destination. Varelas and Vrionis (2020) focused on the peninsula of Kassandra, where tourism capacities were found to be below the needs of a large number of tourists during high season. A survey of entrepreneurs showed that only 30% of the businesses operated year-round. Panas et al. (2017) noted negative trends in Athens, despite its traditional image as an attractive tourist destination, in the years leading up to their study.

At the micro-level, research has shown that tourist satisfaction with travel costs in Greece is positively associated with the tourism product, tourism product attributes and tourism product management (Chaitip, 2010). Dimitrić et al. (2019) analyzed profitability factors for hotel companies in Mediterranean countries from 2007 to 2015, revealing positive impacts of the cash flow to operating revenue ratio and, in most cases, the net asset turnover ratio. However, unlike other countries in the sample, Greece did not show a positive association between profitability and the solvency ratio (equity to total sources of financing). Unlike in Spain and Portugal, older hotels in Greece tend to be more profitable than new ones. Velisariou & Georgedaki (2023) identified management imperfections in hotels across the Crete region. They found that only half of these hotels employed performance indicators and every fourth hotel was struggling to accurately calculate its costs. A more promising perspective on company activities was proposed in a case study of a business survey conducted in Messinia (Drakakis et al., 2017), suggesting that large tourism enterprises can help to develop local tourism production systems rather than simply competing with other local businesses. This approach can help to enhance the visibility of the region, improve transportation routes leading to it, and facilitate the sharing of expert knowledge with smaller businesses.

Business cycles are another significant topic of discussion in research. From 2002 to 2013, Greek regions that attracted more foreign tourists benefited more than those specializing in domestic tourism. The latter suffered from a drop in demand due to the economic crisis and high unemployment since 2008. Despite an increase in the number of arrivals and nominal receipts, the crisis led to a 20% decrease in real per capita receipts (Papatheodorou & Arvanitis, 2014). The situation was different in 2020. The Greek tourism sector, which contributed nearly 20% of the GDP before the pandemic, experienced an abrupt decrease in the number of flights and visitors. In 2020, inbound tourism, originally more important, was surpassed by domestic tourism in terms of tourism expenditure (Medová et al., 2021). Thus, while foreign tourists were a lifeline for the Greek economy during the previous crisis, domestic tourists helped tourism businesses to survive during the pandemic period.

There are claims that, despite the substantial contribution of tourism to the Greek economy, the government's tourism strategy was not well elaborated. The passive "sun, sea, sand" model, which was the focus of local communities and tourism businesses, did not align with the modern conditions of international competition with neighboring countries (Nousia et al., 2018). A survey of tourism businesses in the Central Macedonian Region receiving subsidies under the Operational Program for Competitiveness, Entrepreneurship and Innovation revealed a preference not to invest in less developed territories. Consequently, despite the aid allocated to the sector, the results were insufficient to reduce regional disparities, as shown by a survey conducted in 2018 (Balomenou et al., 2021). Tzioras (2019) emphasized that better and more coherent coordination and planning would be beneficial for the tourism industry in Greece. Changes in ministers and other top officials have led to significant shifts in planning.

However, there are also studies that focus on the measures taken. Financial support for small and medium enterprises has been provided through the Entrepreneurship Fund of the Hellenic Fund for Entrepreneurship and Development. In addition to general programs supporting various SMEs, a more specialized Island Tourism Entrepreneurship program was launched in 2013 for micro and small businesses, including both existing ones and start-ups. Tourism-related businesses could use borrowed funds to purchase new equipment at low interest rates (with rates even as low as 0% for small islands). Repayment of the principal is made only during the high season, while in the low season, only interest is repaid, smoothing the effect of seasonality on tourism industry. This facility is especially important, as the tourism sector had a relatively low share of bank loans, resulting in a situation where new investments in fixed assets were below the depreciation of existing assets. The instrument may also help less-promoted islands to gain a better share of the tourism market, as there was a significant concentration of visits to the most well-known islands (OECD, 2017).

The Greek government implemented various measures to support the tourism sector during the pandemic. These measures included fiscal support for tourism enterprises, suspension options for tax and insurance obligations, rent reductions, payments to workers with temporarily suspended contracts, education initiatives, digital marketing tools, and safety measures information for potential tourists, communication lines for tourism operators, differentiated health safety approaches for various regions of Greece, issuance of digital vaccination certificates, and subsidies for low-income individuals for domestic tourism (UNWTO, 2021). These measures may have contributed to ensuring an earlier recovery of the tourism industry.

Some policy factors extend beyond the activities of the government (such as common EU policies or business self-regulation). On the one hand, joining the eurozone has benefited the tourism industry in Greece. The appreciation of the euro could potentially increase the incomes of tourism enterprises, as the demand for Greek tourism services tended to be inelastic, while tourists were more sensi-

tive to air travel costs (Thompson & Thompson, 2010). However, it was later argued that the overvaluation of the euro and austerity policies were the main factors undermining Greek competitiveness. For example, the hotel room prices in Greece were almost twice as high as in Turkey, Egypt, Bulgaria, Romania, and Hungary (Katsanevas, 2016). Kontis and Gkoumas (2017) focused on the “Greek Breakfast” program implemented by the Hellenic Chamber of Hotels, which aimed to improve hotel breakfast meals by enriching their content with local agro-dietary products.

Several studies are devoted to niche tourism, either by type of activity or by target customers. A mixture of the traditional tourism model and alternative tourism has been proposed to avoid environmental and social problems in the central Aegean islands under a possible uncontrolled growth of tourism. The alternatives could include ecotourism, diving, visiting archaeological trails, museums and cultural sites, villages, religious sites and events (Tselentis et al., 2012). Delitheou et al. (2010) advocated the diversification of the Greek tourism product through the development of conference tourism. This could help to reduce the seasonality of tourism. Greece already had sufficient infrastructure capacity (conference centers), but lacked marketing efforts and direct flights to the main conference destinations (besides Athens and Thessaloniki).

Greece has many advantages for the development of yachting tourism. However, after the 2008 crisis, more than 30% of the moored yachts began to dock in other Mediterranean countries due to issues related to tax reforms, legislation, coastal activities, and berthing capacity (Chen et al., 2016). In addition, during the pre-pandemic period of 2011-2017, there was a downward trend in Greek cruise tourism, when the number of visitors decreased from 6.1 million (5.3 thousand cruise ship arrivals) to 4.5 million (2.8 thousand cruise ship arrivals), which has since been reversed (Papadopoulou, 2020). Tsafoutis & Metaxas (2021) describe the possibilities for the development of fishing tourism in Greece based on semi-structured interviews with fishermen. Fishing tourism is a relatively new and sustainable type of economic activity that generates additional income for fishermen while also protecting the marine environment by limiting the use of fishing gear compared to full-scale fishing. It also includes elements of environmental education and can smooth out the seasonality of tourism. However, there is a lack of government promotion for fishing tourism and some legal uncertainty. The number of fishing tourism license holders in 2021 was close to 200, with the majority located on islands.

Thermal springs are another niche asset. In 2014, almost 2/3 of customers spent more than a week in thermal spa installations. Daily spending was up to 30 euros in 86% of cases. However, the high seasonality of tourism in Greece remained a problem (almost 90% of visitors came in August and September) and there was potential to attract thermal tourists throughout the year. Sixty-three percent of respondents favored the development of alternative forms of tourism in their region, 58% supported the modernization of the existing accommodation fa-

cilities, and 53% supported a special tourism program (Nikoli & Lazakidou, 2019b). A survey conducted in 2015 showed that people with higher education and income demanded better quality, while other visitors were significantly more satisfied with the facilities. As for thermal tourism business providers, 88% expected to expand their services. They mentioned Italy as their main competitor (Nikoli & Lazakidou, 2019a).

Despite the progress made, there is still a lack of infrastructure to accommodate tourists with disabilities, according to opinion polls. Almost 90% of respondents said that the infrastructure abroad was better than in Greece in terms of accessibility. In addition, 62% of the respondents indicated that they had experienced mobility difficulties. More than 50% expressed satisfaction with the service provided by the staff in accommodation and tourist areas (Stankova et al., 2021). Varelas & Vrionis (2020) also concluded that, despite the generally good accessibility of beaches and village centers in the peninsula of Kassandra, most entrepreneurs felt that accessibility for disabled people was insufficient.

Menegaki et al. (2019) analyzed the impact of China on the Greek tourism sector. Chinese tourists played an important role in reducing seasonality, as their vacations take place in winter, unlike the summer high season for European travelers. In addition, China has invested in Greece's seaport infrastructure.

Given the specific conditions of the modern economic situation, characterized by the recovery from the pandemic crisis, further analysis of competitiveness trends and factors affecting the Greek tourism industry is necessary.

Methodology

First, general trends in the development of the tourism industry in Greece are considered, including both long-term trends over the last decade and shorter-term trends covering the period of the pandemic and subsequent recovery.

This paper then examines the relationship between different components of the Travel & Tourism Development Index (World Economic Forum, 2022) and the pace of recovery of inbound international tourism following the Covid-19 pandemic. The pace of recovery is measured as the growth in the share of travel services in a country's total services exports in 2022 compared to the pre-pandemic year of 2019 (World Bank, n.d.). This variable assesses the relative competitiveness of the sector and serves as the dependent variable. A similar dynamic approach is applied to the independent variables, where the differences in the values of the components of the Travel & Tourism Development Index for 2021 and 2019 are used. Thus, this paper estimates the shorter-term effect of factors on the international competitiveness of the tourism sector in the countries undergoing recovery.

The sample includes 86 countries from various continents for which data were available for both the dependent and independent variables. Angola was excluded from the sample due to an exceptionally large negative value of the dependent variable. A subsample of 38 European and Mediterranean countries is also analyzed to test the robustness of the results. A comparative correlation analysis is conducted on both samples in order to identify significant effects of the factors on the recovery of the international competitiveness of the tourism sector. These are then tested using regression analysis.

Finally, a SWOT analysis is used to assess the environment for the international tourism industry in Greece. Both static and dynamic values of the components of the Travel & Tourism Development Index are considered. Static values are those used to calculate the index for 2021. They are used to assess the strengths and weaknesses of the Greek tourism industry. Dynamic values represent changes in 2021 compared to 2021 and are used to assess opportunities and threats. Ranks are used to show the relative position of Greece compared to other countries, with the ranking covering 117 countries.

Research Results

In 2022, the travel and tourism sector's share of GDP was 18.5% (or 38 billion euros). In 2023, this sector's contribution to the Greek economy is expected to reach 39 billion euros, only 4% less than before the pandemic started. A longer-term forecast predicts that it will be 57 billion euros, or almost 24% of the GDP, in 2033 (World Travel and Tourism Council, 2023).

Exports of tourism services provided almost 18 billion euros in revenues in 2022 (Table 1). Despite larger fluctuations in Greece than in the EU, Greek revenues from inbound tourism increased 1.5 times faster than the EU average between 2013 and 2020. The global pandemic became an enormous shock for the global economy in 2020, especially for such industries as tourism. Except for the pandemic period, the number of bedplaces in tourism accommodation facilities has remained at about 1.3 million, with the number of arrivals of foreigners continuously increasing (Table 2). By 2022, main absolute indicators of the tourism sector approached their pre-crisis levels (Eurostat, 2023). The leading countries of origin for tourists were the UK (14%), Germany (14%), and Bulgaria (10%) (World Travel and Tourism Council, 2023).

Table 1

Exports of tourism services in Greece and the EU-27 in 2013- 2020

Year	EU, billion euro	Greece, billion euro	EU, % growth	Greece, % growth
2013	280.8	12.2		
2014	291.8	13.4	3.9	10.2
2015	309.6	14.1	6.1	5.5
2016	320.4	13.2	3.5	-6.5
2017	348.3	14.6	8.7	10.8
2018	362.6	16.1	4.1	10.0
2019	379.1	18.2	4.5	13.0
2020	159.9	4.3	-57.8	-76.2
2021	197.6	10.5	23.6	143.2
2022	362.0	17.7	83.2	68.3
2013-2020			28.9	45.5

Source: Eurostat (2023).

Table 2

Indicators of tourism sector in Greece

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bedplaces in hotels; holiday and other short-stay accommodation; camping grounds, recreational vehicle parks and trailer parks, thousand	1207	1256	1266	1273	1275	1321	1349	943	1019	1279
Arrivals of foreigners at tourist accommodation establishments, million	12.7	15.3	16.5	16.9	19.1	24.3	25.0	5.5	12.4	23.1

Source: Eurostat (2023).

Since tourism was among the most vulnerable industries during the recent crisis, it is interesting to assess its relative position compared to other services. The global average share of tourism in total services exports across all countries dropped from 23% in 2019 to 10% in 2020. It further stagnated in 2021 and only partially recovered to 14% in 2022. This equates to an overall 3-year drop of -9% worldwide. Especially deep declines were observed in East Asia and Pacific region, reaching -21% due to more stringent lockdown measures. On a country-by-country breakdown, Angola experienced the worst decline at -61%, followed by Azerbaijan (-34%), Thailand (-34%) and Malaysia (-28%). Conversely, several countries managed to surpass pre-crisis levels, including Zambia (+8%), Tajikistan (+8%), Moldova (+7%), and Saudi Arabia (+6%). In contrast, the European Union experienced a 3-year decrease of -5%. Greece's tourism sector faced a drop of -9% (with the share of tourism services fluctuating between 45%, 19%, 30% and 37% from 2019 to 2022). Therefore, although Greece's tourism sector has not fully recovered, its recovery started earlier than the global and EU averages (World Bank, n.d.).

Comparative correlation analysis reveals that only a few factors demonstrate significant correlations with the share of tourism in total services exports in both samples, as shown in Table 3. Specifically, the recovery of tourism exports in 2022 relative to the pre-pandemic 2019 is positively associated with the concentration of interest in cultural and natural attractions. Various environmental sustainability indicators are highly correlated with each other. While the positive correlation with aggregate environmental sustainability index holds similar values in both samples, it lacks significance in the smaller sample, where only one of its components, pollution & environmental conditions, was important. Furthermore, the growth of organized violence acts as a deterrent to inbound international tourism. There is also an inverse relationship with the growth in the number of hotel rooms, which seems unusual, suggesting potential risks of mismatch between demand and supply of hotel capacities during the recovery period. Moreover, a stronger negative correlation with the relative importance of domestic tourism and travel spending indicates the existence of a substitution effect between domestic and inbound tourism. These indicators are further tested during the regression analysis phase.

Several factors affecting the recovery of inbound tourism, identified in the large sample of countries, were found to be insignificant when examined in the smaller sample of European and Mediterranean countries. These include factors that exhibit positive correlations with inbound tourism recovery, such as the ease of regulation, access to finance, quality of staff training, and certain environmental indicators. Surprisingly, factors such as hospital facilities (which had a negative correlation) and rental prices (which had a positive correlation) also became insignificant in the smaller sample. In the Europe and Mediterranean region, the recovery of inbound tourism was found to be positively correlated with labor productivity in the sector. Another unclear result was the negative correlation with the reliability of police services. However, these results are sample-dependent and should not be considered robust.

Table 3

Correlation between relative growth of tourism services exports in 2019-2022 and the components of the Travel & Tourism Development Index

Indicator	86 countries, world	38 European & Mediterranean countries
Burden of government regulation, 1-7 (best)	0.23**	0.03
SME access to finance, 1-7 (best)	0.23**	-0.01
Corruption Perceptions Index, 0-100 (best)	-0.17	-0.29*
Reliability of police services, 1-7 (best)	0.03	-0.37**
Organized violence, deaths per 100,000 pop.	-0.30**	-0.69**
Hospital beds density per 10,000 pop.	-0.23**	-0.14
Communicable disease incidence per 100,000 pop.	-0.19*	-0.09
Extent of staff training, 1-7 (best)	0.23**	-0.01
Labour productivity in hotels and restaurants, US\$ per pop.	0.13	0.35**
Individuals using Internet, % of pop.	-0.20*	-0.01
3G mobile network coverage rate, % of pop.	-0.13	-0.31*
Short-term rental price, US\$	0.22**	0.09
Efficiency of air transport services, 1-7 (best)	-0.05	0.28*
Hotel rooms, per 100 pop.	-0.18*	-0.33**
Number of UNESCO Creative Cities	-0.19*	-0.05
Greenhouse gas emissions, tCO ₂ e/pop.	-0.23**	-0.06
Renewable energy, % of total energy consumption	0.20*	0.24
Pollution & Environmental Conditions, 1-7 (best)	0.14	0.29*
Particulate matter (2.5) concentration (µg/m ³)	-0.27**	0.04
Red List Index, 0-1 (best)	0.22**	0.11
Clean ocean water, 0-100 (best)	-0.32**	0.26
Average proportion of key biodiversity areas covered by protected areas, %	-0.18*	-0.27
Environmental Sustainability, 1-7 (best)	0.20*	0.24
Concentration of interest in cultural attractions, % of views	0.46**	0.64**
Concentration of interest in nature attractions, % of views	0.26**	0.32*
International tourism inbound receipts (inbound US\$, millions)	0.18*	-0.01
T&T industry share of GDP, % of total GDP	0.11	0.29*
Domestic T&T spending, % of internal T&T spending	-0.53**	-0.58**

Note: ** denotes significance at $p < 0.05$, * denotes significance at $p < 0.1$. The table does not include factors with insignificant influence or with no information on their change in 2019-2021. Source: authors' calculations.

The Travel & Tourism Development Index includes a large variety of indicators, but most of them (including government expenditure and capital investment in the sector, international openness, land transport and port infrastructure, quantity of natural and cultural resources, and protection of social rights) have no significant correlation with the dependent variable. This does not mean that they are useless. They may still be potentially important in the long run or in more calm periods of time, or they may have an indirect effect. But this is beyond the scope of the research task in this paper, which is specifically devoted to competitiveness during the period of recovery from the major shock of the COVID-19 pandemic.

The first regression model considers the substitution effect of domestic tourism. For the large sample, the model is ($R^2=0.37$)

$$TE = -1,31 + 0,454CC - 0,356DT \quad (1)$$

(-1,1) (3,1)*** (-4,5)***

Here, TE is travel services (% of service exports) in 2022 minus their value in 2019. CC is the concentration of interest in cultural attractions, % of views. DT denotes domestic tourism and travel spending, % of internal tourism and travel spending. T-statistics are shown in parentheses with *** denoting significance at $p<0.01$, ** denoting significance at $p<0.05$ and * denoting significance at $p<0.1$. When the model is recalculated using the small sample (Europe and Mediterranean region), the formula becomes ($R^2=0.48$)

$$TE = 0,30 + 0,618CC - 0,233DT \quad (2)$$

(0,24) (3,2)*** (-2,4)**

Both factors remain significant regardless of the sample. Without considering the substitution effect, more factors may be included in the regression model, although most of them are only marginally significant. For the large sample, the formula is ($R^2=0.30$)

$$TE = -3,86 - 0,903OV - 27,1HR + 16,9ES + 0,585CC \quad (3)$$

(-3,4)*** (-1,9)* (-2,0)* (1,8)* (3,9)***

Here, OV is organized violence, deaths per 100,000 population. HR is the number of hotel rooms, per 100 population; ES is environmental sustainability, on a scale from 1 (worst) to 7 (best).

However, in the smaller sample, environmental sustainability becomes insignificant ($R^2=0.70$)

$$TE = -1,64 - 1,45OV - 30,0HR + 9,8ES + 0,413CC \quad (4)$$

(-1,7)* (-5,1)*** (-3,0)*** (1,2) (2,6)**

Therefore, a 3% to 4% increase in domestic tourism relative to overall internal tourism decreases the share of tourism in services exports by 1%. But this should not be treated as an alert, since domestic tourism also supports the tourism industry, especially under restrictive measures for international movement of

people. Although domestic tourists do not increase exports, domestic tourism helps to reduce imports, because otherwise domestic residents would go abroad and spend money there. The effect on the balance of payments may be close to neutral.

Attention to cultural attractions is an important driver of inbound tourism. Each 2% increase in the share of views of these attractions increases the share of tourism in exports of services by 1%. International tourists also pay attention to security. Reducing the number of deaths due to organized crime by 1-1.5 per 100 thousand of people may help to increase the share of tourism in exports of services by 1%. As for the development of hotel facilities, overinvestment in them became a drawback, especially in the period of the pandemic. Increasing the number of hotel rooms by 1 per 100 people was associated with a 30% decrease in the share of tourism in exports of services. This evidences that it was not the lack of hotel capacities that deterred inbound tourism during the analyzed period. It will be interesting to check if the effect reverses to a normal positive relationship in the coming years, when the market returns to normal conditions, so that it fits the theory again.

Finally, the SWOT analysis revealed that Greece has more strengths and opportunities in its tourism sector than weaknesses and threats (Table 4). Key strengths include its trade and financial openness, safety, well-developed tourism and medical infrastructure, private and public investments in the sector, and labour productivity in hotels and restaurants. Significant progress was noted from 2019 to 2021 in areas such as financial openness and accessibility, business regulation, safety, and the protection of both owners' and workers' rights. Moreover, the correlation analysis indicated that factors such as organized violence and labour productivity in hotels and restaurants contributed to the development of inbound tourism during the recovery period.

The drawbacks include high prices, seasonal fluctuations in demand, and some other factors. Despite the existing problems of access to finance and generally burdensome government regulations, there has been an improvement in these two indicators. According to the correlation analysis of the large sample, the progress in these two indicators may have had a positive effect on the competitiveness of the tourism and travel sector in the period of recovery from the pandemic crisis.

Country brand strategy and hotel prices are the two indicators that have a relatively poor value in Greece and have deteriorated under the pandemic crisis. Other deteriorating factors include energy efficiency, labor supply, etc. However, despite the deterioration in the ranking compared to other countries, some indicators have not decreased in absolute terms. Instead, one can speak of a lack of progress; for example, there was no increase in the number of creative cities or in the mobile internet coverage rate (as the coverage was already high).

Table 4

Results of marketing SWOT analysis of the Greek tourism industry

Strengths (high ranks)	Weaknesses (low ranks)
<ul style="list-style-type: none"> – Number of regional trade agreements in force – 66 agreements (1 together with 26 other EU countries) – Degree of financial openness (1 together with 45 other countries) – Organized violence, 0 deaths per 100,000 pop. (1 together with 66 other countries)* – Timeliness of providing monthly/quarterly T&T data (1 together with 80 other countries) – Hotel rooms, 4 per 100 pop. (2) – Number of physicians, 6 per 1000 pop. (3) – Use of basic drinking water, 100% of pop. (3) – Social protection spending, 25 % of GDP (3) – Prioritization of Travel and Tourism (4) – Labour productivity in hotels and restaurants, 79900 US\$ per pop. (5)* – Number of short-term rental listings, 70 per 10000 pop. (6) – T&T capital investment, 17% of total investment (9) – Tourist Service Infrastructure (9) – Environmental treaty ratification (10) – Health and Hygiene (11) – Broadband internet subscribers, 41 per 100 pop. (11) – T&T government expenditure, 8% government budget (12) – Number of World Heritage cultural sites, 17 (11) – Average proportion of key biodiversity areas covered by protected areas, 71% (14) – Cultural and entertainment tourism digital demand (15) 	<ul style="list-style-type: none"> – Education system's ability to meet needs (90) – Country Brand Strategy rating (92) – Hotel price index, 145 US\$ (92) – SME access to finance (95)* – Burden of government regulation (96)* – Baseline water stress (98) – Short-term rental price, 143 US\$ (102) – Price competitiveness (106) – Efficiency of legal framework to settle disputes (108) – Seasonality of international tourist arrivals, peak season 55% of total (109) – T&T demand pressure and impact (110) – Fuel price levels, 1.9US\$ / litre (111)

Opportunities (large improvement in ranks)	Threats (large decline in ranks).
<ul style="list-style-type: none"> – Degree of financial openness (+52) – Timeliness of providing monthly/quarterly T&T data (+47) – Property rights (+34) – Government ensuring policy stability (+34) – Efficiency of legal framework in challenging government actions (+31) – Workers’ rights (+29) – Business environment (+27) – Impact of rules on FDI (+27) – T&T GDP multiplier (+25) – Safety walking alone at night (+24) – SME access to finance (+20)* – Reliability of police services (+19) – Efficiency of air transport services (+17) – T&T sustainability subindex (+17) – Efficiency of seaport services (+16) – Environmental treaty ratification (+15) – Burden of government regulation (+13)* – Accessibility of healthcare services (+12) – International openness (+12) – Secondary education enrolment, gross % (+10) – Business costs of crime and violence (+10) 	<ul style="list-style-type: none"> – Power losses, +4.5% of domestic supply (-34) – Ease of finding skilled employees in local labour market (-33) – Country brand strategy rating (-21) – Quality of roads (-15) – T&T industry share of employment, -6% of total employment (-13) – Hotel price index, +7US\$ (-12) – International tourist arrivals, -22900 thousands (-12) – 3G mobile network coverage rate, +0% of pop. to the previous value 99.7% (-10) – T&T policy and enabling conditions subindex (-10) – Number of UNESCO creative cities +0 (-10)

Note: * when there is a positive correlation of a better value of the indicator with growth of the share of travel services in total services exports ($p > 0.05$) either in large or small sample in 2019-2022. Source: authors’ own elaboration.

Conclusions

The travel and tourism sector accounts for almost 1/5 of the Greek economy and has a spillover effect on other sectors. Export revenues of this sector reached 18 billion euros in 2022. Prior to the COVID-19 pandemic, it was experiencing rapid growth. Considering the importance of this sector, the pandemic became another major shock for Greece after the crisis of 2008. Tourism exports fell by more than $\frac{3}{4}$ in 2020. Two years later, the Greek tourism sector has nearly recovered, and its recovery started earlier than the global and EU averages. A set of government measures related to fiscal, labor, education, digital and healthcare policy were taken to support the sector.

Despite the evidence of the link between the Travel and Tourism Competitiveness Index and the tourist arrivals and tourism receipts in pre-pandemic studies, only some of the components of the index were found to be correlated with the rate of growth in the share of tourism in total exports of services in 2019-2022. There is a substitution effect between domestic and inbound tourism during this period. The growth rate of tourism indicator positively depended on improvements in the interest in cultural attractions, environmental sustainability and the absence of organized violence. An atypical result during the recovery period was a negative correlation between the increasing number of hotel rooms and the pace of inbound tourism recovery. Several other factors had significant correlations but either in the large global sample or in the small sample of European and Mediterranean countries.

A more detailed view of the situation in Greece in 2021 revealed that Greece had numerous long-term competitive advantages, especially trade and financial openness, safety and health facilities, accommodation capacities and labour productivity. There were several improvements in business regulation, statistics, financial and legal environment in comparison to 2019. High prices and seasonality remained the main vulnerabilities. Rapid deteriorations were observed in positions such as power losses and availability of skilled labour. Nonetheless, progress was made in originally weak positions such as access to finance and burdensome government regulation.

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