Overcoming the Negative Consequences of Coronavirus Pandemic on Tourism: The European Union Experience

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Abstract

This article aims at analyzing the impact of the COVID-19 pandemic on the tourism activity of the European Union (EU) countries, as well as the link between the synthetic index of tourism competitiveness and the possibility of supporting tourism in times of crisis. In order to demonstrate this connection, but also the other correlations that present the overall situation of tourism from 2019 to 2022, the specialized literature that dealt with this common issue worldwide, and especially at the EU level, was reviewed; similarly, specialized statistical sources, as well as qualitative and quantitative research methods were also synthetized. From the analysis of the four hypotheses (of which only three were validated) the authors conclude that: the connection between GDP and the number of tourists is a direct one and of medium intensity, the developed countries managing to support their tourist activity even in less favorable conditions; the association between the index of competitiveness in tourism and the arrivals of tourists is a direct one, of medium intensity, which demonstrates that the index of competitiveness in tourism influences the flows of tourists, especially towards the developed countries; the third hypothesis correlates GDP per capita with the number of tourists, but the results did not highlight the existence of a link between these two variables, which led to the rejection of this hypothesis; the last researched and confirmed aspect is the degree of influence for the vaccination rate in the receiving countries and the number of international tourist arrivals, thus, the large number of vaccinated residents encouraging tourist arrivals.

Keywords

COVID-19 pandemic; European Union countries; GDP; domestic tourism; international tourism.

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Introduction

Tourism is an important sector of the global economy. In the pre-pandemic period (2019), tourism exports accounted for 6.8% of the total exports (USD 1.7 trillion) and 27.4% of the global services' exports (UNWTO, 2022a). The number of international tourists was almost 1.5 billion, and the total revenue from tourism was USD 9.2 trillion (10.4%). The coronavirus pandemic (COVID-19) was primarily a humanitarian crisis that has affected people's lives and triggered a global economic crisis. This has a major impact on the tourism sector, which is essential for many people (OECD, 2020), by generating countless jobs – 334 million in 2019, due to the dynamics of this sector (Panasiuk and Wszendybył-Skulska, 2021), especially at the beginning of the 21st Century (WTTC, 2021). The pandemic has hit very hard this sector, highly sensitive to such shocks, in which the losses are huge, as reflected in the dramatic decrease in its contribution to global GDP, by almost half, in 2020 falling to 5.5% (USD 4.7 trillion) and a reduction in jobs to 272 million. Europe's contribution to global GDP was substantial in 2019, at USD 2,191 billion. The COVID-19 pandemic has also led to a decrease in the contribution of European tourism to global GDP by almost half in 2020, i.e. USD 1,065 billion (WTTC, 2021).

The authors have chosen to approach the countries of the European Union (EU), because the contribution of these countries' tourism to the global GDP is particularly important, here are the countries that receive the largest numbers of visitors in the world, but also from the EU, France, Spain, Italy, Germany (WTTC, 2020), the tourist offer, represented by both the tourist resources and the tourist infrastructure is very generous, and, last but not least, the first cases of COVID-19 in Europe were registered here, namely in Italy (Dorrucci, et al., 2021; Găitan, 2020) and Austria (Kreidl, et al., 2020). The COVID-19 pandemic has hit these countries hard (Moshammer, et al., 2020; Nadeau, Wardley and Rajabi, 2022), with an impact felt especially in countries, cities, and regions where tourism is an important part of the economy, and restrictive measures have led throughout different periods of time to the isolation of countries and to the development of much smaller tourist activity. A factor meant to support the recovery of the tourism sector, at the EU level, is the high vaccination rate registered among the EU member-states, which allowed the re-opening of borders in 2021 and tourist circulation, especially within the EU.

The paper addresses some of the strengths of tourism in the EU countries, especially targeting their ability to cope with large shocks, such as the COVID-19 pandemic, which has hit destinations worldwide in an unpredictable way. The ability of the EU member states to meet this challenge lies primarily in their economic strength and in their diversified activities that make up their GDP. Among the EU countries, the most affected were those in which the contribution of the Travel & Tourism (T&T) sector to the GDP is high, over 10%, and which are small states, with a less diversified economy, from the category of island states in particular, as is the case of Malta, Ireland, and Cyprus, or even Greece, which has many islands famous for tourist activity. Another important factor is generated by the extremely rich tourist resources that these countries have, whether natural or cultural, and the multitude of sights that belong to the UNESCO World Heritage Sites, which continue to be an attraction for visitors. The tourism resources of each EU member state, along with other important factors for tourism, are presented in The Travel & Tourism Competitiveness Index (TTCI) (WEF, 2019), which will be analyzed in more detail in relation to the number of tourists arriving in the EU countries.

Another important factor is the fact that we refer to an economic group (EU) that has a set of common rules and regulations, which facilitate the freedom of movement, a very important aspect for tourism. Even though initially there was no set of common measures at the EU level and some countries applied preventive measures on their own, later attempts were made to harmonize these measures so that the pandemic could be controlled and stopped. The measures taken right from the beginning of the pandemic have led to the isolation of countries and the reduction of tourism activity in almost the entire EU. The strictness of the isolation measures, the contribution of tourism to GDP in each EU country, and the quality of governance are key factors in explaining the differences in economic losses in different EU countries (Sapir, 2020), the months of March and April 2020 being the most affected from this point of view. After the cease of the state of emergency, the relaxation and opening of the borders gradually began, the tourism taking place in conditions of maximum sanitary care.

An important factor in the recovery of the tourism sector, after the opening of the borders, is the acceptance of the vaccine and the vaccination rate. Thus, the long-awaited solution for the end of the pandemic - the vaccine -, which was produced towards the end of 2020, appeared. The beginning of 2021 came with the hope that tourism will resume as a result of the possibility of free vaccination in all EU countries, with vaccinated people being able to travel without too many constraints. Vaccinated people with the full scheme in the EU countries later received a kind of vaccination passport in order to facilitate travel within the EU and beyond (ECA, 2021). EU countries have high vaccination rates, and this can be correlated with the number of tourists arriving in EU countries, due to the openness it offers for travel to another country and at the same time due to the health security of the host country to the arriving tourists. With the increase in the share of the vaccinated population, tourist activity resumed, and the signs of tourism recovery became more and more encouraging. The beginning of 2022 came with a relaxation of sanitary measures due to the fact that the Omicron version of the virus proved to be less aggressive. The fact that these relaxation measures were taken before the end of the pandemic was felt in a short time when the number of new cases began to increase and some countries, such as Austria (Negreanu, 2022), returned to more severe measures.

This paper addresses a topical, unique, and with a major economic and social impact subject. In the introduction, the general framework of the approached subject is presented. Then follows a review of the literature that has become increasingly rich in works addressing the pandemic from many points of view, including medical, economic, social, and political perspectives. The research and methodological parts involve the formulation of four hypotheses further analyzed from the perspective of their validity, using the Statistical Program for the Social Sciences (SPSS). Last but not least, the paper presents its conclusions.

1. Review of the scientific literature

The COVID-19 pandemic has been the subject of numerous papers. Thus, Farzanegan et al. (2021) addresses the relationship between tourist flows and COVID-19 outbreak. The analysis shows a positive and significant correlation between international tourism and the number of cases and deaths caused by COVID-19. It is interesting to see to what extent the coronavirus can affect the image of a destination (Zenker and Kock, 2020), as in the case of the EU countries, which are important tourist destinations. In countries such as Austria, Italy, and Spain, which have suffered greatly during the pandemic due to the high rates of infection, the tourist image could be affected. These countries could be associated with doubts and mistrust regarding certain tourist activities.

One of the most frequently used macroeconomic variables to highlight economic growth is the GDP growth rate. National GDP analysis, GDP structure but also GDP per capita are frequently used in various analyses. Bădulescu, Bădulescu, and Simuț (2018) analyze how economic growth affects tourism in the economies of Central and Eastern Europe. In this sense, three hypotheses are formulated that are used in the analysis of the GDP per capita in relation to international tourism demand. The relationship between tourism and economic growth within the EU-28 is also analyzed by Haller et al. (2021). The authors argue the existence of a positive and direct relationship between tourism and economic growth, i.e. economic growth can lead to an increase in tourism activity. In developed or developing countries, tourism activity can be identified as an important source of income. EU economies have a strong tourism industry, but there are differences in growth rates between regions, and these have increasingly become visible as the EU expands (Simionescu, 2021). In the context of the COVID-19 pandemic, it is found that emerging or developing countries have had the largest decreases in tourist arrivals (Aronica, Pizzuto and Sciortino, 2022). Sapir (2020) presents three factors that may explain the differences in the magnitude of the shock felt in declining GDP by EU countries, namely: the strictness of isolation measures, the structure of the economy (especially the contribution of tourism to GDP), and the quality of governance in each EU member state. The particularly important role that the tourism industry has is also recognized by the Lisbon Treaty (Art.195), which refers to the need for the competitiveness of the tourism sector within each member country (European Commission, 2009).

Analyzing the Central and Eastern European countries, Dugulan et al. (2010) present the association between international tourist arrivals and cultural resources in the Travel & Tourism Competitiveness Report and the very strong relationship resulting between the two pillars. Competitiveness in tourism also makes the tourism sector stronger and has the capacity to attract tourist flows and to generate wealth; furthermore, the key to restoring the tourism industry is the degree of competitiveness that each country has (Salinas Fernández, Guaita Martínez and Martín Martín, 2022). In the context of the pandemic crisis, the authors analyze the recovery of the tourism industry after the pandemic, using in the analysis the contribution of tourism to the country's economy, the impact of COVID-19 in the country and the degree of competitiveness of the tourism industry. The authors want to present which are the most vulnerable countries in the context of the crisis in the tourism industry and the expected recovery. According to Abreu Novais, Ruhanen and Arcodia (2018), the analysis of tourism competitiveness should consider the following dimensions: attractiveness and satisfaction with the destination, economic dimensions, dimensions associated with the well-being of the local population, and sustainability. An important study presents the design of a synthetic index for 80 countries (Salinas Fernández, et al., 2020) that attract tourists by their level of tourism competitiveness. Research shows that Western Europe is the most competitive region and includes countries in the EU, such as Germany, Austria, France, and the Netherlands, distinguished by both attractiveness and very similar values. Northern Europe is the third most competitive area in the world, with EU countries such as Finland, Sweden, and Denmark. However, although Northern Europe has high values in the synthetic index of tourism competitiveness, it does not attract such a large number of tourists. Southern Europe is in fourth place, with Spain and Portugal in leading positions. This study focuses on identifying the most influential dimensions of tourism competitiveness so that it can improve a country's tourism competitiveness by finding the most effective and important policies. The top positions are occupied by Germany, Spain, Austria, Finland, France, followed by Sweden, Netherlands, Portugal, Denmark, Ireland, Estonia, Belgium, Malta, Greece, Czech Republic, Slovenia, Italy, Croatia, Lithuania, Latvia, Poland, Hungary, Cyprus, Slovakia, Bulgaria, and Romania.

2. Research methodology

In order to conduct this research, both quantitative and qualitative methods were used. Quantitative methods used statistical information from UNWTO (2022b), WTTC (2020 and 2021), WEF (2019), Country Economy (2021), and from other sources. These statistics were used to demonstrate the hypotheses formulated in the research using the Statistical Program for the Social Sciences (SPSS). The qualitative method was used to analyze the documents issued by various authorities regarding the measures taken during the COVID-19 pandemic in the EU.

In order to highlight some factors that had a particularly important role in supporting the tourist activity during the pandemic, under completely exceptional conditions, four hypotheses were formulated:

- Hypothesis 1 (H1): In case of a crisis (in this case the pandemic crisis), developed countries have the capacity to continue to carry out their tourist activity, even if this may be diminished.
- Hypothesis 2 (H2): The number of international tourists is directly influenced by the tourist potential of a country.
- Hypothesis 3 (H3): A high standard of living, with a high GDP per capita, positively influences the arrivals of international tourists and the tourist activity in general.
- Hypothesis 4 (H4): A high vaccination rate favors the arrivals of international tourists.

In order to validate or invalidate these hypotheses, several simulations were performed, the results of which will be presented in the next section, of results and discussions.

3. Results and discussions

Among the European countries which are the world's largest contributors to global GDP in terms of Travel & Tourism (T&T) are precisely the largest EU economies. Thus, the largest contributor in 2019 was Germany, with USD 394 billion, then Italy with USD 269.8 billion, France with USD 240.5 billion, and Spain with USD 202.1 billion (WTTC, 2021). In 2020, the contribution of the T&T sector to the GDP fell by almost half: Germany with USD 208.8 billion, Italy with USD 132.2 billion, France with USD 123.2 billion, and Spain with USD 75.4 billion. For these values, a major contribution had the activities associated with domestic tourism but also those associated with international tourism (international arrivals) (Figure no. 1).

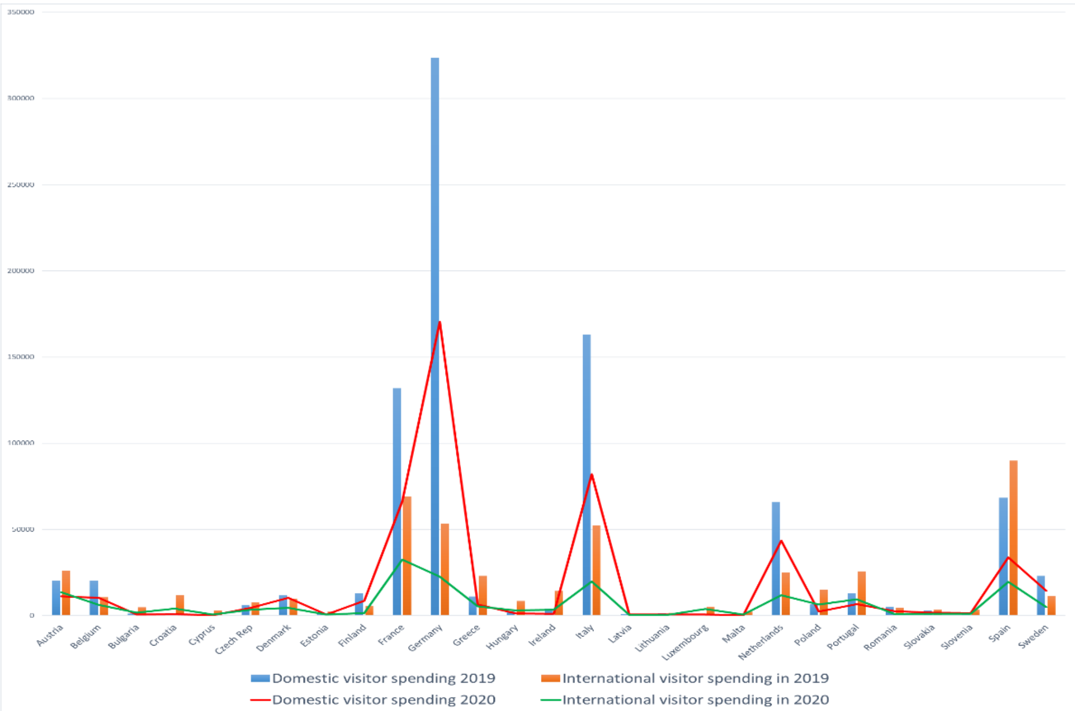

Figure no. 1. Domestic and international tourism contribution to economy (comparison between 2019 and 2020)

Source: Made by authors based on data provided by WTTC, 2021

Germany was a leader in terms of revenues from domestic tourism both for the period before COVID-19 and towards the end of the pandemic, with over USD 323 billion, followed by Italy and France. Regarding the revenues from international tourism, the authors found that Spain (USD 89.8 billion) holds the leading position for 2019, followed by France (USD 68 billion) and Germany (USD 53.4 billion). Instead, with the advent of the virus, France becomes the leader (USD 32.5 billion), followed by Germany (USD 22.5 billion) and Italy (USD 19.8 billion) (WTTC, 2021).

The proportion of domestic and foreign visitors varies between EU member states. In countries like Sweden, Romania, Poland, and Germany, over 75% of arrivals are domestic visitors. In countries with a smaller population and area, especially island countries, such as Cyprus or Malta, foreign tourists are the majority (over 90%). A high proportion of foreign tourists are also found in Croatia, Cyprus, Luxembourg, or Ireland. Among the big tourist receiving countries, Italy and Spain, the distribution is more even.

EU countries traditionally considered to be tourist destinations, which are heavily dependent on international arrivals, such as Croatia, Cyprus, Greece, Malta, and Spain or Ireland, have suffered the largest declines (over 60%) in terms of international tourist arrivals (ECA, 2021). Less affected were the countries where domestic tourism is an important component of tourism. Thus, a decrease of between 20 and 50% was registered in France, Belgium, Germany, the Netherlands, Austria, Denmark, and Finland (WTTC, 2021).

The countries of the EU are among the most visited destinations worldwide. Most international tourists coming to Europe go to these EU countries, some of which are by definition considered tourist countries, due to the importance of tourism recognized as having a significant total T&T contribution to national GDP (the cases of Croatia 24.3%, Greece 20.3%, Portugal 17.1%, Malta 15.9%, Spain 14.1%, Cyprus 13.4%, Italy 13.1%, and of other countries with values over 10%, such as Estonia, Austria, the Netherlands, Bulgaria, and Slovenia). In the other EU countries, tourism also made significant contributions to the GDP in 2019. The health crisis has substantially reduced this contribution, in most cases by half, a situation similar to that of the EU region (WTTC, 2021). For some countries, the contribution to GDP in 2020 has dropped dramatically, by more than half, about two-thirds, as in the cases of Greece (8.7%), Malta (5.4%), and Cyprus (3.7%) (Figure no. 2).

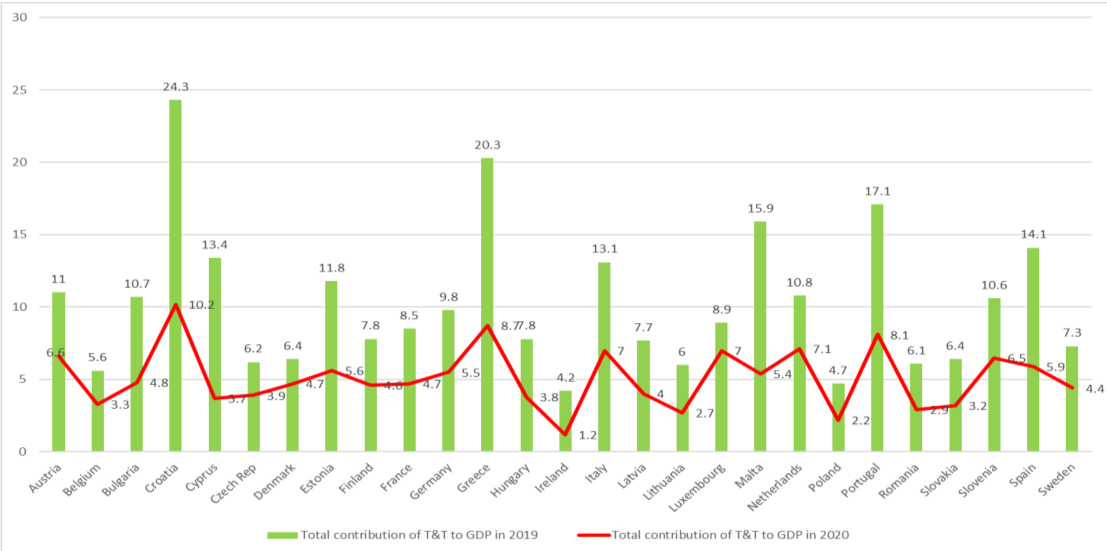

Figure no. 2. T&T contribution to GDP, a 2019 to 2020 comparison

Source: Made by authors based on data provided by WTTC, 2021

Based on these observations, the aim of the quantitative research was to test the influence of variables such as GDP, tourism potential, GDP per capita, and the degree of vaccination on tourist arrivals in EU member states. The influence was verified by performing correlation tests between the above-mentioned variables. Also, most studies point out the influence of tourism on GDP growth, while fewer studies address the opposite situation.

Table no. 1. Correlation between variables of interest (H1)

	Tourists Incomings 2021	**GDP 2021**
Tourists Incomings 2021	.	
GDP 2021	.621**	.

Note. ** Correlation is significant at the 0.001 level (two-tailed)

To validate H1, a first test was performed aiming at the association between GDP and tourist arrivals (Table no. 1). The results show the existence of a correlation, direct by nature and with moderate intensity between the analyzed variables. The results highlight the fact that the economically strong countries were able to continue to attract tourists, even if the medical conditions were not always optimal, thus H1 is confirmed.

In order to validate H2, another test was performed aiming at the association between the score of the TTCI (2019) and the international arrivals (Table no. 2). Thus, the results highlight the existence of a correlation, moderate by the intensity and having a positive meaning, between these two elements. In other words, the competitiveness index influences the flow of tourists, especially in developed countries. The results lead to the validation of the 2nd hypothesis (H2).

Table no. 2. Correlation between variables of interest (H2)

	Competitiveness index score 2019	**Tourists Incomings 2021**
Competitiveness index score 2019	.	
Tourists Incomings 2021	.566**	.

Note. ** Correlation is significant at the 0.002 level (two-tailed)

In order to validate the 2nd hypothesis, data provided by the WEF (2019), TTCI, were used. Europe and Eurasia remain the most competitive regions in T&T. The key element is the abundance of cultural resources, which are mainly concentrated in Southern and Western Europe. The high degree of market integration, regulations, and travel policies centered on the EU and the Schengen areas support intra-regional travel, which represents the vast majority of its international arrivals.

Of interest for the present research was also H3, thus the ratio between GDP per capita and international tourist arrivals was tested (Table no. 3). The results did not highlight the existence of a link between the researched variables, so it can be stated that GDP per capita does not influence the arrivals of tourists/tourist activity.

Table no. 3. Correlation between variables of interest (H3)

	Tourists Incomings 2021	**GDP/CAP 2021**
Tourists Incomings 2021	.	
GDP/CAP 2021	-.064*	.

Note. * Correlation is not significant at the 0.75 level (two-tailed)

Therefore, it is found that H3 is not validated, which means that a high GDP per capita in the host country does not influence the arrival of a large number of tourists. In contrast, a high GDP per capita in the issuing country may influence the increased flow of tourists to the host countries (Bobi and Cimpoeru, 2021). An econometric model is used in this regard by Dritsakis and Athanasiadis (2000). The importance of the economic determinants of international demand for tourist services is analyzed by Garin-Munoz and Amaral (2000) in Spain, and Martins, Gan and Ferreira-Lopes (2017) show that GDP per capita is relevant to explaining tourism arrivals. The last hypothesis investigated, H4, focused on the degree of influence of the vaccination rate in the countries receiving tourists and the arrivals of international tourists (Table no. 4).

Table no. 4. Correlation between variables of interest (H4)

	Tourists Incomings 2021	**COVID -19 vaccine doses administered**
Tourists Incomings 2021	.	
COVID -19 vaccine doses administered	.712**	.

Note. ** Correlation is significant at the 0.000 level (two-tailed)

The results highlight the existence of a very high-intensity correlation between the researched variables, of a positive sense, an aspect that validates the 4th hypothesis. The existence of this correlation suggests that a large number of vaccinated inhabitants encourages the arrivals of international tourists.

Conclusions

The effects of the COVID 19 pandemic are multiple and complex. Among the economic sectors, one of the most impacted was tourism, both international and domestic, as evidenced by our research. The authors have clearly determined a direct link between GDP, vaccines, and competitiveness, in international tourism.

The results showed that countries with strong economies in the pre-pandemic period maintained their economic strength during the crisis generated by the COVID-19 pandemic. The already existing important and varied tourism resources as well as the massive investments in creating the appropriate infrastructure prior to the pandemic were instrumental for this outcome. In addition to this, numerous European and national programs were channeled towards keeping the tourism industry on the survival line and on supporting the economy contributing to the economic strength of the EU countries. The research has also found that as vaccination has intensified, with EU member-states having one of the highest vaccination rates in the world, international tourist arrivals in EU member states have also intensified. All these circumstances have led to attracting an increased number of tourists, who came both from EU and non-EU countries. The research findings suggest as well that a common and coherent EU public health policy could contribute to overcoming in a relatively short time many of the negative aspects brought to the tourism industry by the COVID-19 pandemic.

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