The Impact of COVID-19 on Tourist Destinations in Romania

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Abstract. *The period of the Covid 19 pandemic meant for the tourism industry a moment of general assessment of its own route. The plans and programs in which this industry was active at the time of the outbreak of the pandemic were closely related to the transformation of this industry into one that operates based on the principles of sustainability.*

The decrease in the number of arrivals, the practical stoppage for a period of this economic sector, attracted by itself determinations regarding the value volumes of the decreases in economic indicators but also research for the possibilities of further development of this industry. It can thus be noted that at the level of Romania, the decrease in the number of arrivals was over 50% in 2020 compared to 2019. In addition, although the forecasts of the World Tourism Organization indicated a relatively quick return in 2021, this did not happen in Romania, the value level being in 2021 at approximately 70% compared to 2019.

The purpose of this article is to analyze the behavior of tourism demand and supply in the three periods, namely: pre-pandemic, pandemic and post-pandemic. The data are based on records from the National Institute of Statistics, as well as studies and research carried out on this topic.

The conclusions of the determinations carried out are mainly related to the nature of isolated tourism observed during the pandemic, but also to the behavior of entrepreneurs in the sector who reacted immediately in the development of these areas.

Keywords: Pandemic, tourist arrivals, tourist destinations, tourist demand, tourist offer

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1. Introduction

The SARS-COV-2 virus emerged and developed at a time when the tourism industry was in the process of transitioning to sustainable tourism. Action plans initiated and developed by the World Tourism Organization (UNWTO, 2005) included meeting the economic needs of businesses in the field, protecting the environment as well as increasing the well-being of local communities. The plans, however, did not sufficiently contain directions for action in the event of a global pandemic. The programs provided elements of unity of actors in the tourism industry, but not at a level that would cope with a pandemic.

Gossling (2005) states that the transmission and spread of diseases is a determining factor both in decreasing the parameters of the tourism industry and in terms of the impact on the environment.

After the outbreak of the Covid-19 pandemic, the World Tourism Organization (UNWTO, 2020) anticipated a decrease in arrivals by about 20-30% in 2020 compared to 2019, at a value level this means about 40 billion dollars.

In Romania, the decrease from 2020 compared to 2019 was 52.16% at the level of tourist arrivals, an element that led to obvious negative effects on businesses in the field, employees, but also small producers from the complementary services of selling gifts, souvenirs, sports, culinary activities, etc.

Basically, tourism activities stopped working for a certain period (Kliger et al., 2020) and the studies that were developed following this had two directions of approach, namely: the end of tourism in its current form or a rediscovery of it. The responsibility to preserve the health of the population but at the same time not to lose jobs, was special during the pandemic, including as elements cooperation or solidarity. It was obvious to all actors in the field that the developed policies did not contain programs for this situation. The forecast of the World Tourism Organization (UNWTO, 2020), that the tourism sector can recover by the middle of 2020, has not come true, and at this moment we can consider the example of Romania where, taking as a comparison criterion the level of tourist arrivals in tourist destinations, it is observed a decrease of about 30% in 2021 compared to 2019 (National Institute of Statistics, TEMPO_TUR104C_18_1_2023).

In addition, according to the reports of the World Tourism Organization (UNWTO, 2020) worldwide before the pandemic, tourism provided, for example, a volume of 1.5 billion dollars from air travel, 10% of the global Gross Domestic Product, respectively 334 million jobs. In 2020, the volume of tourism revenues was 49.1% compared to 2019, and compared to the global Gross Domestic Product, it was 5.5%, obviously down from the 10% share recorded before the outbreak of the pandemic.

The research questions that formed the basis of the development of this article are related to the behavior of tourist demand and supply in tourist destinations in Romania during the pandemic, obviously compared to previous periods, as well as what happened once the restrictions were lifted. The concept of destination in a broad sense was used, namely: the totality of the spa resorts, the coastal area, the mountain resorts, the Danube Delta, the county seat municipalities and the city of Bucharest, as well as various other objectives or tourist routes.

Elements referring to the balance between tourist demand and supply, to the exploitation of natural or human resources, were not taken into account. The overall evolution of tourist demand and supply was analyzed in relation to the specified destinations. The purpose of the research was to determine the behavior of tourists and, respectively, of entrepreneurs involved in the tourism

industry during the Covid-19 pandemic, the behavior preceding the pandemic period, as well as the behavior after the pandemic.

The assumptions of the presented model are:

- The level of tourist demand is strongly correlated with the level of tourist arrivals in tourist destinations;

- The level of tourist offer is strongly correlated with the level of tourist reception units with accommodation functions in tourist destinations.

Starting from these hypotheses, the research questions were the following:

- What are the effects of the Covid-19 pandemic on the behavior of tourist demand?
- What are the effects of the Covid-19 pandemic on the behavior of the tourist offer?

2. Literature review

The analysis of specialized studies on the consequences of the Covid-19 pandemic starts from the World Tourism Organization Reports (UNWTO, 2021), which present the data from the pandemic period compared to the previous periods, as well as forecasts for the following periods. These studies contain data on the value volumes of the aggregated indicators from the Tourism Satellite Account, the analysis of their variation as well as the presentation of the most affected areas of the globe.

Other authors such as Brouder (2020) or Gossling (2020) primarily analyze the situation of the tourism industry in the post-pandemic period in order to identify solutions for its recovery.

Regarding the forecasts for tourism in Romania, one can take into account the analysis made by the Alliance for Tourism (Non-Governmental Organization) which claims (2020) that the recovery of the tourism industry in Romania will be achieved in 2025, a forecast that is based on the analysis the indicators of the actors in this sector.

Most of the studies and research carried out in this period, post-pandemic, lead to roughly the same conclusions, namely that the development of tourism can be achieved by implementing measures that lead to sustainable tourism, as well as by developing and implementing new technologies in tourism.

A special framework is digitization where the almost unanimous opinion is that it represents a fundamental element of the growth of the tourism sector.

From the point of view of financing, studies and research support the development of public-private partnerships, this being in direct correlation with the increase in the efficiency level of investments.

An important segment in the studies currently carried out is given by the rediscovery of the tourism sector, and here we can recall the research carried out by Gossling (2020), Brouder (2020) or Niewiadomski (2020). The research starts from the moment of total travel blocking and looks at the possibilities for this sector to recover either by returning to the current form of operation of the sector or through a redefinition of it.

Other researches analyze the indirect effects on the tourism industry through the lens of new constructions where the direct beneficiary was the tourism sector or infrastructure development where also the direct beneficiary was the tourism industry (Cho vancova, 2019). It should be mentioned here that during the pandemic the construction sector was not limited by all the restrictions to which the vast majority of the population was subjected. This sector was able to carry out its activity both in terms of the civil and the industrial segment. On the other hand, Chovancova (2019) analyzes the service sector which experienced a development during the pandemic through various new products developed. We refer here strictly to the services developed

and promoted by companies in the tourism sector. According to the UNWTO report (2020), the most affected sectors were those that have direct contact with tourists, such as airlines, travel agencies, in general all hotels and restaurants, in other words what concerns basic tourist services as and complementary to them.

3. Methodology

The aim of this study was to identify the behavior of tourism demand and supply in the pre-pandemic, pandemic and post-pandemic periods in the main tourist destinations in Romania. The following were considered as tourist destinations: Spa resorts, Resorts in the coastal area excluding the city of Constanța, Resorts in the mountain area, The Danube Delta including the city of Tulcea, Bucharest and the county seat cities excluding Tulcea, other localities and tourist routes.

In determining the behavior of tourist demand and supply, the level of tourist arrivals in tourist reception structures, respectively the level of tourist reception structures with tourist accommodation functions, were considered as determining variables.

The evolution of the two aggregates in the period 2012-2021 is presented in tables 1 and 2 according to the data provided by the National Institute of Statistics: TEMPO_TUR104C_18_1_2023, TEMPO_TUR101B_18_1_2023.

Thus, in table 1, the first two columns show the evolution of the total number of tourist arrivals in the tourist reception structures in the period 2012-2021, and in columns 3-8 the percentage value of the number of arrivals for the six classes of destinations is presented, compared to the total in column 2, also corresponding to the period 2012-2021.

Table 1. Evolution of tourist arrivals in tourist reception structures in Romania in the period 2012-2021

Destinations / Years	Total	Spa resorts	Resorts in the coastal area, exclusive of the city of Constanța	Resorts in the mountain area	The Danube Delta area, including the city of Tulcea	Bucharest and the county seat cities, excluding Tulcea	Other localities and tourist routes
1	2	3	4	5	6	7	8
2012	7686489	9.06	10.46	14.59	1.15	49.66	15.08
2013	7943153	8.54	9.17	15.63	1.02	50.15	15.49
2014	8465909	7.74	8.82	15.25	0.77	50.89	16.53
2015	9921874	7.85	8.28	15.41	0.70	51.28	16.48
2016	11002522	7.73	8.88	15.89	0.66	50,56	16,28
2017	12143346	7.78	8.65	16.63	0.83	49.35	16.76
2018	12905131	7.89	8.61	17,18	1.28	47.88	17,16
2019	13374943	8.47	8.63	17,24	1.24	46.92	17.50
2020	6398642	9.40	14,15	20,24	1.85	36.87	17.49
2021	9370232	9.87	12,19	19.92	1.46	39.07	17.49

Source: INS TEMPO_TUR104C_18_1_2023.

In table 2, the first two columns show the evolution of the total number of tourist reception structures with tourist accommodation functions in the period 2012-2021, and in columns 3-8 the percentage value of the number of tourist reception structures with accommodation functions is

presented tourism for the six classes of destinations, compared to the total in column 2, also corresponding to the period 2012-2021.

Table 2. Evolution of tourist accommodation structures with tourist accommodation functions in Romania in the period 2012-2021

Destinations / Years	Total	Spa resorts	Resorts in the coastal area, exclusive of the city of Constanța	Resorts in the mountain area	The Danube Delta area, including the city of Tulcea	Bucharest and the county seat cities, excluding Tulcea	Other localities and tourist routes
1	2	3	4	5	6	7	8
2012	5821	8.38	11.61	23.64	2.34	22.25	31.78
2013	6009	8.30	11.47	24.91	2.25	22.25	30.82
2014	6130	7.36	11.26	26.25	2.25	21.50	31,38
2015	6821	7.02	10.06	26.71	2.02	21,26	32.93
2016	6946	7.00	10.09	27.04	1.96	20.63	33.28
2017	7905	7.30	9.82	28.72	1.58	18.62	33.96
2018	8453	7.03	9.06	28.08	3.38	18.28	34.17
2019	8402	7.11	10.09	27.87	3.02	18.27	33.64
2020	8610	7.20	8.97	27.53	3.16	18.37	34.77
2021	9146	6.86	8.44	27.25	5.79	16.86	34.80

Source: INS TEMPO_TUR101B_18_1_2023.

Analyzing the data in table 1, which describes the evolution of the total number of tourist arrivals in the tourist reception structures during the period 2012-2021, it can be seen that the county seat municipalities, including the municipality of Bucharest, represented approximately 50% of the total number of arrivals before the pandemic period, an element that can be considered as a determinant in the evolution of the number of arrivals at the level of the entire country. From the analysis of the two curves presented in figure 1, approximately the same trend can be noted, for the entire period 2012-2021. This fact will also be characterized numerically from the point of view of the correlation between the two time series variables, in order to be able to draw conclusions regarding the level of determination of the total number of arrivals from Romania considering as a factor the arrivals of tourists in the tourist reception units in the municipalities county seat, including the municipality of Bucharest. Taking into account the absence of natural resources in this type of destinations, we can consider that no conclusions can be drawn on the behavior of tourist demand and supply during the analyzed pandemic period.
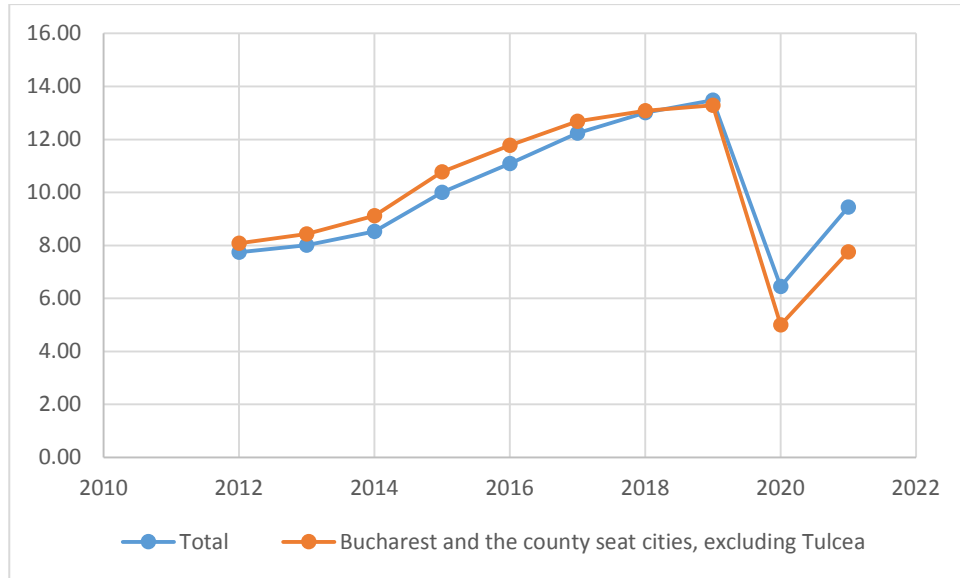
**Figure 1. Evolution of arrivals in Romania and in county seat municipalities, including Bucharest,
in the period 2012-2021**

Analyzing the data corresponding to the other destinations and which can be viewed in figure 2, one can observe somewhat the same trend of evolution for the period 2012-2021. It is clear that the rate of growth in 2020 compared to 2019 was negative for all tourist destinations in Romania and of course also at the level of the entire country. It can be noted that at the national level we have a rate of tourist arrivals in tourist reception structures of -7.03%, which can be found in the decreases from Spa Resorts (-6.42%), to Mountain Resorts (- 6.07%), at Other localities and tourist routes (-7.37%) and especially at the level of county seat municipalities including the municipality of Bucharest (-8.29%), It can also be observed that at the level of Resorts in the coastal area less the municipality of Constanța with a decrease of -2.63% or the Danube Delta with a decrease of -4.52%, the decrease is noticeably smaller. Of course, another value that could be taken into account is the one in the mountain area, where the percentage is below the national one. This fact can lead to the conclusion that isolated tourism was preferred at the mass level during the pandemic period. This fact can be supported by what happened in the Danube Delta, where it can be seen that during the pandemic it was one of the preferred destinations, of course easily perceptible in the collective mind that it is one of the safest destinations during a pandemic.

This is illustrated in figure 2, where the behavior of the demand can be visualized for all destinations in Romania except the residence municipalities and the municipality of Bucharest.
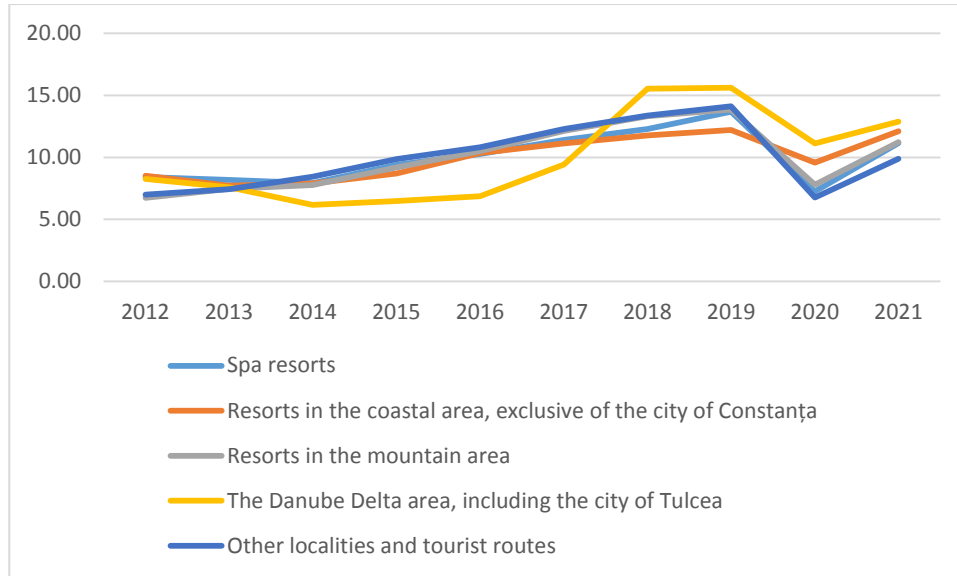
**Figure 2. The evolution of arrivals in Romania in all destinations except the county seat
municipalities including the municipality of Bucharest, in the period 2012-2021**

Source: Authors' own research.

Considering that the central tendency in the mountain area is approximately the same as that of the Spas as well as Other localities and tourist routes, figure 3 shows the curves characterizing the behavior of tourist demand only for the coastal area, the mountain area and the Danube Delta area, areas that can be considered as isolated areas in terms of the pandemic period.

It can be seen from the indicators that refer to the total number of tourist arrivals in tourist reception structures that these areas were preferred during the pandemic, which supports the previously stated hypothesis of an isolated tourism.

However, it should be noted that the coastal area in 2021 is the closest in terms of tourist arrivals to structures from 2019 with a rate of -0.12%, the mountain areas and the Danube Delta respectively being both at a rate of about -2, 70% At the national level, the rate of return is -4.04%, obviously this value is strongly influenced by the residence municipalities and the municipality of Bucharest with a rate of -5.54%. It should also be noted the extremely low level of the return to the values of 2019 for Other localities and tourist routes, where the value of -4.23% represents a low interest for this type of destinations, in other words a return to the level of 2015 for them.
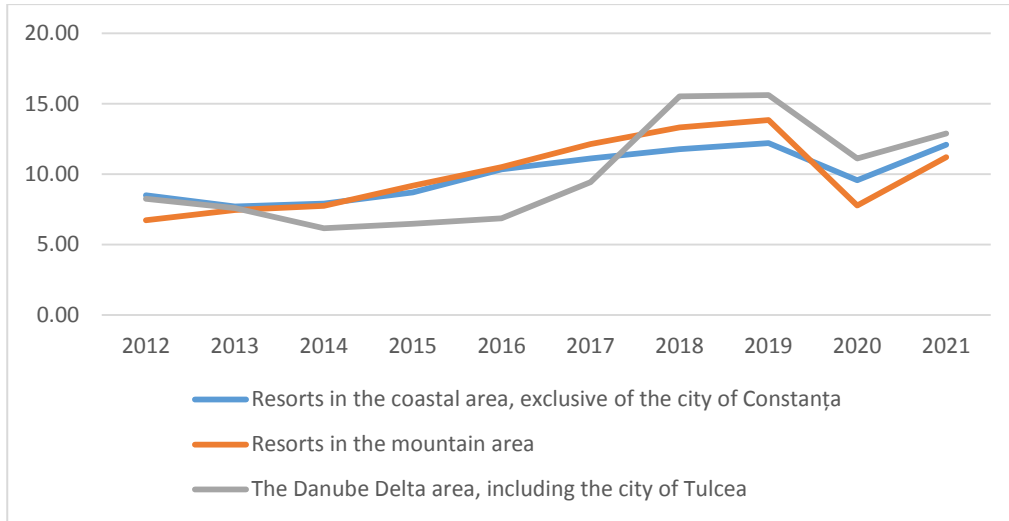
Figure 3. Evolution of arrivals in Romania in the coastal area, the mountain area and the Danube Delta area, in the period 2012-2021

Regarding the tourist accommodation structures with tourist accommodation functions, it can be seen from table 2 and visualized in figure 4, that their number at the level of the entire country has increased constantly in the period 2012-2021, the regression of 0.6% from the year 2019 compared to 2018 being practically insignificant.

It should be noted, however, that during the pandemic, the number of tourist accommodation structures increased by approximately 2.48%, an element also based on the fact that during this period the construction sector was not blocked. Interest in investment and development manifested itself somewhat differently in each destination. Thus, an increase of 3.85% is recorded in the spa resorts, in the mountain resorts an increase of 1.2%, in the Danube Delta area an increase of 7.09% and in Other localities and tourist routes an increase of 5.94%.
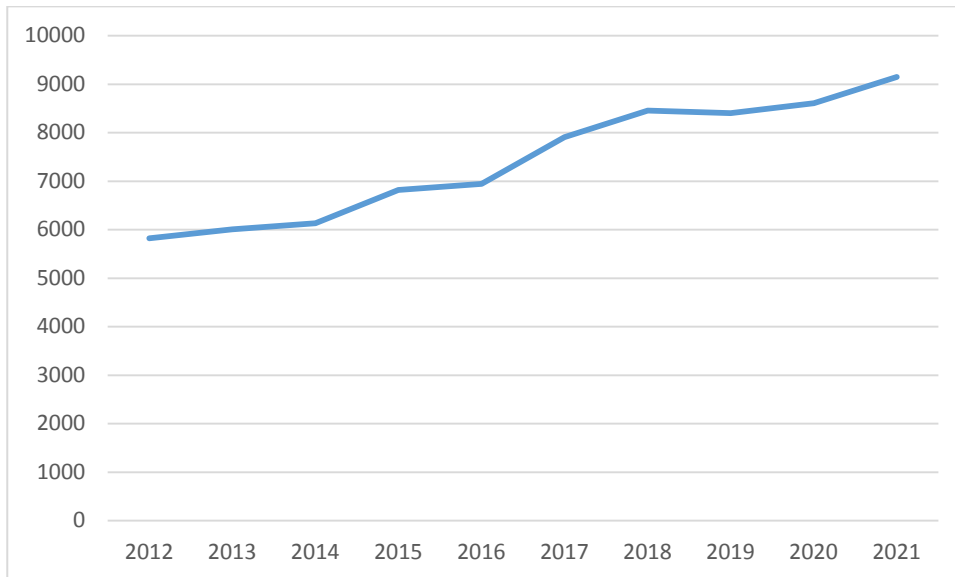

Figure 4. The evolution of tourist accommodation structures with tourist accommodation functions in Romania, in the period 2012-2021

The interest for the isolated type of tourism can be noted in 2021, where for example in the Danube Delta area the increase compared to 2019 of accommodation structures with tourist accommodation functions is 108.67%. It has the highest level of growth among all destinations, the other increases being in lower parameters, namely: Spa resorts with 5.03%, respectively Other localities and tourist routes with 12.63%. In the coastal area, the decrease was 8.94%.
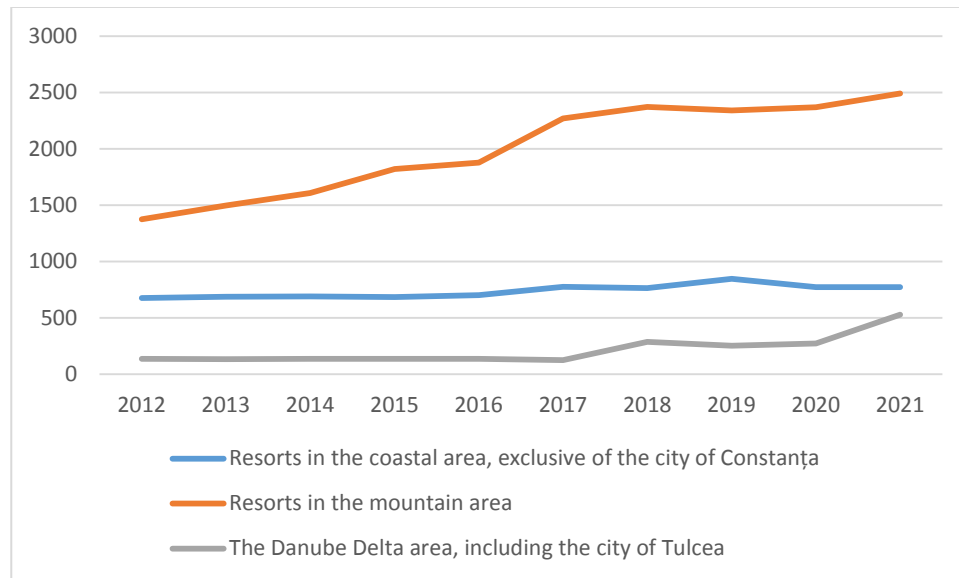
Figure 5. The evolution of tourist accommodation structures with tourist accommodation functions in the coastal area, the mountain area and the Danube Delta area, in the period 2012-2021

Source: Authors' own research.

3.1. Model hypotheses
Based on the graphical methods of analysis, the following hypotheses can be formulated:
- Tourist demand during the Covid-19 pandemic was influenced by the characteristics of an isolated tourism (such as preferences for the Danube Delta area);
- The tourist offer during the Covid-19 pandemic was determined by the preservation of business under the conditions of a tourism influenced by the health of the population.

3.2. Methodology used
The research model used is the statistical regression between the time series variables obtained for the tourism demand and supply corresponding to the tourist destinations in Romania. The aim was to determine the preferred destinations by analyzing the correlations between the time series variables corresponding to the destinations.

The determination of the statistical parameters was done with the SPSS package v26.

The statistical regression method was used in studies related to indicators in the tourism industries by Dudek (2020) or Cerovici (2015). They identified links between the value volumes of accommodation or catering activities and the global level of the Direct Gross Domestic Product from Tourism, as well as between the level of tourist arrivals and the number of overnight stays in accommodation units.

3.3. Regression analysis results

In order to substantiate the analysis of the behavior of tourist demand and supply in Romania during the pandemic as well as in the pre- and post-pandemic periods, the correlations between the number of tourist arrivals in the structures in the destinations that correspond to isolated tourism were determined, namely: The resorts in the seaside area, The resorts in the mountain area as well as in the Danube Delta area.

The high level of correlation reports between them supports the hypothesis that in all periods the interest in them was similar, and taking into account the level of values during the pandemic, it can be considered that they were preferred.

The calculated values of the correlation ratios are shown in Table 3.

Table 3. Correlation report for arrivals in Romanian destinations in the period 2012-2021

Destinations / Destinations	Resorts in the coastal area, exclusive of the city of Constanța	Resorts in the mountain area	The Danube Delta area, including the city of Tulcea
1	4	5	6
Resorts in the coastal area, exclusive of the city of Constanța	1.0000	0.7577	0.8310
Resorts in the mountain area	0.7577	1.0000	0.8131
The Danube Delta area, including the city of Tulcea	0.8310	0.8131	1.0000

Source: Authors' own research.

Also, correlations were determined between the level of tourist reception structures with tourist accommodation functions in destinations that correspond to isolated tourism, namely: Resorts from the seaside area, Resorts from the mountain area as well as from the Danube Delta area.

A high level of the correlation ratio is manifested between the coastal area and the mountain area. The fact that the same level is not recorded between the coastal area and the mountain area compared to the Danube Delta area is caused by the fact that in the Danube Delta area the relative increase was very high in relation to all other areas.

The calculated values of the correlation ratios are shown in Table 4.

Table 4. Correlation report for arrivals in Romanian destinations in the period 2012-2021

Destinations / Destinations	Resorts in the coastal area, exclusive of the city of Constanța	Resorts in the mountain area	The Danube Delta area, including the city of Tulcea
1	4	5	6
Resorts in the coastal area, exclusive of the city of Constanța	1.0000	0.7426	0.5313
Resorts in the mountain area	0.7426	1.0000	0.6989
The Danube Delta area, including the city of Tulcea	0.5313	0.6989	1.0000

Source: Authors' own research.

4. Conclusion

The timing of the outbreak of the Covid-19 pandemic can also be linked to a period of transformation towards sustainable tourism. However, the Covid-19 pandemic almost brought tourist activities to a halt. Thus, although the World Tourism Organization predicted a decrease of about 20-30%, in reality it was much higher, and taking Romania as an example, a percentage of about 50% can be presented.

Studying the behavior of tourism demand and supply in Romania in the pre-pandemic, pandemic and post-pandemic periods, it can be concluded that during the pandemic tourism had the character of isolated tourism. Entrepreneurs in the field offered the products and services necessary to maintain the health of the population, even if the response of tourists once the pandemic ended was not the same.

Taking into account the studies and research in the field regarding the return of the tourism industry, it can be concluded that two directions are indicated, namely: either the return to the forms before the pandemic or a rediscovery of the tourism sector. Considering the determinations made in this article, it can be concluded that in Romania tourism is heading towards a return to the initial forms before the pandemic. The lack of action plans, of general directions that offer alternatives lead directly to a return to the forms of tourism of 2019.

Although areas such as the Danube Delta, mountains or balneo-climatic resorts have reacted by increasing accommodation capacities, analyzing the data from 2011, it can be seen that tourists are returning to their behavior before 2019, that is, it can be concluded that they are returning to those forms of tourism In addition, the values recorded in the year 2021 in the county seat municipalities, respectively the municipality of Bucharest and also in the coastal area, lead to the conclusion that in Romania business tourism returns to the parameters of 2019, as well as to coastal tourism in destinations other than Romania.

It can be observed that in 2021, tourism in Romania returns practically to the same trends manifested before the pandemic period, to the same characteristics of demand behavior. It should also be noted that although the supply met the demand during the pandemic, it did not react accordingly in the post-pandemic period. Referring to this fact, the question of social ethics can be raised, absolutely necessary in the conditions in which tourism will be developed on a sustainable basis.

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