

## Navigating the New Normal: The Impact of COVID-19 on China's Tourism Industry



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### ABSTRACT

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*COVID-19, domestic tourism, economic development, international tourism, public-private partnerships, tourism economy*

This study aims to quantify the transformation of China's tourism market during the pandemic. The research relies on methodological concepts developed by WHO, UN, and UNWTO. The methods include a strategic approach based on the analysis of key tourism market indicators and economic data, including information about global tourism. The study analyzed the tourism sector and highlighted pathways for restructuring the market and promoting safe tourism in the spread of and recovery from the COVID-19 pandemic. According to the results of the study, statistics about the number of registered disease cases by country provide a certain level of awareness about tourism safety in a country. Tourism within China has acquired strategic importance, reorienting towards domestic tourism development. This sector has become a key component of the local economy. The Chinese tourism market, having become one of the largest in the world, has gained popularity among the countries of the Asia-Pacific region for both inbound and outbound tourists. This issue is especially important for identifying the impact of crisis events on the economy and the strategies aimed at overcoming the crisis. The finding of the study can be used by local governments and tourism organizations to develop tactical measures for the provision of safe tourism services in their area, as well as step-by-step instruction for crisis management.

## 1. INTRODUCTION

The coronavirus epidemic has exposed all countries of the world to negative socio-economic consequences, but at the same time has emphasized the role of sustainability in public life and economic activity.

### 1.1 Defining tourism: An integral part of the global economy

In this context, tourism [1] is a global instrument of rapprochement and reconciliation for all humanity, through which inclusive community development is promoted conforming to the status of a people-oriented industry. The Organization for Economic Cooperation and Development (OECD) [2] defines tourism as a social, cultural, and economic phenomenon associated with the movement of people beyond their usual place of residence.

Consequently, the tourism market is associated with the idea of people traveling to other places, both within the country (domestic tourism) and outside the country (foreign tourism), for recreation, social, or business purposes. Tourism has an economic effect primarily in the places visited by travelers, mainly because of the demand for goods and services that are produced and provided in a given

geographical location. This has become an important area for economic observation.

In the world community, tourism is seen as a phenomenon on both the demand side (it correlates with consumer preferences and their role in the acquisition of goods and services) and the supply side (it is a set of productive activities that are aimed at serving consumers of the tourist market) [2]. In this context, the tourist is identified as a person who travels to another place / away from his usual social environment for business, leisure, or social reasons. To be classified as a tourist, a person must stay in a given place for more than 24 hours, but not more than one year. Lock [3] believes that it is difficult to define the tourism market because, unlike other industries, it does not have one definite product. The scientist examines the tourism market by its constituting the sectors:

- Transportation (road, rail, air, sea);
- Accommodation (hotels, shared stay, hostels, campsites, cruises, agritourism, timeshare accommodation);
- Catering (restaurants, catering, bars/cafes, nightclubs);
- Entertainment (casinos, online or offline tourist information, retail, tourist guides, and tours);
- Related sector (financial services, travel agents, tour operators, online travel agencies, travel, and educational organizations).

Pololikashvili [4] views tourism through the labor market

and focuses on its two important functions: 1) creating jobs and providing employment for the population on different continents; 2) allowing the population to form values about their culture and natural landscape. According to the United Nations (UN) [5], tourism is one of the largest industries in the world and the third-largest export sector in the world economy.

## 1.2 The impact of COVID-19 on the global tourism industry

However, the global COVID-19 pandemic has changed the business activity in the tourism market. Countries around the world introduced partial or full travel restrictions. The COVID-19 infection has become an obstacle for tourists. All sectors of the tourism market are forced to survive in the face of uncertainty, and there is an increasing concern about the current status of the industry among employed individuals. Folinas and Metaxas [6] found that the global pandemic damaged the tourism market.

The number of people who are planning vacations in 2020-2021 continues to decrease. In turn, airlines have reduced flights by 50%, and catering has faced a decrease in the number of visitors by 90%. The world tourism organization [7] expects that the tourism market will not experience economic growth within 5-7 years due to the consequences of the COVID-19 pandemic. Gössling et al. [8] also question the model of tourism growth. Scientists point out that tourism is very susceptible to pandemic measures in the form of limited mobility and social distancing. In this respect, COVID-19 is analogous to the ongoing climate crisis. Yang et al. [9] believe that the COVID-19 infection revealed the crisis of the health care system and its unpreparedness to ensure the safety of tourism on a global scale. They suggested that people who make decisions within the law of supply and demand should optimize their activities in a stochastic environment.

During the first months of 2020, all regions of the world recorded a significant decrease in the number of arrivals. The region most affected by COVID-19 is Asia-pacific, with a 79% drop in arrivals, followed by Africa and the middle east (69% each), Europe (68%), and the Americas (65%) [4].

## 1.3 COVID-19 and its impact on China's tourism market

China is the country where the epidemic has started. The first case occurred in December 2019 in Wuhan [10]. Wuhan is a major air and rail transportation hub in central china. The local outbreak quickly became a global pandemic [11]. Potential tourists tended to postpone or cancel their plans for this destination. Ayittey et al. [10] found that COVID-19 has directly disrupted all sectors of the tourism market (entertainment, accommodation, transport, catering) and may destroy 0.5% of world GDP or \$300 billion. Thus, the spread of the COVID-19 infection beyond Wuhan resulted in a worldwide decline in international tourism. China lost its popularity among tourist destinations.

The current global situation makes it impossible to predict when the tourism market will fully resume. However, significant changes will take place in the tourism market in order to find a way out of the crisis. According to UNWTO [12], 2020 was the year of local tourism. The development of local/national cultural and historical parks network provides an opportunity for the promotion of natural and cultural heritage while curbing migration through the creation of jobs

and opportunities for local residents. UNWTO has identified the following six priorities for restarting the tourism industry [7] to restore safe travel for people and maintain a standpoint on the sustainable development goals (SDGS) and the Paris agreement: public health; social inclusion; biodiversity conservation; climate action; circular economy; and governance and finance.

## 1.4 Strategies for tourism industry recovery in the wake of COVID-19

Thus, restarting the tourism market will depend on its ability to balance people's travel needs with the growing need for resource conservation within a circular economy. Polyzos et al. [13] point out that the health care system has a dominant role in the recovery of tourism activity. Without COVID-19 vaccination, the tourism market will not be able to avoid the delay of economic recovery.

The papers discussed above contribute to the understanding of the situation in the tourism industry during the COVID-19 pandemic and its social consequences. These studies question the model of tourism growth. Key discussions about the trends and future of the tourism economy show that collecting data on china's tourism market, where the epidemic began, is relevant for decision-making and effective actions aimed at the industry's sustainability.

The study is an important contribution to the field of tourism. Considering the impact of the COVID-19 pandemic on this industry, the paper provides updated data and new perspectives. It fills in current research gaps, emphasizing the growth of domestic tourism in China and analyzing how tourism has adapted to the crisis. The study compares data before and after the pandemic, as well as highlights key changes and trends in the industry. In addition, it provides practical recommendations for authorities and tourism organizations. The findings can help them develop strategies for the restoration and sustainable development of tourism. Given the uncertainty in health measures, the study also describes a flexible approach to strategic planning. The study on the impact of the pandemic on tourism in china has far-reaching implications beyond this country. At the same time, it can globally affect the understanding and management of tourism:

**(1) Global impact.** The study of china, as one of the largest tourism markets, can serve as a model for other countries and regions, as well as influence global tourism.

**(2) The crisis management model.** The study provides a model of crisis management in the tourism industry that applies to different contexts.

**(3) Balance between security and economy.** The study highlights the importance of a balance between tourist health safety and economic interests. This aspect is relevant for all countries and can contribute to the development of new norms and standards in the global tourism industry.

**(4) Exchange of experience.** The findings facilitate the exchange of experience and knowledge between countries and regions. Consequently, it is possible to take more effective measures against the challenges associated with tourism and pandemics.

## 1.5 Summary: The significance of the research and anticipated outcomes

Thus, the study has a significant impact on the global

understanding and management of tourism. It provides new knowledge, strategies, and examples for other countries and regions in the context of crises and pandemics.

The purpose of the study is to assess the transformation of china's tourism market during the COVID-19 pandemic by looking at the transformation of its supply and demand. The study aims to:

--analyze the COVID-19 prevalence rate by country, considering china's position;

--quantify key components of china's tourism market performance to determine the real-time state of tourism in the country;

--summarize the resulting estimates in the context of the industry characteristics in order to highlight ways for restructuring the tourism economy within the law of supply and demand.

Based on the description of the study, the hypotheses are as follows:

Hypothesis 1: The COVID-19 epidemic in China has led to a revision of priorities in tourism, with an emphasis on domestic tourism.

Hypothesis 2: The Chinese tourism market has demonstrated steady growth in the face of a pandemic.

## 2. MATERIAL AND METHODS

The study relies on the methodological concepts developed by WHO [14] (Centers for Disease Control and Prevention, 2020), UNWTO [7], and the UN. The main data source is the Worldometer outbreak management website [15]. Sharing data from different sources and maintaining transparency in data analysis can minimize the risks of errors and provide more reliable results in outbreak control studies.

The suggested approach will ensure a comprehensive overview of the epidemic's impact on China's tourism market. The research uses a strategic approach based on key components of the tourism market and economic data.

The study is structured around three interrelated objectives. The *first objective* is to review case studies [6, 9, 16] and policy briefs [15, 17] on the COVID-19 pandemic. The study sample includes countries in the Americas, Europe, and Asia and uses the IMF classification [16] of advanced economies, euro area, emerging market and developing economies. At this stage, the study examines the area of the country and its health system (mortality/recovery/new cases). Based on the statistics obtained and the review of the case studies, the authors determine the territory's exposure to the COVID-19 risk. The reported cases are defined as the sum of all lethal cases and recovered/discharged patients. The *second objective* is to quantify the epidemic's impact on the Chinese tourist market (as the country where the tourism crisis began). The impact is assessed through a set of key statistical indicators of tourism performance [15, 17-20] for the period between January 2015 and June 2020, such as domestic tourism, international tourism, and economic data (the industry's contribution to GDP and revenues from tourism). The processing of data was done with the help of the Excel software, and the results were visualized as diagrams and histograms. The quantitative assessment of the tourism market allowed the authors to show the real-time state of tourism in the profile of the country.

The study considers external influences or interfering variables that may affect the tourism market (for instance, government policy, public sentiment, or related events).

Therefore, the study conducted a comparative analysis of countries to identify how different government policies or public attitudes affect tourism. The study of the relationship between income from domestic and international tourism in the context of the COVID-19 pandemic includes the analysis of income data and comparative analysis.

The *third objective* is to identify the main directions for restructuring the tourism industry to create a sustainable post-pandemic market. This step is informed by the previous assessments of China's tourism market. To determine the main directions of restructuring the tourism industry in China and the creation of a sustainable post-pandemic tourism market, the authors applied market and demand analysis. This analysis showed which types of tourism are in high demand and which need restructuring. The study used official sources (statistical services and tourism organizations) to collect data on the contribution of tourism to China's GDP [21-24]. Variance analysis (ANOVA) compared mean values between data groups.

The study extrapolated data from 2019 and partially 2020 to predict the behavior of the tourist market in the future. To do this, it was necessary to employ the time series method. This method analyzes and predicts data based on their previous values over time. The ARIMA model (Auto-Regressive Integrated Moving Average) can predict trends in the tourism industry based on historical data. However, this method may require correction and consideration of external factors, such as policy changes or events that may affect the market.

The study has two limitations. First, China's COVID-19 case study is based on 2019 (all four quarters) and 2020 (1-3 and partially 4th quarter) data. Therefore, the tourism situation in 2020 cannot be completely objective. Second, it is not known how the tourism market will behave if the healthcare system takes radical measures against the unpredictable pandemic. Given these limitations, the highlighted ways of restructuring the tourism economy may not be sufficiently reliable. To prevent potential biases or limitations in the method of data collection or analysis, it is important to use updated data. If data for 2020 are available, it is reasonable to conduct a study using up-to-date data on the tourist situation in China. This study will provide a more accurate picture of the pandemic's impact on tourism.

## 3. RESULTS

The study measures the impact of the global COVID-19 outbreak on human economic activity related to all aspects of travel. The world is facing health, social, and economic security crises caused by COVID-19 infection. At the end of 2020, COVID-19 had been registered in 218 countries, with a total of 54,506,992 reported cases, 1,320,934 deaths, and 193,991 newly identified cases [11].

Table 1 provides an overview of the top 5 countries with the most COVID-19 cases and China, as a country of origin, spread, and recovery of/from the epidemic. The ranking of countries in terms of their exposure to COVID-19 rests on the number of cases and deaths, as well as the spreading rate.

According to the data provided in Table 1, the most affected country in the world is the USA, a country with advanced economy (11.235.666 cases in total). The fifth most affected economy is the Russian Federation, a country with a developing economy and an emerging market (a total of 1.925.825 registered cases). China occupies the 62nd position

among 218 countries with 86,338 registered cases in total. The prevalence rate of the COVID-19 infection across the selected countries is the following: USA (21%), the Russian Federation (3%), China (0.16%), and the rest of the world (40%). Thus, China is gradually recovering from COVID-19 infection.

Under the current conditions, the contribution of tourism to

the economic well-being of the country directly depends on the safety of the territory (see Table 1), as well as the quality and quantity of services at the national tourist market, which includes the sectors directly dealing with tourists, such as hotels, travel agencies, catering, leisure, airlines, and other modes of passenger transport.

**Table 1.** Top 5 countries with high COVID-19 exposure vs. China (as of Q4 2020)

Rank	Area, km <sup>2</sup>	Country	Rank	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered
4	9.372.610	USA (advanced economy)	1	11.235.666	9.448	251.285	29	6.891.461
7	3.287.590	India (emerging market / developing country)	2	8.834.331	19.429	129.914	240	8.228.896
5	8.547.000	Brazil (emerging market / developing country)	3	5.848.959	No data	165.677	4	5.291.511
47	547.030	France (euro area)	4	1.954.599	No data	44.246	No data	139.140
1	17.075.400	The Russian Federation (emerging market / developing country)	5	1.925.825	22.572	33.186	352	1.439.985
3	9.596.960	China (emerging market / developing country)	62	86.338	13	4634	No data	81.319

Source: International Monetary Fund [21], Worldometers [11], and Wu et al. [16].

As shown by a comparative analysis of the countries that influence tourism, approaches to the management of this industry vary depending on the context of government policies and public attitudes. Each country takes measures corresponding to its unique conditions and goals. The latter can include support for domestic and international tourism, infrastructure development, preservation of cultural and natural values, as well as the safety and comfort of tourists. Thus, both domestic and international tourism are actively developing in the USA. Government support and incentives for the tourism industry contribute to its growth. Public sentiment can influence tourism development depending on such factors as security and economic stability. India is actively developing its tourism sector, especially domestic tourism. State programs are aimed at improving infrastructure and preserving cultural attractions. In this country, public sentiment fosters the preservation of traditional values and culture.

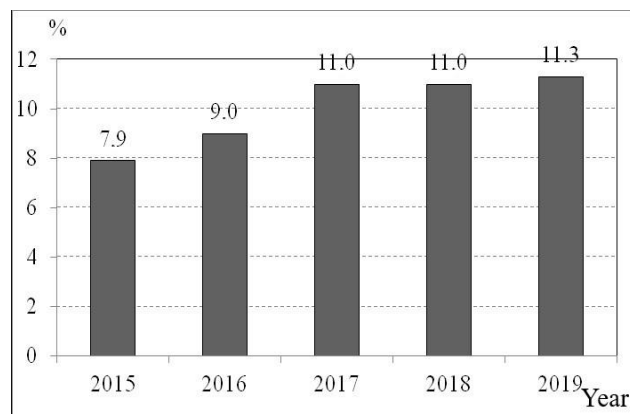
Brazil attracts international tourists, mainly due to its beaches and natural attractions. The state supports infrastructure development and tourism. However, political instability and public protests can affect the security and attractiveness of the country for tourists. France is a leader in the tourism industry with an emphasis on cultural heritage and art. The state actively supports tourism, and public sentiment favors the preservation of cultural values. Russia is trying to increase international tourism, focusing on cultural and historical attractions. State policy aims to attract tourists. However, public sentiment can affect the safety and attractiveness of the country for foreign visitors.

China is actively developing domestic tourism. This country is becoming increasingly popular with international tourists. State support and investments focus on infrastructure and cultural attractions. Public sentiment can influence tourists' preferences and safety. The general trend is that government policy and public sentiment affect tourism development in each of the studied countries. In addition, these factors may vary depending on the specific circumstances.

The COVID-19 pandemic has had a direct and indirect impact on the tourism industry. The direct consequences include a reduction in the number of tourists, a decrease in

tourism income, and employment losses. Besides, there are also indirect consequences, such as economic damage to related industries, a decrease in investment and development, a change in consumer preferences, and a revision of business models by companies. These two types of consequences interact with each other, creating challenges in the tourism industry. This situation requires adaptation, as well as new recovery and development strategies.

Figure 1 displays the contribution of the tourism industry to China's GDP over the period between 2015 and 2019.

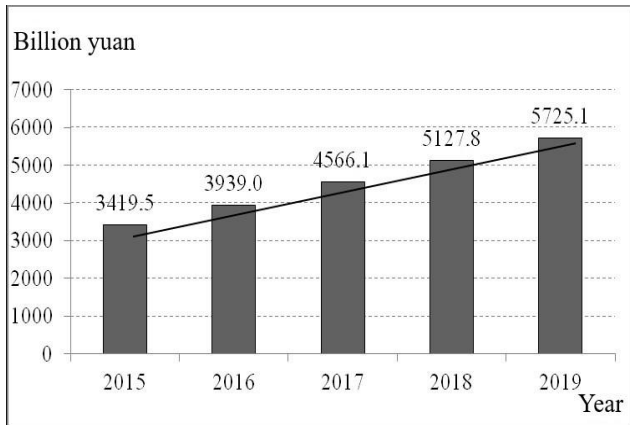


**Figure 1.** Tourism's contribution to the GDP of China, 2015-2019

Source: Gazetteer [25]

In 2019, the total contribution of tourism to China's GDP was 11.3%, indicating the efficiency of the tourism market during the analyzed period, with the best results recorded in 2019. According to UNWTO [20], China ranked second out of the fifteen most visited countries in the world (after the USA) with a global market share of 11.3%.

According to the WTTC [17], in 2019, the global tourism market generated \$8.9 trillion in revenue, contributing 10.3% to the global GDP. Tourism in this context means to travel for leisure, business, or other purposes. Figure 2 shows tourism revenue in China's economic profile from 2015 to 2019 including both domestic and international revenues.

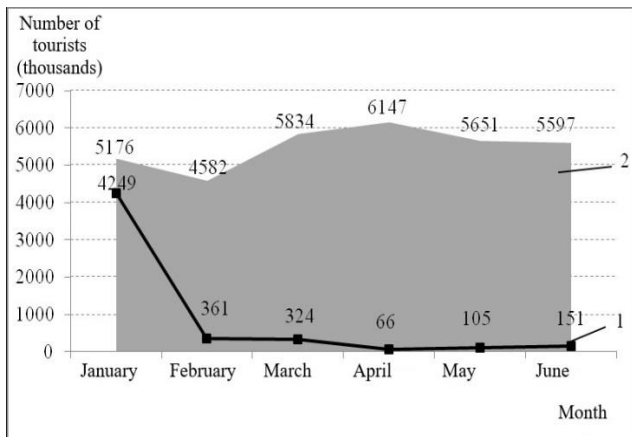


**Figure 2.** Tourism industry revenue in the profile of China's economy between 2015 and 2019

Note: 1 yuan=0.14 USD and 0.13 Euros as of April 2020.

Source: Gazetteer [25]

In 2019, tourism revenues added about 5725.1 billion yuan to the national economy, which is 1.6 more than in 2015. This trend indicates a steady growth of the tourism market. It is important to note that the tourism market employed about 10.3% of the total working population in 2019. As the third-largest country in the world in terms of land area (Table 1), China offers a wide range of natural, historical, and cultural attractions. Figure 3 provides an overview of the current situation regarding international tourism in China.

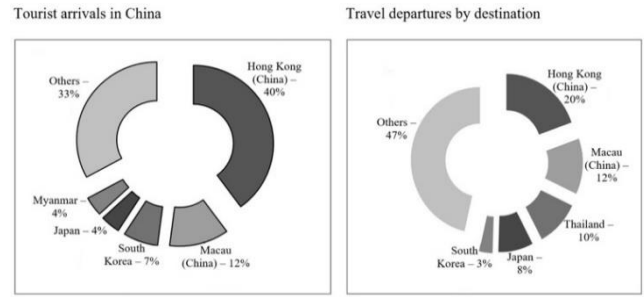


**Figure 3.** China's international tourism and COVID-19: 1 – 2020; 2 – 2019

Source: Manzo [19]

International tourism during the COVID-19 pandemic is not in demand. It has decreased by an average of 6.2 times compared to 2019. Moreover, the statistics of international travel and domestic tourism ticket data shows [20] that domestic tourism adapts to the COVID-19 crisis faster than international tourism. Domestic tourism in China has dropped by 75% compared to the 90% drop in international tourism. Starting from April 2020 to the 4th quarter of 2020 domestic demand for air tickets began to exceed international demand at a 6 to 1 ratio.

According to the International Monetary Fund [21], the tourism market consists of domestic and international tourism and includes data on tourist arrivals and departures outside the country, which are the key components of the tourism economy (see Figure 4).

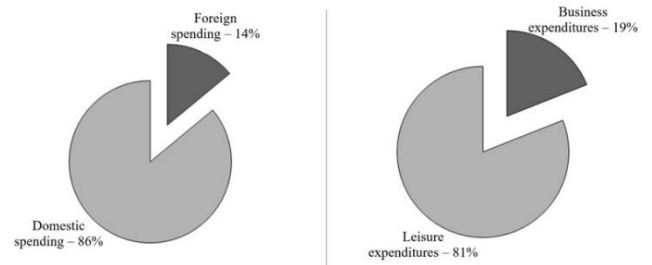


**Figure 4.** Domestic and international tourism, 2019

Source: WTTC [17]

In 2019, 40% of tourists came to China from Hong Kong, which has become an important source of China's domestic tourism market. Fewer tourists arrived from the Asia-Pacific (27%) and other regions (33%). In this context, the arrival rate encompasses all tourists, both business travelers and people visiting friends or relatives. The majority of travel departures from China are to the Asia-Pacific region (53%) followed by other destinations (47%). There is a demand for domestic travelling to Asia-Pacific countries. It can be concluded that tourists have a desire to explore the neighboring countries and join the local culture. Thus, China has become one of the most popular tourist destinations for many countries in the Asia-Pacific region, including Thailand, Japan, and South Korea.

Based on the quantitative assessment of tourism market components and economic data, a sectoral characteristic of the tourism market is presented in Figure 5.



**Figure 5.** Percentage of expenditures by type (domestic and international) and purpose (leisure and business), 2019

Source: WTTC [17]

Domestic spending accounts for 86%, with 81% attributed to leisure. This has positively impacted the tourism industry's share in China's GDP (11.3% (Figure 1)) and provided jobs for 10.3% of employed people [17]. It can be argued that the tourism market remains an important driving force of China's national economy and effectively resists the impact of the COVID-19 crisis.

According to the Ministry of Culture and Tourism in 2019, the share of domestic tourism is 91% while international arrivals account for just 3% of the market, which indicates the priority of domestic tourism [20, 22]. This is a result of several factors: demography, income levels, transport, and hotel infrastructure [20]. It was established that themed tours focused on hiking and camping, allowing for the social distance to be observed, were in demand during the pandemic. Moreover, the Chinese government and private sector have developed guidelines to stimulate the domestic market. For example, one communication strategy involves online programs developed by the Chinese cultural centers for

Facebook, YouTube, TikTok, and Instagram. These programs showcase the historical and cultural heritage that the country and tourist organizations can offer [23]. To summarize, China's tourism market continues to develop and function. However, it has reorganized towards domestic tourism.

It is necessary to consider how changing tourism models can influence future policy decisions and strategies in the industry:

**(1) The adaptation of public policy.** When domestic tourism becomes more popular, governments may reconsider their priorities and reallocate resources. For example, they can provide additional subsidies and tax incentives for local tourism enterprises and the development of domestic tourist routes.

**(2) Investment in infrastructure.** Changes in tourism models may require investments in various areas. If tourists prefer eco-tourism, governments can allocate funds for the creation and maintenance of national parks, ecological routes, and infrastructure for outdoor activities.

**(3) Marketing and promotion.** The tourism industry may revise its marketing strategies according to changing patterns of consumer behavior. For example, the emphasis may be shifted to the promotion of tourist routes suitable for families with children or tourism for outdoor activities.

**(4) Education and training.** The changing needs of tourists may require retraining of personnel in the field of tourism. The training of industry employees can be a key element of a development strategy.

**(5) Sustainability and safety.** Governments and tourism organizations can strengthen their efforts to ensure the sustainability and safety of tourism. These efforts may include the creation of standards and certification for enterprises that comply with environmental and health standards.

These changes in policies and strategies can help the tourism industry adapt to the new reality. The appropriate measures can make effective use of the opportunities presented by changing tourism models.

COVID-19 has forced the tourism market to adapt to the crisis and prompted the effort to guarantee the safety of both the tourist and the destination as part of the balance between human health/hygiene and the functioning tourism economy. The restructuring of the tourism market aims at:

(1) Changing the demand for domestic tourism (local/national/regional) and outdoor recreation, while fostering the recovery of international travel;

(2) Promoting partnerships between local initiatives (government and private sector);

(3) Achieving a high level of territory safety notification system, which determines the economic behavior of consumers on the tourist market.

#### 4. DISCUSSION

In the context of the tourism industry, the impact of COVID-19 can occur in several aspects:

·Decrease in international travel. The pandemic caused a reduction in international travel due to restrictions imposed at borders and quarantine measures. Subsequently, the number of foreign tourists visiting China decreased, followed by a reduction in revenue from foreign tourism.

·Increase of domestic tourism. With restrictions on international travel, many Chinese began to prefer domestic tourism. This fact has increased the demand for local tourism products and services, fostering domestic tourism.

·Changes in the preferences of tourists. Due to the pandemic, tourists became more cautious and focused on health safety. This change influenced the choice of destinations and preferred types of tourism, as well as stimulated the development of ecological and rural tourism.

·Cooperation between the state and the private sector. The pandemic has facilitated closer cooperation between the state and the private sector. This cooperation provides support to the tourism industry and ensures the safety of tourism.

·Decline in international travel. The pandemic has also led to a decrease in the number of Chinese traveling abroad. Consequently, this process has affected other countries and regions dependent on Chinese tourism.

The analysis of these links and their impact on changes and trends in China's tourism industry can clarify the results of the study. These data also better explain how the COVID-19 pandemic has affected this sector.

The research examines the transformation associated with tourism activities in China in the face of the pandemic. The study showed that the spread of the COVID-19 infection, which began in China, affected all continents of the world, disrupting the health safety of health and travel. Because of the infection's spread, consumers in the tourism market limited their social activities. Hoque et al. [24] measured the impact of the pandemic on the tourism industry in China. They found that the epidemic that began in China has stopped the socio-economic activity of people around the world. Because of this threat tourists from other countries are afraid of contact with the Chinese population. International tourists have cancelled their trips to China, and a ban has been imposed on Chinese tourists traveling outside of China. This situation has affected the country's tourism industry in the context of supply and demand. Qiu et al. [26] believe that tourism aggravates the crisis of the healthcare system.

Priority concerns in an epidemic setting are the identification and quantification of perceived risks and the social costs of tourism in order to minimize its negative impact on the destination. The analysis of the economic data showed that the tourism market in China has expanded significantly in the last five years demonstrating stable growth. According to the United Nations [5], tourism has a vital economic, social, and cultural importance offering real prospects for sustainable and inclusive economic growth. Consequently, this industry provides income for millions of people through employment in the tourism market sectors. It also plays a role in reconciliation through visits to destinations and the opportunity for different groups of people to appreciate their own culture and the culture of other nationalities.

The introduction of more sustainable practices in the tourism industry is an important task. It requires the following measures:

**(1) Environmental sustainability.** The tourism industry can reduce the negative impact on the environment by implementing environmental sustainability practices. The practices may include the use of energy-efficient technologies, waste reduction, and support for environmentally friendly forms of tourism (for instance, ecotourism).

**(2) Socio-cultural sustainability.** Tourism can promote respect for the cultures and traditions of local communities. To do this, it is necessary to involve local residents in the industry. The promotion of training and exchange programs can increase mutual understanding between tourists and the local population.

**(3) Economic sustainability.** Support for tourism

sustainability can also mean equitable economic benefits to local communities. These benefits depend on local entrepreneurial initiatives, investing in infrastructure, and the creation of jobs.

**(4) Education and information.** Educating tourists and industry participants about sustainability issues is an important step. Tourists can be more aware and responsible if they have information about the impact of their trips and how they can make them more sustainable.

**(5) Cooperation and regulation.** Government agencies, local governments, businesses, and non-profit organizations can cooperate to develop and implement policies and standards that promote tourism sustainability.

It is crucial to make sustainability an integral part of tourism development strategies. This approach can increase the competitiveness and long-term sustainability of the industry. Consequently, it will be possible to preserve nature, cultural heritage, and economic well-being in tourist destinations.

Zhao and Liu [27] analyzed the current situation of China's tourism industry according to two key components: domestic and international tourism. They found that the Chinese tourism market has entered a stage of comprehensive development. At the same time, researchers propose to improve the quality of China's tourism industry by several means. Facilitating the construction of transport infrastructure could promote local/regional tourism. Supporting the development of Internet services helps to improve the tourist experience. Coordinated tourism based on the integration of cultural, sports, and other resources helps to create new tourist products. Improving the national legislation concerning the tourism industry and creating a favorable political environment in the country strengthens international tourism ties with the global community and enhances the competitiveness of China's tourism market. Our analysis has shown that the country's population is a key player in the response both during the spread of the epidemic and during the recovery period. With the current exponential spread of COVID-19, people are attracted to destinations that offer the safety of both health and territory. Manzo [19] found that during COVID-19, tourists became more cautious and began to gravitate to destinations that are close to where they live, first at the local level, then at the national level, and after that, depending on the level of a territory's exposure, at the regional level. According to the CDC institute [14], the COVID-19-induced isolation measures are recognized as an effective mechanism, which slows down the infection in high-risk environments.

In this regard, one of the first steps to restore the popularity of the tourism industry is domestic tourism. Factors such as safety, disposable income, and travel restrictions make domestic tourism an important player in the revitalization of tourism activity. The results of this study show that the tourism market became a key sector of China's national economy during COVID-19 because of the tourists' return to the local market. In the short term, the promotion of domestic tourism will focus on attracting tourists from the same region. Wei et al. [28] traced the influence of the external environment on China's tourism industry before the pandemic with a focus on supply and demand using the information entropy approach. They showed that the tourism industry before the pandemic was in the stage of transformation/renewal. The market was transitioning from a demand-dependent one (demand factors are the number of tourists and tourism structure) to a supply-driven industry (loyal/rigid conditions). In this period, demand had increased due to the emergence of the market of inbound

tourism.

The growth rate of inbound tourist arrivals to China remained stable. This issue has been widely described in reports and articles, including data from the World Tourism Organization (UNWTO). However, there was a decline in tourism revenue growth due to lower transaction costs, indicating the low level of development of related tourism market sectors and the presence of Internet infrastructure in the regions. In addition, researchers found insufficient state support for the tourism industry, which should promote economic growth and the creation of a healthy tourism economy. Another problem was a low initiative from tourist organizations to transform and update products and services. The presented quantitative assessment performed made for a tourist market in times of the pandemic, showed that the tourism industry had its rebalanced resources. The change in the vector of supply and demand towards the domestic consumer and have reoriented the government and the private sector offers to the needs of the consumer in this market. In addition, tourism research mainly aims to analyze supply and demand. The purpose of this analysis is to identify trends, predict changes, and develop strategies that help companies and countries effectively manage this sector. The concepts of supply and demand play a key role in this process.

Thus, the tourism sector in recent years demonstrated continuous growth, creating on the one hand benefits in terms of economic growth for the national economy and employment and on the other hand identifying problems with the destinations' capacities and natural resources consumption. The pandemic is an opportunity to accelerate the transition to sustainable patterns of consumption and production to improve tourism. In the current situation, coordination between governments and tourism organizations is highly relevant to ensure that tourism activities take social commitment, which will contribute to the return of benefits to the tourism economy. These conclusions indicate that the further development of China's tourism industry after the pandemic includes an emphasis on domestic tourism, closer cooperation between industry entities, and the safety of tourists. These steps can contribute to a more sustainable and long-lasting development of the tourism industry in the future.

## 5. CONCLUSIONS

The study quantified the impact of epidemics on the tourism market and highlighted the importance of this sector in the global economy. The research has identified the pathways for restructuring the industry using a statistical analysis of performance and other economic data. The main findings contribute to other case studies and define the following features of the COVID-19 impact on the tourism sector in China:

- On a conceptual level, the COVID-19 epidemic demonstrated the need for a balance between health security and the tourism economy;

- Tourism has become an important sector of China's domestic economy, which, under the pandemic influence, reoriented towards the development of domestic tourism;

- The Chinese tourist market has become one of the largest in the world and gained popularity among the Asia-Pacific inbound and outbound markets, as evidenced by the steady growth of the industry;

- During the COVID-19 health crisis, tourists prefer

domestic tourism (at local or national scales) or countries in the same region.

The results of the study allowed the authors to outline different directions for restructuring the tourism market and in the context of the spread of and recovery from the pandemic with a focus on the partnership between the government and the private sector.

To restore the Chinese tourism market after the COVID-19 pandemic, the study proposes the following practical strategies:

First, it is important to further maintain a safe environment for tourists. This strategy includes strict compliance with sanitary norms and regulations in hotels, restaurants, and other tourist facilities. Public campaigns about safety measures and guaranteed cleanliness can boost tourist confidence and stimulate demand.

Second, domestic tourism development should become one of the key priorities. Activities aimed at promoting domestic tourist destinations and supporting local travel companies contribute to an increase in demand for local trips. Such measures as discounts on accommodation and entertainment can also encourage tourists and support the industry during the recovery period.

The study contributes to the understanding of what constitutes safe tourism and how to build a strategy for revitalizing tourism activities. Safe tourism is a concept of tourism development focused on the safety and comfort of tourists, the environment, and cultural heritage, as well as the development of local communities. To achieve this goal, it is necessary to apply strategies that ensure tourist safety, protect nature and cultural values, observe sanitary standards, maintain cooperation between stakeholders, provide education and information for tourists, and include emergency plans. It is important to achieve a balance between tourism development and the preservation of nature and cultural values to create a sustainable tourism industry.

Further studies can focus on the influence of social factors (psychological aspects, social interaction, media impact, socio-cultural aspects, and interaction with local communities) on the development and functioning of the tourism market in the COVID-19 era to get a comprehensive assessment of the epidemic's impact on the tourism industry.

## REFERENCES

- [1] UNWTO. (2020). Brings tourism sector together to plan for the future. UNWTO. <https://www.unwto.org/news/unwto-brings-tourism-sector-together-to-plan-for-the-future>, accessed on Dec. 4, 2021.
- [2] OECD Library. (2020). OECD tourism statistics. OECD Library. [https://www.oecd-ilibrary.org/industry-and-services/data/oecd-tourism-statistics\\_2b45a380-en](https://www.oecd-ilibrary.org/industry-and-services/data/oecd-tourism-statistics_2b45a380-en), accessed on Dec. 4, 2021.
- [3] Lock, S. (2020). Global tourism industry – statistics & facts. Statista. <https://www.statista.com/topics/962/global-tourism/>, accessed on Dec. 4, 2021.
- [4] Pololikashvili, Z. (2020). International tourism. UNWTO. <https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-10/201027-barometer-en.pdf>, accessed on Dec. 4, 2021.
- [5] United Nations. (2020). Policy brief: COVID-19 and transforming tourism. UN. <https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-08/SG-Policy-Brief-on-COVID-and-Tourism.pdf>, accessed on Dec. 4, 2021.
- [6] Folinas, S., Metaxas, T. (2020). Tourism: The great patient of coronavirus COVID-2019. MPRA, Munich.
- [7] UNWTO. (2020). One planet vision for a responsible recovery of the tourism sector. UNWTO. <https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-06/one-planet-vision-responsible-recovery-of-the-tourism-sector.pdf>, accessed on Dec. 4, 2021.
- [8] Gössling, S., Scott, D., Hall, C. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1): 1-20. <https://doi.org/10.1080/09669582.2020.1758708>
- [9] Yang, Y., Zhang, H., Chen, X. (2020). Coronavirus pandemic and tourism: dynamic stochastic general equilibrium modeling of infectious disease outbreak. *Annals of Tourism Research*, 83: 102913. <https://doi.org/10.1016/j.annals.2020.102913>
- [10] Ayittey, F.K., Ayittey, M.K., Chiwero, N.B., Kamasah, J.S., Dzuvoor, C. (2020). Economic impacts of Wuhan 2019-nCoV on China and the world. *Journal of Medical Virology*, 92(5): 473-475. <https://doi.org/10.1002/jmv.25706>
- [11] Worldometers. (2020). Opinions on the coronavirus outbreak. Worldometers. <https://www.worldometers.info/coronavirus/coronavirus-expert-opinions/>, accessed on Dec. 4, 2021.
- [12] UNWTO. (2020). Tourism & rural development. UNWTO. <https://www.unwto.org/world-tourism-day-2020/tourism-and-rural-development-technical-note>, accessed on Dec. 4, 2021.
- [13] Polyzos, S., Samitas, A., Spyridou, A.E. (2020). Tourism demand and the COVID-19 pandemic: An LSTM approach. *Tourism Recreation Research*, 46(2): 175-187. <https://doi.org/10.1080/02508281.2020.1777053>
- [14] Centers for Disease Control and Prevention. (2020). Global Health – China. CDC. <https://www.cdc.gov/globalhealth/countries/china/default.htm>, accessed on Dec. 4, 2021.
- [15] Worldometers. (2020). Reported cases and deaths by country, territory, or conveyance. Worldometers. <https://www.worldometers.info/coronavirus/>, accessed on Dec. 4, 2021.
- [16] Wu, J., Leung, K., Leung, G. (2020). Now casting and forecasting the potential domestic and international spread of the 2019-nCoV outbreak originating in Wuhan, China: A modeling study. *The Lancet*, 395: 689-697. [https://doi.org/10.1016/S0140-6736\(20\)30260-9](https://doi.org/10.1016/S0140-6736(20)30260-9)
- [17] WTTC. (2020). China 2020. Annual research: Key highlights. World travel & tourism council. <https://wttc.org/Research/Economic-Impact>, accessed on Dec. 4, 2021.
- [18] Ma, Y. (2020). Contribution of China's travel and tourism industry to GDP 2014-2028. Statista. <https://www.statista.com/statistics/249794/contribution-of-chinas-travel-and-tourism-industry-to-gdp/>, accessed on Dec. 4, 2021.
- [19] Manzo, G. (2020). Global economic impact & trends 2020. World Travel & Tourism Council, London.
- [20] UNWTO. (2020). International Tourism and COVID-19. UNWTO. <https://www.unwto.org/international-tourism-and-COVID-19>, accessed on Dec. 4, 2021.
- [21] International Monetary Fund. (2020). External sector



- report: Global imbalances and the COVID-19 crisis. Washington, DC.
- [22] UNWTO. (2020). Understanding domestic tourism and seizing its opportunities. UNWTO briefing note – tourism and COVID-19. UNWTO. <https://www.segittur.es/wp-content/uploads/2020/09/Informe-Turismo-Dom%C3%A9stico-OMT.pdf>, accessed on Dec. 4, 2021.
- [23] IC. (2020). China CN: Domestic tourism. Tourism Industry overview. <https://www.ceicdata.com/en/china/tourism-industry-overview/cn-domestic-tourist>, accessed on Dec. 4, 2021.
- [24] Hoque, A., Shikha, F.A., Hasanat, M.W., Arif, I., Hamid, A.B.A. (2020). The effect of Coronavirus (COVID-19) in the tourism industry in China. *Asian Journal of Multidisciplinary Studies*, 3(1): 52-58. [https://www.researchgate.net/publication/340309682\\_The\\_Effect\\_of\\_Coronavirus\\_COVID-19\\_in\\_the\\_Tourism\\_Industry\\_in\\_China](https://www.researchgate.net/publication/340309682_The_Effect_of_Coronavirus_COVID-19_in_the_Tourism_Industry_in_China), accessed on Dec. 4, 2021.
- [25] Gazetteer. (2020). ‘About countries’. World Square. Ostranah. [http://ostranah.ru/\\_lists/area.php](http://ostranah.ru/_lists/area.php), accessed on Dec. 4, 2021.
- [26] Qiu, R.T., Park, J., Li, S., Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research*, 84: 102994. <https://doi.org/10.1016/j.annals.2020.102994>
- [27] Zhao, Y., Liu, B. (2020). The evolution and new trends of China’s tourism industry. *National Accounting Review*, 2(4): 337-353. <https://doi.org/10.3934/NAR.2020020>
- [28] Wei, M., Peng, Q., Chen, M.H., Su, C.H. (2020). Understanding the evolution of China's tourism industry performance: an internal–external framework. *International Journal of Tourism Research*, 22(4): 479-492. <https://doi.org/10.1002/jtr.2350>

## NOMENCLATURE

- OECD      Organization for Economic Cooperation and Development
- SDGs      Sustainable Development Goals