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# Chapter

# Opportunities and Obstacles in the Global Tourism Industry: A Story of Post-Covid-19

Syed Abdul Rehman Khan, Laeeq Razzak Janjua and Zhang Yu

### **Abstract**

The rapid spread of Covid-19 has had far-reaching consequences for people's daily lives in almost all parts of the world. Furthermore, it creates a negative impact on trade and economic activities, which further has spillover social problems, including unemployment and poverty. Moreover, in the tourism sector, millions of people lost their jobs, and hundreds of airlines are nearly bankrupt. This chapter is intended to investigate the link between the outbreak of Covid-19 and its effect on the tourism sector. The discussion reveals that due to the Covid-19, tourism sector declined sharply, but it provides an opportunity to transform our polluted world into a green one, which will have a significant and positive impact on global tourism in upcoming years. Finally, the chapter provides practical implications and recommendations, which will help policymakers to formulate an eco-friendly mechanism in the tourism sector.

**Keywords:** tourism industry, Covid-19, environmental sustainability, post-Covid-19 world

### 1. Introduction

If we look at history and especially last century, there were some remarkable incidence happened which leave every lasting impact on our daily life. Moreover, these incidence changes our overall behaviors, as well. Among these incidents was an era of the First and Second World War, then the cold war and 9/11. However, the invention of recent technologies such as mobile phone communication, artificial intelligence, and the internet of things profound effect on our daily life. Besides all wars and inventions, the ongoing pandemic crises of Covid-19 will have permanent and everlasting impacts on our lives, even if we can control it immediately. In terms of economy, due to pandemic crises of Covid-19, IMF predicts that the world economy would contract with 3%; however, the revised estimated figure for the contraction of the global economy is 4.9 to 5.5% in 2020. One of the critical factors, which decline rapidly due to Covid-19, is the tourism sector.

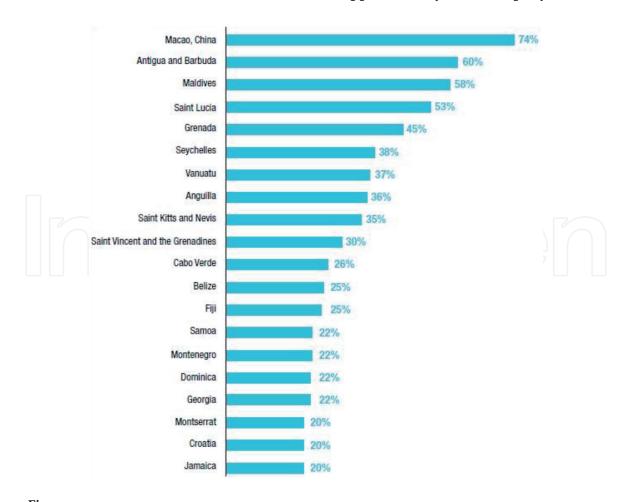
According to the estimate, the international labor organization tourism sector created approximately 330 million jobs worldwide, and it is 10.3% of the total global employment. The tourism sector creates jobs; promote local economic development

and culture. In terms of career, it contributes to direct and indirect jobs for young people and women. Globally, tourism is an essential source of employment. There are some distinctive characteristics of the labor market. In general tourism industry is labor-intensive. Furthermore, approximately 54% of posts are taken by the tourism sector by the woman and young people, which makes the industry inclusive.

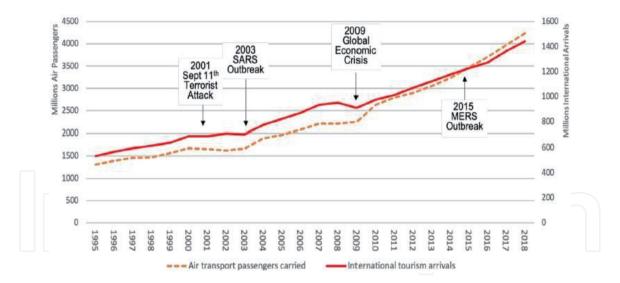
The expected loss for 2020 in the tourism sector can be estimated by analyzing the figure of the previous year, as in 2018, approximately 1407 million international tourist arrivals were recorded, which generate total tourist receipts amount 1480 billion dollars. Similarly, the tourism sector also provides a significant amount of indirect employment, such as in construction and infrastructure development, and even a long chain of the supply chain of food and drinks is also associated with this sector. Many staff in the tourism offices, airlines, aircraft, hotels, restaurants, shopping centers, and various tourist attractions often has direct interaction with visitors. Below give **Figure 1** indicate, inbound tourist expenditure recorded in 2018 by top tourist destination in the world.

It is not the first time where the world is experiencing a pandemic outbreak. In the past 20 years, the earth had also experienced two regional pandemic crises, SARS 2004 and Ebola 2014. Both pandemic disasters did not affect the airline and especially the tourism industry. However, due to the Tsunami 2004, the tourism sector of Far East Asian countries. The 9/11 incident did not account for the massive decline in the airline industry. Give below **Figure 2** present, these incidences and overall flight operations.

In the European Union, it is expected that 13 billion people might lose their job due to Covid-19, and in terms of revenue, it is approximately 12 billion per year.



**Figure 1.**Inbound tourism expenditure of 2018 by top tourist destinations. Source: United Nations Conference on Trade and Development.



**Figure 2.**Impact of major crises on the global tourism. Source: Gössling et al. [1].

The key drivers of the tourism industry in Europe are the local festivals, trade fairs, sports events, and concerts. Therefore due to Covid-19 in many tourist places, hotels, restaurants, bars, and theme parks already closed. Similarly, sports events like the Euro 2020 football championship already postpone until 2021. Likewise, on the other hand, at the beginning of the Covid-19 outbreak, many tourists faced difficulty with returning home due to the border controls in massive countries of Europe.

The primarily purpose of this chapter is to explore the nexus between the impact of Covid-19 and tourism. Furthermore, this chapter explains the overall impact of tourism and lockdown on pollution as well.

### 2. Covid-19 and tourism

Tourism also has an indirect economic effect, in addition to incoming tourism expenditures. Tourism employs workers, ports, and airports as well as a wide variety of intermediate inputs, including financial services, education, food and alcohol, and domestic transport. According to IATA estimation, as compared to April 2019, 80% fewer flights were recorded in 2020 due to the Covid-19 outbreak. In terms of numeric values, the estimated monetary loss recorded in the airline industry is 84.3 billion and 2020. Furthermore, according to IATA estimation, regular international flight schedules will start working until 2023–2024, whereas domestic flights will soon be restored.

In terms of survivor crises of the Covid-19 outbreak, three kinds of potential threats have been indicated by 2020, the United Nations Conference on Trade and Development. These scenarios are listed below in **Figure 3**.

According to the above table, each scenario indicates the annual tourism expenditure is reduced as productivity shock. Similarly, on the other hand, the social effect on the output of the other products and sectors also hit massively in each of the scenarios explained in the table, such as food, drink, logistics, and construction. However, in the case of a moderate scenario, for four-month, the global economy reduced by 1.2 trillion US dollars. Intermediate for eight-month it reduces 2.2 trillion US dollars. In the last, in case of a dramatic scenario, the world would experience a loss of 3.3 trillion US dollars in terms of GDP (2020, United Nations Conference on Trade and Development).

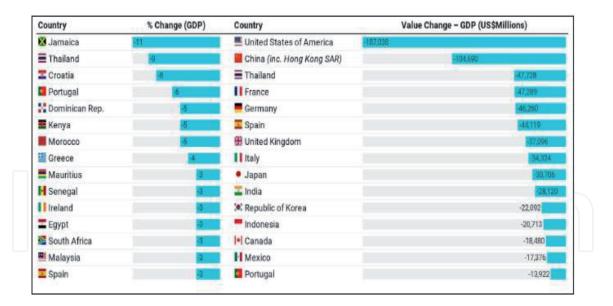


**Figure 3.** *Three kinds of potential threats. Source: United Nations Conference on Trade and Development.* 

Similarly, Ali and Cobanoglu [2], mention in work once, as initially due to Covid-19 world experience lockdown situation, they predicted that under the current circumstances of international travelers can be shrinking from 1.4 to 1 billion. Furthermore, they also reveal that approximately 50 million jobs could be lost. However, the current statistics are indicating the worse situation. The world has already experienced massive outbreaks, crises, and other natural disasters that directly or indirectly impact the overall tourism sector. In the past, one of the significant crises hit the tourism sector, especially, was the Tsunami of 2004, which ran almost 15 countries of the Indian Ocean, and more than 200,000 people lost their lives. It was a natural disaster, as [3] disasters are unpredictable catastrophic change; usually, it happens all of a sudden and can be responded after the event, furthermore response is possible either by contingency plans or by through reactive responses as well. Although Covid-19 is not a regional issue or any specified geographical disaster, it is pandemic crises spread worldwide, and eventually, every human living in this world is disturbed due to it. It is right to argue that the tourism sector hit and disrupted massively due to Covid-19 due to that sector, every other industry of the world experience a downward trend.

In terms of Covid-19 impact of economy, Barro et al. [4] empirically investigate the economic effect of Covid-19 and reveals that due pandemic crises, on average, 2.1% death rate could cause the decline of averagely 6% of world GDP and 8% decline in private consumption. On the other hand, one more study conducted by Coibion et al. [5] using a survey on the household in the US concluded due to pandemic crises, consumption and employment decreased whereas inflation and economic uncertainty increased.

Similarly, a massive number of empirical studies have been conducted that explain the positive impact of the tourism sector on the economy. Some of these studies which demonstrate a positive relationship between economic growth and tourism are [6] for Turkey, [7] for six Balkan countries, Chen and Chiou-wei [8] for Thailand and Korea [9] for India, and more recently Khan et al. (2019) empirically investigate that relationship between multiple variables for Thailand using ARDL estimation and conclude that the logistics and transportation sector positively impact inbounds tourism. Therefore it is correct to argue that, due to current



**Figure 4.**Overall GDP change in top 15 countries due to Covid-19. Source: World Tourism Organization.

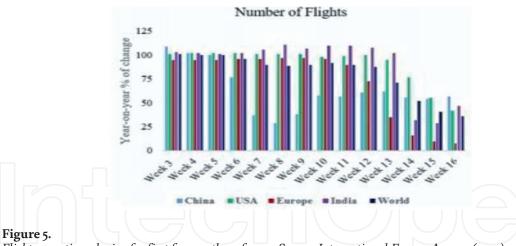
pandemic crises, the overall economic industry hit massively due to the downfall of the commercial sector. The figure below indicates the global destruction of GDP in terms of the percentage and value of the top 15 tourist destinations in the world (**Figure 4**).

The above table indicates that from Asia, Thailand, and Malaysia's GDP falls with 9 and 3%. In terms of the monetary value of GDP, Indian GDP decreased by 28,120 million US dollars, China bear loss of 104,690 million US dollars, and Korea experienced the loss of 22,092 million US dollars. Jamaican and Dominican republic GDP indicate a downward trend of 11 and 5%. However, European countries' tourism sector hit massive due to the Covid-19 outbreak. Croatian GDP fall by 8%, Portugal 6%, Greece 4%, Ireland and Spain 3%. In terms of monetary value, France bears losses of 47,289 million US dollars, Germany 46,260 million US dollars, and then Italy lost 34,104 million US dollars. All these losses are due to the lockdown of other sectors, directly or indirectly, with the tourism sector of Europe.

Similarly, the net of loss experience by European countries is due to massively unemployed labor and capital. One of the main reasons for the substantial loss in Europe is the high percentage of Tourism to GDP ratio. According to the estimate, the overall tourism sector is responsible for 30% of the EU's GDP [10]. Due to this, many people are unemployed or displaced in Europe. However, due to the lockdown situation, all these unemployed people also face difficulty searching for new work.

Gössling et al. [1] indicate in their research work that various airlines such as Scandinavian Airlines (March 17, 2020), Singapore Airlines (March 27, 2020) and Virgin (March 30, 2020), and German TUI (March 27, 2020) have already requested for state aid due to pandemic crises. According to the Federal Aviation Administration estimate in the USA, approximately 64 million take-offs and landed recorded. However, the Covid-19 pandemic crises became a significant cause of downfall in the airline industry. The below figure indicates the trend of airlines from January to April 2020, and due to lockdown situations, a massive number of airlines top working (**Figure 5**).

At the beginning of 2020, it was not expected that Covid-19 caused economic down and air restriction. In the middle of February the causalities and death rate due to Covid-19 start increasing especially in the UK, Italy and Spain, most of the European countries lockdown their border, and also put travel bans. Besides that, all



Flight operations during for first four mother of 2020. Source: International Energy Agency (2020).

the schools, universities, bar-restaurants, and other tourist spots were also closed by authorities in Europe. Given the below figure, indicate travel restriction imposed by countries due to the Covid-19 (**Figure 6**).

However, as the number of confirmed cases started increasing, most of the world's countries put travel restrictions. In the case of tourism, many people also faced issues related to their visa, which was on a visit to other countries as international tourists. However, it is notable that almost every country of the world increased visa validity for an unknown period. Similarly, embassies of the different countries also played an active role during the crises. Many countries arranged chartered flights for their nationals, which were stuck in different countries of the world.

Besides the airline industry, exploring and travel by cruise ship is also very much popular in European, American, and Asian countries. However, due to Covid-19 cruise industry also faced a downward trend. The significant number of cruise ships also experienced heavy losses. The cruise industry stops its operation until 2020 September, and also it is expected that it will be until the first quarter of 2021. The top three cruise ship lines which experienced heavy losses are cruise lines Carnival, Norwegian Cruise Line, and Royal Caribbean Cruises. However one of the most

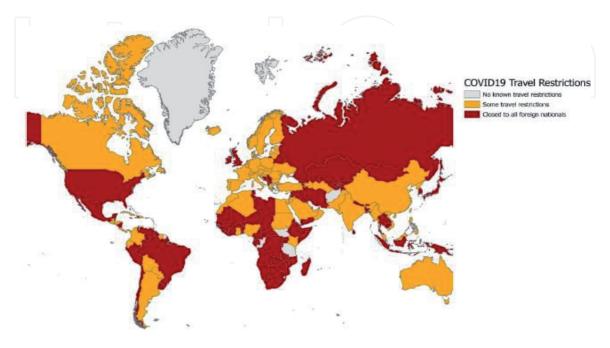


Figure 6. Travel restriction on 31 March. Source: Gössling et al. [1].

significant reasons for imposing bans on cruise ships is indicated by Travel.State. Gov [11], they mention in their work, due to the close environment of the cruise it is a high possibility that the Covid-19 spread among the traveler very quickly and therefore it will also be hard to provide help and assistance immediately.

On the other hand, some of the positive attributes have also been observed due to the Covid-19 impact of the tourism sector—one of the crucial factors found in the rapid downfall of air pollution. Due to the massive lockdown number of airlines grounded their air craft's, which ultimately reduces the air-pollution. As the airline industry accounts for about 2.5% of global CO<sub>2</sub> emission, and it is also predicted that until 2050 the airline industry will averagely increase 1.5 degrees Celsius worldwide [12]. After the lockdown, the clean environment has been observed worldwide, not only in highly industrialized countries, more specifically in European countries due to the lockdown situation, and the concentration of NO<sub>2</sub> emission in the air rapidly decreased. It has alone been observed after a long time, in Italy due to lockdown and tourist restriction marine line start running in the canals of Vince. The change in terms of environmental change, which we are experiencing at the moment due to the lockdown situation in terms of clean air and clean water channels will not be long-lasting. It is expected that once in the world normal life cycle starts, we will again experience massive air and other pollutions [13].

Due to the deep concentration of tourism in the economy of numerous countries, many tourism business are associated with the global food market due to low cost, which generates employment for the local state. Similarly, on the other hand, there is a high volume of food waste involved in the tourism industry. Due to the Covid-19 outbreak, food waste and supply are declining, but on the other hand, it also becomes the cause of job losses for the people who work in the food industry [14].

It is right to argue that, due to the lockdown situation and downward trend of tourism, the natural beauty around the world is restored. One of the critical factors which are noticed is the reduction of waste and trashes. Covid-19 provides us with a chance to restore our natural beauty. Besides tourism, another significant factor contributing to the decrease in pollutions (water and air) is less transporting activities. Thus due to lockdown, most people working from home, on the other hand, a massive number of industrial units not operational at the moment, which also decreased air pollution.

Due to the lockdown activities and the non-operational tourism sector, environmental quality is improved worldwide. Various gases such are  $CO_2$ ,  $NO_2$ , and  $SO_2$  concentration decreased within the air. Furthermore, the critical factor which increases air quality around the world is also due to less operational activities of the airline industry. The figure given below presents the air quality which is observed in some of the cities in Europe (**Figure 7**).

On the other hand, in the country, China's economy is considered one of the world's top growing economies due to its industrialization. However, due to the Covid-19 outbreak and lockdown in china, its air quality increased as well. Similarly, as we have stated earlier, China also bears massive losses due to the downfall of the tourism sector. One of the critical factor which can be noticed that due to the lockdown situation and decline in tourism sector indicatively impact on overall energy consumption. More especially in China, energy consumption also declined due to the Covid-19 lockdown, which eventually affected its production. Less production of energy increases air quality as less coal consumption is used in the production of energy—figure, present coal consumption in Jingjinji city by five energy-generating plants (**Figure 8**).

However, lockdown and the downward trend of the tourism sector provide an opportunity for the world to move toward renewable sources. It the responsibility of the government at the movement to spread awareness of green economy within

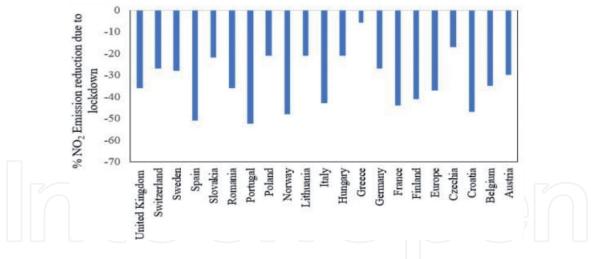
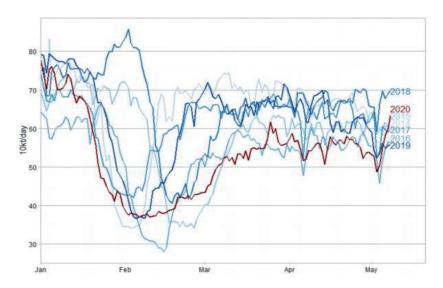


Figure 7. Change in  $NO_2$  emission due to lockdown in Europe. Source: Centre for Research on Energy and Clean Air.



**Figure 8.**Coal consumption by five generating plants in China. Source: Centre for Research on Energy and Clean Air.

their countries and further set upset those on tourist spots, which can efficiently operate with renewable energy sources, ultimately it will also reduce air pollution in the future. Similarly, after once pandemic crises will over, it is also highly recommended that, for local and international tourists, the authorities should arrange those vehicles for traveling purposes which consume renewable energy sources.

### 3. Conclusion and recommendations

This chapter aims to discuss the association between Covid-19's outbreak and the tourism sector. The debate indicates that Covid-19 indicates an adverse effect on tourism activities. Due to the lockdown, thousands of people lost their jobs. Many airlines, restaurants, bars, and hotels are nearly to become bankrupt. On the other hand, our discussion reveals that global lockdown creates a positive impact on environmental sustainability. Also, air and water pollution have been reduced significantly, which creates a positive impact on fauna and flora.

Further, we predict that in upcoming years, due to the restoration of environmental beauty, the global tourism industry will boom. However, the age of booming may not be very long. Because, once the world engine starts after Covid-19, air and water pollution will occupy the space of greeneries. It is the right time to formulate

sustainable strategies and policies to maintain the beauty of the world. The following are the recommendations that will help policymakers and regulatory bodies to develop a master plan and integrate sustainable practices in the tourism industry.

- The airlines, and especially tourist operators, should adopt green and ecofriendly practices in their businesses to improve environmental sustainability.
- Governmental bodies should formulate strict eco-friendly policies for the tourism sector. Also, regulatory bodies encourage firms to adopt ISO certification
- Regulatory bodies may encourage renewable energy and green projects by providing subsidies and tax-exemptions to corporations that adopt eco-friendly practices.
- Governmental bodies embossed heavy penalties on the polluting firms, which will not only create pressure on firms to adopt sustainable practices but also motivate the eco-friendly firms.
- The regulatory bodies should evaluate enterprises' environmental performance and publicize the evaluation results, which will create competition between enterprises to be more sustainable.

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