# How Has The Covid-19 Pandemic Affected The Development Of International Tourism And What Is The Role Of Vaccination In The Tourism Industry Recovery?

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#### **ABSTRACT**

This article reviews the impact of the COVID-19 pandemic on the global tourism industry. The purpose of this study was to assess changes in international tourism development as a result of the COVID-19 pandemic and to examine the role of vaccination in the tourism industry recovery. The problems of decreasing international tourist arrivals in tourist regions, international passenger traffic and hotel occupancy rate are highlighted. The level of population vaccination against COVID-19 by regions of the world and in individual tourist countries is analyzed. The quarantine restrictions of the main European tourist countries and the national plan for combating the coronavirus pandemic in Australia are reviewed. The importance of vaccination for the further tourism development is demonstrated and justified.

**Keywords:** tourism, coronavirus, quarantine restrictions, European Union, Australia, vaccination.

# I. INTRODUCTION

Tourism has become one of the most important and dynamic industries of the world economy at the beginning of the 21<sup>st</sup> century. The modern tourism industry occupies an important place in international economic relations and affects the development of the economies of individual countries and the world economy as a whole. Scientists have long been discussing the "tourist revolution", i.e., a real revolution in the industry. After all, the growth in the number of tourists in the world in recent decades has exceeded all forecasts. Just fifty years ago, only 25 million people on the entire planet were traveling internationally. The number of tourists has increased by more than 40 times since then.

All regions saw growth in international tourism in 2019. However, uncertainty surrounding Brexit, the collapse of tour operator ThomasCook, geopolitical and social tensions, and the global economic downturn collectively contributed to slower growth in 2019 compared to the exceptional

pace in 2017 and 2018. This process has mainly affected the developed countries and especially Europe and the Asia-Pacific region.

The UNWTO predicted international tourism growth of 3 % to 4 % in 2020, with major sporting events, including the Tokyo Olympics, and cultural events, such as EXPO 2020 in Dubai, expected to have a positive impact on the development of the sector. But suddenly the world was faced with a COVID-19 pandemic.

Coronavirus was first isolated in 1965 by British virologists D.A. Tyrrell and M.L. Bynoe. Such viruses usually do not pose a threat to humans. However, coronaviruses can quickly mutate and become dangerous. For example, the SARS-CoV virus caused outbreaks of acute respiratory syndrome in 2002–2003 (9 % mortality of all infected), and the MERS-CoV virus caused Middle East respiratory syndrome in 2012 (35 % mortality). A new strain of coronavirus can cause a severe form of pneumonia. The course of the disease depends on a person's immune system. Most people who have

died because they were infected with the virus have had health problems. There are many elderly people with chronic diseases among the deceased. The main concern is the range of symptom severity: some people have mild symptoms, while others are severely ill. This makes it difficult to establish the true number of people infected and the rate of person-to-person transmission.

The inevitable changes in the travel market became evident in March 2020, following the recognition and WHO announcement of another pandemic sweeping humanity, and further steps by the authorities to ensure the safety of the people [1]. However, experts even then could not foresee all the tragic events that will occur in tourism.

A quarantine was introduced in most countries of the world to prevent the coronavirus from spreading and restrictions were imposed on foreigners visiting the country. At the moment political decisions of the countries of the world on the response to the pandemic are divided into two groups. The first is the isolation of sick and infected households without quarantine and stopping the movement of citizens. The second is tougher measures, quarantine, movement restriction, closure of public establishments up to the complete cessation of all business or social activity. Most governments now choose the second course of action, i.e., strict controls and restrictions. Such harsh measures, however, have a very high economic cost. An alternative to harsh economic and social responses could be either a populationwide vaccination, or the "herd immunity" concept, or the new social organization of life and work, i.e., politics and economics", "social "virtual distancing", "remote work and access".

The topic of the current crisis in tourism is reflected in some scientific and popular scientific publications. This does not mean, however, that all the necessary questions have been answered. After all, the problem of international tourism and international tourism business, which suffer from coronavirus, is multidimensional and worthy of comprehensive analysis at all levels: from the global (world) and regional (tourist regions) to local (in the

context of individual countries), taking into account the interaction between government and business, as well as the participation of international organizations in overcoming the crisis phenomena. Publications on the impact of the COVID-19 pandemic on the tourism industry, meanwhile, are usually narrowly focused, reflecting different individual aspects of this impact.

The practice of previous years shows that no expert forecasts on the international tourism recovery at the present time can be considered reliable and final. The COVID-19 pandemic turned out to be not only deadly, but also a fairly stable and mutable disease, and it is not yet in retreat, despite all the efforts of the world community, but only somewhat weakens and then strengthens its influence again in the form of so-called "waves": the first, the second, the third... Monitoring and summarizing the current situation, under such circumstances, regarding the impact of the COVID-19 pandemic on the tourism market remains not only desirable but also necessary, especially for those who work in the tourism business. They are involved in tourism and interested in tourism or research tourism. This will help to quickly identify the likely risks to both international tourism and international tourism business.

It is appropriate to refer to the corresponding period of 2019 in the study of statistics reflecting the current processes occurring in the tourism market in the context of the COVID-19 pandemic in 2021, since comparisons of official statistics between 2021 and 2020 are distorted by the extraordinary impact of COVID-19.

#### 2. MATERIALS AND METHODS

Materials for the study are international statistics of such organizations as UNWTO, IATA, STR data, OWID publications, WHO and Therapeutic Goods Administration (Australian Government Department of Health) resources, information from specialized business publications, review of solutions for existing tourism industry problems caused by COVID-19 using the Australian example. Scientific methods were used at different stages of

the study, depending on the objectives: collection, systematic analysis, comparison, grouping.

A comprehensive analysis of entry restrictions to certain tourist countries was applied to summarize the results in order to justify the need for vaccination as a priority for tourism recovery in many parts of the world.

### 3. RESULTS AND DISCUSSION

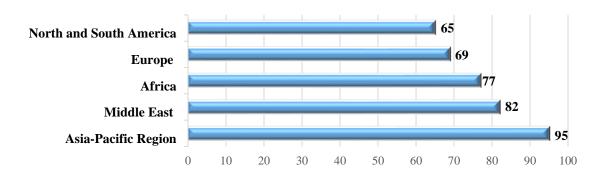
International tourist arrivals for the first 9 months of 2021 decreased by 20 % (according to the same period in 2020) due to quarantine restrictions, but by 76 % compared to the same period in 2019, according to UNWTO. Arrivals in August and September 2021 were 63 % lower than in 2019, which is the best monthly result since the pandemic began. This is due to increased traveler confidence amid rapid advances in vaccination and easing of entry restrictions to many destinations. International tourism receipts in 2021 are estimated at \$1.9 trillion, which is significantly below the prepandemic value of \$3.5 trillion [2].

North and South America recorded the highest results in the first nine months of 2021, with arrivals

up 1 % over 2020, but still 65 % below 2019 levels. Europe experienced an 8 % decline compared to 2020, down 69 % compared to 2019. Arrivals in Asia-Pacific were 95 % below 2019 levels as many destinations remained closed for non-essential travel. Africa and the Middle East recorded declines of 77 % and 82 %, respectively, compared to 2019 (Figure 1, in-house development [2]).

Tourism shows signs of gradualism and caution, as reflected in the gradual lifting of travel restrictions in several countries, particularly in Europe, some international flights being restored and some domestic and intra-regional markets being restarted.

In early 2022, the WHO recommended that international travel restrictions be lifted because the restrictions do not benefit but continue to contribute to the "economic and social stress" that countries are experiencing. Willie Walsh, CEO of IATA, urged governments to speed up the process of lifting restrictions, including quarantines and coronavirus tests for vaccinated passengers, in order to recover the tourism industry at a faster pace and return it to its pre-pandemic state [3].



**Fig. 1.** Decrease in tourist arrivals by regions for 9 months of 2021 compared to the same period of 2019, %

Most UNWTO Panel Experts expect international tourism to begin recovering in the third quarter of 2022 and not fully recover until 2023–2024, but there has been a recent increase in Covid-19 and Omicron strain cases, which could disrupt recovery. Experts also mention the lack of reliable

information and a deteriorating economic environment as factors that have affected consumer confidence in tourist services. It is also predicted that domestic tourism will recover faster, as domestic tourism is less dependent on the global coronavirus crisis and quarantine measures [4].

Demand in passenger-kilometers (RPK) in 2021 fell by 58.4 % compared to 2019, according to IATA. This is an improvement compared to 2020, when the annual RPK fell by 65.8 % compared to 2019. International passenger demand in 2021 was 75.5 % below 2019 levels. Offer expressed in available kilometers (ASK) declined 65.3 %, and seat fill rate fell by 24 percentage points to 58 %. Demand for domestic flights in 2021 was down 28.2 % compared to 2019 [3].

Analysis of international passenger traffic for 2021 shows a decline in all regions. European carriers

recorded a 67.6 percent decrease in traffic in 2021 compared to 2019, North American carriers recorded a 65.6 percent decrease, Latin American carriers recorded a 66.9 percent decrease, and Middle Eastern carriers recorded a 71.6 percent decrease. Asia-Pacific airlines' international traffic was 93.2 % lower in 2021 compared to 2019, which was the deepest decline of any region. African airlines' international traffic declined 65.2% compared to 2019, which was the best result among regions (Figure 2, in-house development [3]).

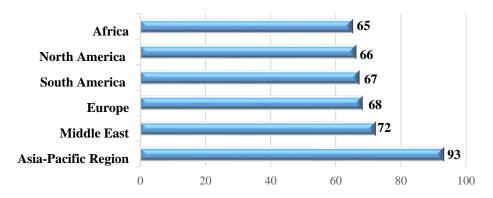


Fig. 2. Decrease in international passenger traffic by regions in 2021 compared to 2019, %

The negative impact of COVID-19 is also very noticeable in the global hotel services market. Hotels were one of the first industries affected by the pandemic and will be one of the last to recover. The pandemic has led to a wave of cancellations in lodging facilities. The hotel companies around the world have implemented massive layoffs and job cuts in the face of the inevitable collapse of business, and many hotels have temporarily closed their doors. Most of the world's hotel groups have postponed or canceled dividends to shareholders and suspended capital spending, causing a drop in investment in tourism.

The hotel industry continues to suffer significant declines, according to STR. The numbers at the end

of 2021 show significant differences in recovery by regions due to varying levels of pandemic restrictions around the world. Occupancy in 2021 in Europe reached 43.3 % and decreased by 40 % compared to 2019. The decline reached 28.9 % in Asia (occupancy of 48.8 %), 36.3 % in Australia and Oceania (occupancy of 47.2 %), 34.0 % in Africa (occupancy of 40.1 %), 14.0 % in North America (occupancy of 56.6 %), 30.5 % in South America (occupancy of 40.6 %), 14.1 % in the Middle East (occupancy of 56.5 %) (Figure 3, inhouse development based on [5]). The revenue per available room (RevPAR) in hotels in the Middle East has reached 85.6 % of pre-pandemic levels. And it is the highest rate among the regions of the world at the end of 2021 [5].

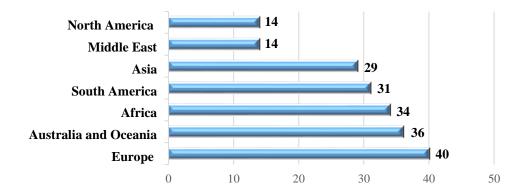


Fig. 3. Decrease of hotel occupancy rate by regions in 2021 compared to 2019, %,

The success of countries in vaccinating their populations and easing travel restrictions allowed an increase in the number of tourist trips. International tourism gradually recovered in the second half of 2021. Nevertheless, the decline was 62 % by the same period in 2019.

after Travel restrictions imposed the introduction of the Omicron variant slowed the recovery in international travel demand in December 2021 by about two weeks. It was expected that demand for international flights in December 2021 would rise to about 56.5 % compared to 2019 levels, without the new coronavirus variant. Volumes were 58.4 % below the results of the same month in 2019 and 60.5 % below the results of November 2021. There has been a decline in ticket sales for future domestic and foreign flights since November 2021 [3].

The top ten favorite tourist countries according to UNWTO, which exists under the auspices of the UN, are five European states: Germany, France, Spain, Italy, and the UK. Entry into these countries remains severely restricted since the beginning of the coronavirus pandemic.

Germany considers entry from the territory of each country separately. Unhindered entry into Germany, from February 7, 2022, is allowed for citizens of Switzerland, Andorra, Monaco, San Marino, Vatican City (Holy See), Great Britain (with a residence permit issued by Germany until December 31, 2020 year) and member states of the European Economic Area.

France also continues to severely restrict the rules of entry into the country. The country is open

to citizens of Switzerland, Andorra, Monaco, San Marino, Vatican City (Holy See), Great Britain (depending on residence permit and residence documents) and the member states of the European Economic Area.

Entry into Italy for foreign nationals is still highly restricted. The right of unimpeded entry is only available to citizens of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Republic of Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland and Vatican City (Holy See).

The list of countries whose citizens are allowed to enter Spain includes: Andorra, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Slovakia, Slovenia, Spain, Sweden and Vatican City (Holy See).

Citizens from most countries are allowed to enter Great Britain, but they must present a negative test result at least 2 days before departure from the first boarding point or a COVID-19 vaccination certificate.

Australia, the representative of the Asia-Pacific region, vividly demonstrated the tight restrictions in connection with the COVID-19 pandemic. The country is open to citizens of New Zealand, Japan, Korea and Singapore with a COVID-19 vaccination

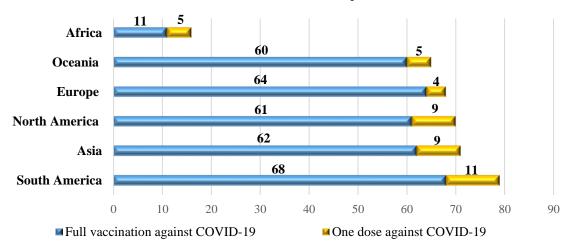
certificate. Entry into the country is allowed for everyone vaccinated with two doses in Australia from February 21, 2022, for the first time since the closure of the border.

The solution to the problem of coronavirus spread is seen by national governments as mass vaccination of the population. The Pfizer vaccine was approved for use in the U.S. and several other countries in December 2020, and thus mass vaccination began. Vaccine development and improvement play a critical role in the health care system. More than 40 medicines have been developed and tested by various medical institutions and pharmaceutical companies since April 2020 that should potentially protect against COVID-19. There

are several coronavirus vaccines available today: Pfizer-BioNTech, Moderna, OxfordUni-AstraZeneca, Sputnik V, and others. EU countries have begun wide vaccination of the population since the end of December 2020.

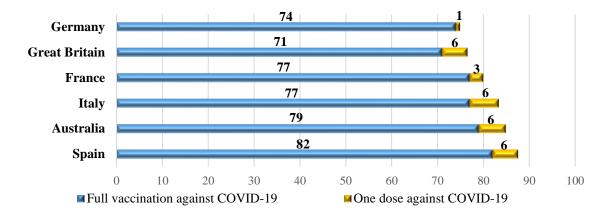
62 % of the world's population received at least one dose of the COVID-19 vaccine in February 2022, of which 53 % were fully vaccinated. 10.24 billion doses have been administered worldwide, and currently 23.66 million doses are administered daily [6].

Vaccination rates against COVID-19 vary by country, from less than 1 % of the population in some countries to over 60 % in others (Figure 4, inhouse development based on [6]).



**Fig. 4**. COVID-19 vaccination rates in tourist countries in February 2022, %

Countries gradually lift travel restrictions thanks to vaccination, allowing tourism to recover in many parts of the world. The health of citizens must remain a priority. Coordinated medical protocols must be firmly in force. They have to protect communities and travelers, as well as support companies and workers. The vaccination rate against COVID-19 also varies by region (Figure 5, in-house development based on [6]).



**Fig. 5.** COVID-19 vaccination rates by region in February 2022, %

Vaccination has resulted in lower rates of coronavirus in Australia than in many other countries.

The Australian government has developed specific strategies to develop the tourism and hospitality industry in 2020 to ensure business survival. These include reduced fees and charges for tourism businesses in several sectors, tax breaks for domestic airlines, targeted measures to stimulate domestic tourism after the crisis. The national government announced a A\$250 million package for regional Australia in September 2020. This package included two areas. One area was A\$50 million aid to businesses to recover tourism in regions that rely heavily on international tourism. The other was 200 million Australian dollars to develop local tourism infrastructure in regions.

The Australian government adopted a four-phase national plan in 2021 to deal with the coronavirus pandemic. The first phase of the plan, among other things, called for a national vaccination plan to be implemented as quickly as possible. The second phase was aimed at eliminating outbreaks and the spread of infection in the community. The third phase of the plan was to remove any restrictions on vaccinated returnees and expand the list of visas whose holders would be allowed to enter the country. It was also planned to allow international travel for vaccinated Australians. The fourth phase expected Australia to be able to return to its previous life and open its borders to citizens and foreigners, with only some health restrictions for those who for

one reason or another had not been vaccinated against the coronavirus.

Documents confirming that they are vaccinated, or exemption from vaccination for medical reasons, are a prerequisite for entry of foreign tourists into the country. Fully immunized are those who have used medications approved by health authorities in Australia. According to the country's government, these vaccines are Comirnaty (Pfizer), Vaxzevria (AstraZeneca), Spikevax or Takeda (Moderna), COVID-19 Vaccine Janssen (Janssen), Nuvaxovid (Biocelect on behalf of Novavax), Coronavac (Sinovac), Covidshield (AstraZeneca - Serum Institute of India), BBIBP-CorV for people under 60 years of age on arrival in Australia (Sinopharm China), Covaxin (Bharat Biotech), Sputnik V (Gamaleya Research Institute) [7].

The country's airport workload is gradually approaching pre-pandemic levels, but the airline market and tourism industry will need a long time to recover from the pandemic without the return of foreign tourist traffic.

It would be helpful to stimulate the economy if Australian policymakers could expand on current experience with crisis management strategies to better prepare the country for future shocks of any kind [8].

# 4. CONCLUSION

The COVID-19 pandemic is the biggest challenge the world has faced since World War II. The virus, which appeared in Asia in late 2019, has spread to

every continent, even Antarctica. projections for 2021 have declined several times since the coronavirus outbreak, due to high levels of uncertainty. The actual decline in international tourist arrivals reached 72 % in 2021 compared to 2019, due to the speed of the coronavirus spread and the duration of restrictions and border closures. The prospects for future developments, however, remain unclear. The world still faces major challenges going forward, from the uncertain duration of the pandemic to movement restrictions, all in the context of a global economic recession. Countries around the world are implementing a wide range of measures to minimize the effects of the COVID-19 pandemic and to stimulate recovery in the tourism sector.

The crisis has shown the importance of tourism as a way of development for many countries to reduce poverty and improve their economies. The survival of businesses throughout the tourism industry is threatened without continued government support, and the recovery of international tourism in 2021 has not taken place while many governments have taken impressive measures to soften the blow to tourism, to minimize the loss of jobs.

Many countries, most often located in Europe and the Americas, have begun to open their borders to foreign tourists. The easing of restrictions on vaccinated tourists has contributed to the gradual recovery of mobility in Europe and other parts of the world. But it didn't happen in Asian countries, where most destinations remain completely closed.

The majority of UNWTO experts (64 %) still believe that international tourism will return to 2019 levels only in 2024 or even later. 58 % expect a recovery in the third quarter of 2022, while 42 % expect a full recovery to occur only in 2023 [9]. More pessimistic forecasts are made for the Asia-Pacific region. The Middle East is projected to fully recover as early as 2022.

It would be advisable to develop and implement socio-economic recovery programs and travel protocols based on close national and international cooperation and coordination, a whole-ofgovernment approach, public-private partnerships, and public participation to promote business recovery and increase traveler confidence. Full coordination with health authorities international cooperation on consumer protection policies and travel restrictions are essential to promoting travel safety, building trust and accelerating the recovery of tourism activity. The lifting or imposition of travel restrictions must be fully coordinated between countries to ensure a safe recovery. Vaccination deployment, however, remains uneven, and many destinations remain completely closed, mostly in Asia and the Pacific [10].

It is therefore important that national governments prioritize the tourism sector, intensify the vaccination process, and take measures that would allow industries to resume their activities and cope with the negative effects of the pandemic.

Another year in a deadly pandemic has demonstrated the global nature of the problems that have arisen in international tourism. They affected all countries and territories, where previously international tourism was a familiar attribute of life, and international tourism business was an integral of the local population. Prolonged psychological discomfort associated with the inability to travel freely is only one aspect of the effects of COVID-19. It is still possible to accept this, although not everyone can withstand it and sometimes go on the road, exposing themselves and others to danger. It is much more difficult to realize the sudden business interruption, the loss of work, income, and sometimes just the means of living. All this negativity is strengthened by the uncertainty of the situation. How long the pandemic will last and when it will finally end is still difficult to say unequivocally. It is clear, however, that the return of international tourism to pre-crisis levels will not happen in weeks and months, but years later. It is advisable to continue to monitor the situation in order to be prepared for both the best and the worst scenario in the development of international tourism, if it is such a situation.

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