

Bulletin of Taras Shevchenko National University of Kyiv. Economics, 2020; 2(209): 42-46

УДК 336.7

JEL classification: L93, M31

DOI: <https://doi.org/10.17721/1728-2667.2020/209-2/6>

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FORECASTS OF THE AIR TRANSPORT INDUSTRY AFTER THE COVID-19 CRISIS

The air transport services industry is one of the most affected branches of the global crisis industry caused by the new COVID-19 coronavirus. After a sustained growth in the last decade, this industry came to report declines of almost 50% at the end of the first quarter of 2020. Given that no one can approximate how long the global pandemic will end, it is very difficult to predict how long the air transport services will return to January 2020, as well as how many operators will declare insolvency or how many they will be able to adapt their strategies so that they can make a profit. Part of global airline operators have managed to adapt their activity by operating mainly cargo flights, but even so, a very large part of the fleet remained on the ground.

Through this article to followed highlighting the situation in which air transport services are found, almost half a year after the outbreak of the COVID-19 pandemic by highlighting the amounts that some European countries have not received while issuing forecasts on how in which the staged resumption of flights will take place and how the air operators will manage to follow common return policies or will develop their strategies.

Key words: air transport strategies, COVID-19 crisis, air transport marketing, marketing forecast.

Introduction. Currently, the Earth is facing a unique situation, characterized by social distancing, the self-isolated population in their own homes, massive waves of layoffs and technological unemployment, as well as an acute lack of predictability in most areas of activity. It can be said that at the moment there is only one choice between health and the global economy, and in most states, the authorities have taken the necessary measures to protect the health of the population, and the main scenarios of economic reorganization will be analyzed.

Corona viruses are grouped into an extended family of viruses that usually target the respiratory organ. The name comes from the Latin word corona, which means crown, due to the thorny fringes that surround these viruses. At this time, animals in Wuhan, China, a city of 11 million, are believed to have made the leap late last year. Global specialists are still trying to understand their exact roots. As for the signs, in 10 and more than 30 percent of cases, two of the seven crown viruses that infect people, SARS and MERS, can cause severe pneumonia and even death. Others, however, have milder effects, such as colds. Most patients now start with fever, cough and shortness of breath, according to the Centers for Disease Control and Prevention. An early analysis, published in *The Lancet*, provided even greater details. A subset of the first 41 patients in Wuhan with confirmed Covid-19 was analyzed. Fever, cough, muscle aches, and exhaustion were the most common symptoms; vomiting, nausea, and coughing up mucus or blood were uncommon.

As a result of air traffic and large population movements, the rapid spread of Covid-19 in Asia will count in Africa. As a result of the rapid expansion of Chinese investment in Africa¹⁸, air traffic between China and Africa has increased by more than 600% in the last decade. For example, Ethiopian Airlines, Africa's largest airline, now operates about half of Africa's 2,616 annual flights to China¹⁸.

From an economic point of view, COVID-19 contributes to an economic decline worldwide. The beginning of 2020 presented the global economic situation in an optimistic tone, on the road to recovery, with growth forecasts for most markets. Currently, all predictions have stopped, with the spread of COVID-19 in almost every country in the world. Just a decade after the global recession of 2008, a short and severe crisis is still possible. The first entities affected are in the transport and hospitality industries. All ports and terminals face a sharp decline in revenue, higher

processing costs due to site congestion and the accumulation of empty containers and trying to use the "force majeure" situation to reduce losses.

If the crisis generated by COVID-19 is appropriately managed, in the next phase follows the global reset and everything and starts from scratch. In my opinion, as in the major crises of the past, there will be ways to solve it now. There are several opportunities for global cooperation to bring the economy back on an upward trend.

In this article, an exploratory research of the literature was conducted and a case study was conducted on the current situation of air transport and how it was affected by the Covid-19 pandemic. Also, based on the identified information and existing data, predictions were made regarding the evolution of the current situation.

Implications of COVID-19 in the air transport industry: a theoretical approach

The trend of global mobility has grown in the last ten years at a faster pace than the global growth of the world's population. Even so, most air traffic flows have been shaped on a national or regional scale by variations due to political instability, terrorism and economic crises. The air traffic industry has shown strong dependence on pandemic outbreaks in the past, such as SARS in 2003 and MERS in 2011, with regional and global repercussions.

It is estimated that by 2020 the passenger air transport sector will see a decrease of up to 44% in revenue compared to 2019. The magnitude of the demand shock will be partly determined by the objective dangers of the infection or by various official measures for social distancing. The new standards are defined by fear, and a large part of the meetings will be cancelled in order not to risk being stuck in the quarantine isolation at home. Translated into sums this difference means a minus of \$ 252 billion, according to recent estimates of the International Air Transport Association (IATA).

After a fast land spread of the infection with beginning indication in Asia and a slacked reaction in the remainder of the world, most aircrafts attempted to work an ordinary calendar until they were forestalled by versatility limitations, for example, outskirts terminations and lockdowns, converting into unexpected drops in flight numbers from mid-Walk.

Information demonstrated that effect has been more grounded in global than local markets. There was a fractional recuperation of Asia Pacific household markets during Spring, powered by Chinese recuperation,

transforming into a twofold plunge in April as other Asian nations experienced drops in residential rush hour gridlock in accordance with worldwide patterns (Suau-Sanchez et al, 2020).

The tourism industry is facing many cancellations and a significant decline in demand amid strict government restrictions on social distancing and the restriction of unnecessary travel. At European level, the President of the EU Commission proposed that all non-essential trips to non-EU countries be suspended for 30 days. Travel suspensions have been similarly implemented in Asia and Africa. Airlines are facing one of the worst crises in its history. In this situation, government aid is needed to reduce the disaster caused by the lack of passengers. The amount that companies would need is about \$ 200 billion in order not to go bankrupt.

Only the amounts that will have to be returned to passengers for tickets cancelled due to restrictions imposed by governments around the world will bring losses of 35 billion dollars in the second quarter.

The most affected European countries due to pandemics with COVID-19 are:

- The UK with 113.5 million fewer passengers, and \$ 21.7 billion in losses. Approximately 400,000 jobs are also endangered, representing a \$ 32.7 billion contribution to the state budget;
- Spain, with a number of 93.7 million fewer passengers, and losses of \$ 13 billion. A total of 740,000 jobs are at risk, contributing \$ 49.4 billion to the state budget;
- **Germany**, with 84.4 million fewer passengers and losses totalling \$ 15 billion. About 400,000 are at risk of losing their jobs, bringing a \$ 28 billion contribution to the national economy;
- **Italy** with 67.7 million fewer passengers, and losses of \$ 9.5 billion. At the same time, about a quarter of a million jobs are endangered, whose contribution to the state budget is 67.4 billion dollars;
- **France**, with 65 million fewer passengers, and total losses of 12 billion dollars. Endangered jobs – 318,000, whose contribution is 28.5 billion dollars to the national economy.

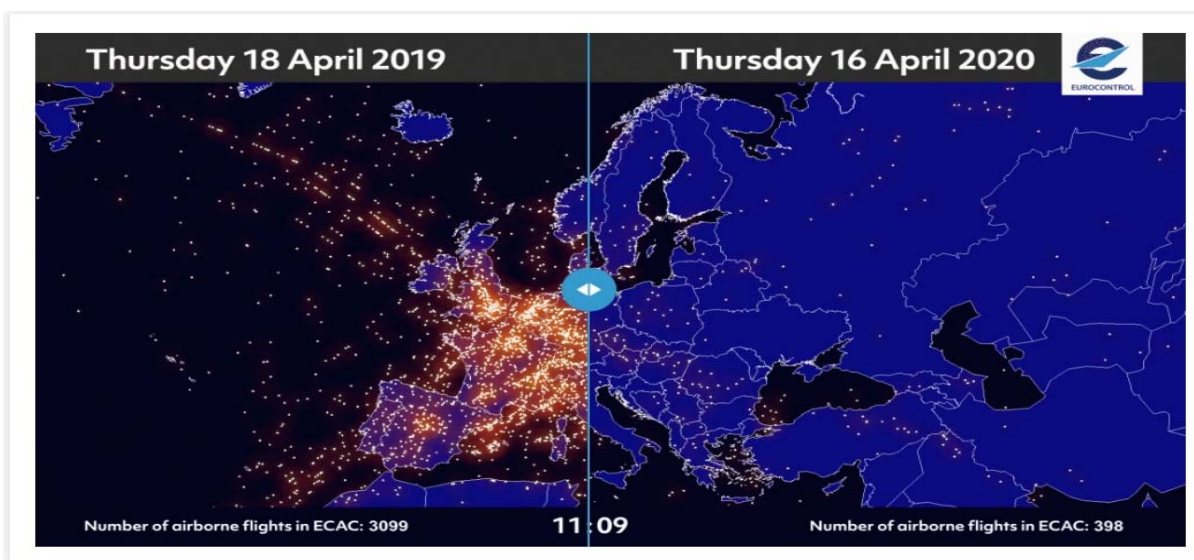


Fig. 1. Graphic representation of air traffic 18.04.2019 ws 16.04.2020

Source: Eurocontrol.

The change felt by the global air transport services industry. If in a year almost 11000 aircraft were operated at 11.00 AM, a year later their number is ten times smaller. Although the situation of global air transport services is not in the best moments, there are also positive and encouraging elements. Air operators are now in a much better state compared to other crises and will more easily overcome the effects of coronavirus. After the unfortunate events of September 11, 2001, some companies in the aviation industry filed for bankruptcy or decided to merge. Also, the massive drop in oil prices can be translated into reductions of up to \$ 28 billion in fuel costs used by air operators.

On a worldwide scale, traveler air make a trip was required to keep up positive development rates in 2020, regardless of various difficulties looked by the business: aircrafts around the globe are battling with high stream fuel

costs and lazy monetary development. Be that as it may, the episode of the novel coronavirus put everyone's arrangements on pause. These troublesome monetary conditions are anticipated to balance the flying business by a 54.2 percent drop in traveler figures, which thusly is anticipated to convert into the main negative budgetary execution of the carrier area since 2009. It is accepted that the worldwide avionics industry will encounter an astonishing 84.3 billion U.S. dollars in net benefit shortfall in 2020 from 26.4 billion U.S. dollars in 2019.

This measurement speaks to the yearly development in worldwide air traffic traveler request somewhere in the range of 2006 and 2021. In 2019, worldwide air traffic traveler request expanded by 4.2 percent on the prior year. In 2020, due to the coronavirus episode, traffic is anticipated to diminish with 54.2 percent.

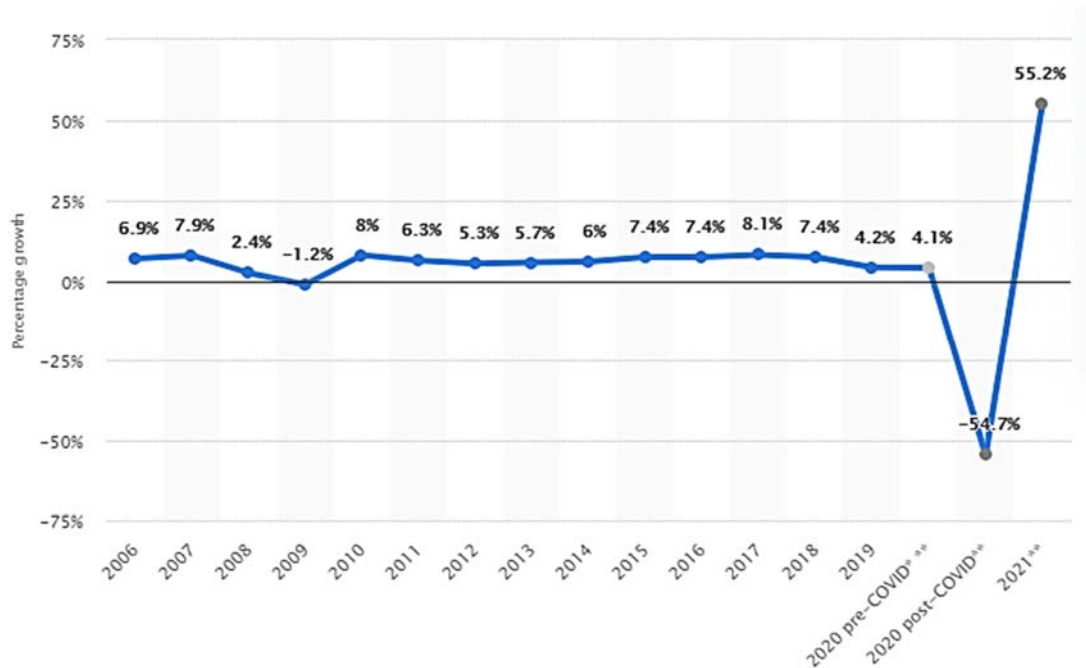


Fig. 2. Yearly development of traveler request 2006-2021

Source: IATA.

The viewpoint of the business is sensitive. Aeronautics request was set to be powered by the rising fortune of the white collar classes in developing markets. Air traffic was gauge to become most altogether in Latin America and Africa, however these districts are likewise destined to

experience the ill effects of wellbeing emergency brought about by the flare-up.

Globally, the effects of the COVID pandemic are highlighted according to the following graph.

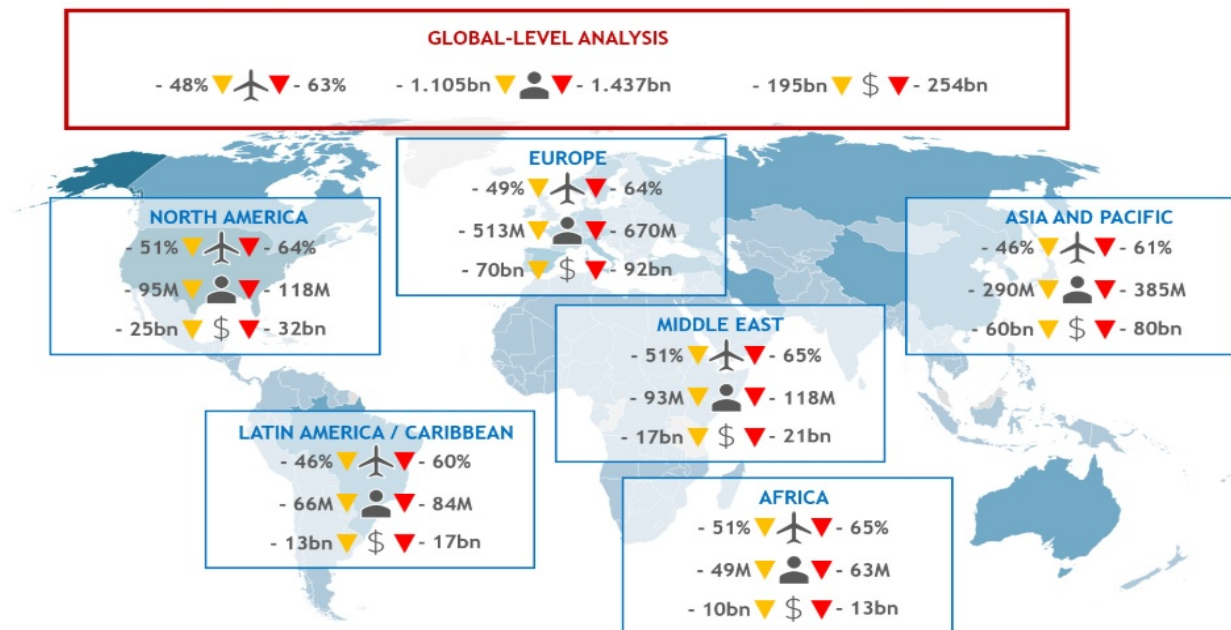


Fig. 3. Number of flights globally

Source: ICAO.

It is obvious that at European level there was the largest decrease in the number of people transported through airlines, which generated a loss for airlines of between 70 bn and 91 bn. In the Americas, Node flight destinations are concentrated in a few countries (USA and Canada) and fewer international airports, the number of countries and destinations affected in Europe is much higher. The direct comparison of international passengers and COVID-19 cases shows a significant correlation with a clear trend on Asian countries with the most flight routes to China.

Forecasts for the air transport industry

At European level, two significant scenarios have been developed regarding how this industry can recover in the next ten months. These scenarios envisage a unitary application of relaunch policies and provide for facilitation of government policies of social distancing and reduction of population movements.

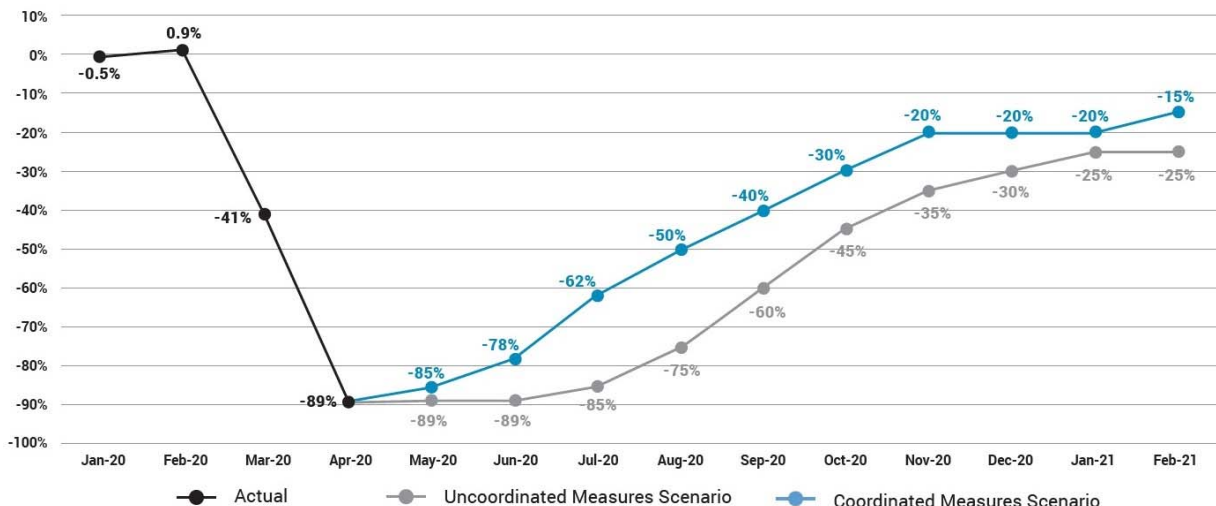


Fig. 4. Scenarios for relaunching air transport services

Source: Eurocontrol.

The implementation of these scenarios depends in no small extent on the duration and size of the Europe pandemic, which so far is not very clear. Through a coordinated approach of the air operators, there is the possibility that in mid-June, starting with July, a large part of the planned flights can be executed. In order to issue the forecast in Fig. 2, a series of international organizations such as ICAO, IATA, ACI and IMF were consulted, as well as management staff from major European air operators.

In Asian countries where the presence of COVID-19 first existed, about 40% of domestic flights have returned to normal, even though most aircraft seats are not fully occupied. Also, due to the global pandemic, it is expected that intra-European traffic will enjoy an increase, at least in the field of tourist services.

Through the "Coordinated Measures" scenario, the evolution of air traffic is expected, based on a common approach in order to establish operational procedures in place with measures to lift federal restrictions. In anticipation of the first scenario, the forecast "Uncoordinated measures" was developed, which involves an individual approach, based on the directions established by each country and each operator/group of air operators.

Analyzing the evolution of the airline industry highlighted in the scenario of coordinated measures, a loss of 45% of flights is forecast, approximately 5 million in 2020. If the scenario of uncoordinated measures is applied, a loss of 57% of flights of approximately 6.2 million can be obtained. The difference between the two scenarios is significant, 12% of flights or 1.2 million fewer passengers, which emphasizes that the development of a common approach is significant to minimize the effects and cost of the pandemic.

Analyzing in terms of prices, one of the scenarios predicts a significant increase in tickets, due to low demand. In the case of air transport services, the passengers gave up, first of all, the non-essential flights, an aspect that caused high losses for the companies. By default, due to their desire to minimize the level of losses, as well as flights at the limit capacity, there is the possibility to increase prices. Another scenario predicts a drop in prices, based primarily on the feedback of Asian countries where some of the races have been resumed. In this case, the price reductions were significant, reaching insignificant costs in some cases. Also, in support of the second

scenario, the price of petrol is added, which has reached negative historical values.

From returning to a healthy state, the operators in the field of air transport point out that for the flights planned to start with October, there is an increase. Also, there are already reservations for December 2020 and quite a few reservations for February 2021. The flight conditions will be, at least for a different period, the companies will no longer be able to place passengers very close, and ticket sales will no longer be possible for the full capacity of the aircraft. Carriers will have to be more rigorous in terms of health and hygiene, a practice that will undoubtedly incur additional costs. Staff will need to do additional cleaning of tables and toilets to prevent the spread of the disease. This would require additional resources and help reduce the number of flights that carriers can operate. Air operators will also have to invest in technical air purification equipment onboard aircraft.

So air traffic has been a major vector for the global spread of COVID-19. At this time our data are incomplete, due to the limited availability of information, our results suggest a direct correlation between the number of passengers between China and international destinations and cases of COVID-19 diagnosed outside China. The large differences in the number of COVID-19 cases per passenger in China compared to international ones are most likely related to extensive train and car transport, while the international spread of COVID-19 is practically exclusively attributed to air traffic and the number of passengers. International traffic with China depends mainly on the air traffic network, China in China is relatively isolated from other world centers, even in Asia.

Conclusion & Discussion. Air transport services are going through a difficult period, characterized by hundreds of missed flights, thousands of aircraft left on the ground and large sums spent to deal with the COVID-19 pandemic. At this time, it is difficult to say how long the current situation will last and how long the air transport services will be able to return to the level held in the same period of 2019. Even if nothing is inevitable regarding the recovery of the level of flights performed. transport, bodies At the international level, together with airline specialists, they have developed scenarios aimed at reducing recovery time, while

establishing universal policies that they will adopt once government restrictions are lifted.

In the next period, most countries in the world will open their borders and a large part of air transport will be resumed. Certainly, companies will seek to offer routes other than those established at the same time as the closure of non-performing routes. They will also have to implement the World Health Organization's recommendations on social distance, air quality in aircraft or conditions for boarding and disembarking passengers.

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Received: 17/02/2020

1st Revision: 26/02/2020

Accepted: 20/03/2020

Author's declaration on the sources of funding of research presented in the scientific article or of the preparation of the scientific article: budget of university's scientific project

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ПРОГНОЗИ ЩОДО АВІАТРАНСПОРТНОЇ ГАЛУЗІ ПІСЛЯ КРИЗИ COVID-19

Галузь авіатранспортних послуг є однією з найбільш постраждалих через світову кризу, викликану новим коронавірусом COVID-19. Після стійкого зростання протягом останнього десятиліття, у цій галузі було зафіксовано падіння майже на 50 % в кінці першого кварталу 2020 року. З огляду на те, що ніхто не може приблизно визначити тривалість пандемії, дуже важко передбачити, скільки часу буде потрібно, щоб авіаперевезення повернулися до рівня січня 2020 р., а також скільки компаній оголосять про банкрутство або хто з них зможе адаптувати свої стратегії таким чином, щоб отримати прибуток. Частина глобальних операторів авіаперевезень зуміли оптимізувати свою діяльність, виконуючи в основному вантажні рейси, але навіть при цьому дуже велика частина флоту залишилася на землі. У статті звернено увагу на ситуацію, в якій опинилися авіаперевізники через півроку після початку пандемії COVID-19, і на те, які суми не були отримані деякими європейськими країнами всупереч прогнозам щодо поетапного відновлення польотів, і як авіакомпанії зможуть відповідати загальній політиці повернення або розробляти власні стратегії.

Ключові слова: авіатранспортні стратегії, криза COVID-19, маркетинг повітряного транспорту, маркетинговий прогноз.

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ПРОГНОЗЫ ДЛЯ АВИАТРАНСПОРТНОЙ ОТРАСЛИ ПОСЛЕ КРИЗИСА COVID-19

Отрасль авиатранспортных услуг является одной из наиболее пострадавших из-за мирового кризиса, вызванного новым коронавирусом COVID-19. После устойчивого роста в течение последнего десятилетия, в этой отрасли было зафиксировано падение почти на 50 % в конце первого квартала 2020 года. Учитывая, что никто не может приблизительно определить продолжительность пандемии, очень трудно предсказать, сколько времени потребуется, чтобы авиаперевозки вернулись к уровню января 2020 г., а также, сколько компаний объявят о банкротстве или кто из них сможет адаптировать свои стратегии таким образом, чтобы получить прибыль. Часть глобальных операторов авиаперевозок сумели оптимизировать свою деятельность, выполняя в основном грузовые рейсы, но даже при этом очень большая часть флота осталась на земле. В статье обращено внимание на ситуацию, в которой оказались авиаперевозчики спустя полгода после начала пандемии COVID-19, и на то, какие суммы не были получены некоторыми европейскими странами вопреки прогнозам относительно поэтапного возобновления полетов, и как авиаконпании смогут следовать общей политике возврата или разрабатывать собственные стратегии.

Ключевые слова: авиатранспортные стратегии, кризис COVID-19, маркетинг воздушного транспорта, маркетинговий прогноз.