

# Chapter 4

## The Effects of the COVID-19 Pandemic and the Future of Aviation

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### **ABSTRACT**

*The aviation industry, which gained momentum in the 20<sup>th</sup> century, has become one of the pioneers of the transportation industry in the 21<sup>st</sup> century. Thanks to the speed of technological developments, this great and rapid development increases the importance of the sector day by day. This rapid growth in the aviation sector has been interrupted from time to time due to world wars, economic, or social crisis. Lessons learned from the crises are important factors that enable one to be prepared for future crises. For this reason, it is considered that it will be useful to examine the damage caused by the COVID-19 pandemic to the aviation sector and to reveal the right and wrong practices made during the emergence of the pandemic.*

### **INTRODUCTION**

The aviation industry has developed rapidly due to the speed it has added to the transportation industry and has become an important part of national and international economies. The aviation industry also contributes to global economic growth, creates new jobs and social benefits. Compared to its short history, the aviation industry is a rapidly developing business that leads other sectors. Pre-pandemic estimates made by the leading organizations of the aviation industry such as ICAO and IATA show that the industry will grow more and more in the coming period. However, these growth expectations were suddenly interrupted by the emergence of the covid-19 pandemic.

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The covid-19 pandemic caused travel restrictions, quarantines, hospitalizations, and deaths, has adversely affected many aspects of social life and many business sectors, especially the aviation and tourism sectors. During the covid-19 pandemic the airline sector has experienced significant economic losses until now, but the pandemic hasn't over yet. Although the sector has entered a recovery process recently, it is estimated that it will take a long time for the sector to return to its good old days. By the way, the covid-19 pandemic is not the first crisis affecting the aviation industry. In previous periods, world wars and major economic crises affected the development of the aviation industry, but they could not stop it. If the lessons learned from previous crises had been used to shape the industry appropriately, the effects of the current covid-19 pandemic could have been reduced. Since it is impossible to provide an environment free from crises in the future, being prepared for future crises will reduce the damage caused by the crises. For this reason, the aim of the study is to analysis the effects of covid-19 pandemic on aviation industry so we can get ready for future crises.

The aviation sector is a business model with a high potential to be affected by crises and extraordinary events. For this reason, the lessons learned from these crises are important in terms of being prepared for possible risks and reducing the effects of the events in the future. In this context, first, definitions on crisis management, aviation business models and previous crisis events affecting the aviation sector will be given. Then, the effects of the covid-19 pandemic on the aviation industry will be discussed. Then precautions taken by international organizations and support packages for aviation companies implemented by national aviation authorities during covid-19 pandemic will also be included. In the last part, evaluations about the future of the aviation industry will be given. The descriptive study, designed according to the qualitative method, is based on secondary sources. Publications compiled from scientific studies published by international aviation authorities and academicians are used as secondary data sources.

## **BACKGROUND**

The development of aviation industry was interrupted by Covid-19 pandemic, which started in the Wuhan province of China and affected the whole world. It was declared as a public health emergency on 30 January 2020 and as a pandemic (universal epidemic disease) on 11 March 2020 by World Health Organization (Zhuang vd., 2020; Zhang vd., 2020). After the declaration of Covid-19 as a pandemic, mobility of both human and freight was stopped to lower the spread of the disease. Air transport and operations which plays an important role in human mobility, are also stopped due to covid-19. For this reason, the aviation industry; has always been at the forefront both in the spread of the epidemic and in prevention efforts. In the last 50 years, during which the aviation industry has developed rapidly, there have been periods of contraction and stagnation due to various factors on sectoral growth such as Gulf Wars, 2008 Global Crisis, SARS, Twin Towers Attack in 2001. However, in none of these crises, the aviation industry hasn't almost come to a standstill, as in the case of COVID-19 pandemic.

### **Crisis and Crisis Management**

In this part of the chapter, we will give more information on crises and crisis management because first covid-19 created a huge crisis environment and aviation companies deal with covid-19 crisis with crisis management approaches. As a starting point definition of crisis and crisis management are given. Crisis is defined as “a state of fear that cannot be prevented despite all preparations, needs to be responded to

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