


## Chapter 15

# The Impacts of COVID-19 on the Stock Returns of Supplier Industries of the Civil Aviation Sector: An Event Study

**Olcay Ölçen**

 <https://orcid.org/0000-0002-4835-1171>

*Faculty of Aviation and Space Science, University of Kyrenia, Turkey*

**Yalçın Pamuk**

*İstanbul Gelişim Üniversitesi, Turkey*

**Özlem Sayılır**

*Anadolu Üniversitesi, Turkey*

### ABSTRACT

*The pandemic has not only affected passenger markets deeply, but it has also generated excessive impacts on the sub-branches and related industries of the civil aviation sector, in terms of financial results. Therefore, this study analysed the impacts of the pandemic on the stock returns of the freight forwarder industry and airport service industry as the main supplier industries of the civil aviation sector. The sample of the study is comprised of 18 freight forwarder companies and six airport service provider companies, which operate in different regions of the world. It is selected legal declaration of COVID 19 on 11 March 2020 by the World Health Organization as the event date, and an event study analysis is made. The findings of both approaches support that COVID-19 pandemic crisis had statistically significant impacts on the stock returns of freight forwarder industry and airport service provider industry.*

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## INTRODUCTION

The civil aviation sector is the third largest sector in the world, which consists of different industries operating together with global regulators such as the International Civil Aviation Industry (ICAO), International Air Transport Association (IATA) and Airport Council International (ACI). Civil aviation market players continue to play their games in a narrow legal ground adorned with safety, security, environmental and anti-noise rules, regulations and laws with possible and severe punishments. Each player also possesses a financial identity that may encounter financial burdens, which have become heavier especially in the last decade. Investors, creditors and leasing companies monitor these markets vigorously and thoroughly. Besides, the sector exhibits a dynamic managerial and financial structure. In fact, the market conditions of the US Civil Aviation Sector after the 1978 Airlines Deregulation Act, with all of its negative and positive impacts, is an experienced example of the relocation of the market toward the desired destination in a complex financial world.

Ever since the World Health Organization (WTO) declared Covid-19 as a pandemic (World Health Organization) on March 11th, 2020, severe restrictions have been imposed on air transportation. According to Iacus et al. (2020), air travel bans due to Covid-19 caused significant reductions in the World GDP as well as job losses in the aviation sector. COVID-19 travel restrictions even led to the bankruptcy of several airlines and airports (Dube et. al.,2021). Similarly, global air transportation networks were also dramatically affected by Covid-19 (Sun, Wandelt and Zhang, 2020). Besides, Airport revenues dropped significantly due to the pandemic, which can be seen in the table 1.

*Table 1. Quarterly Total Airport Revenues in 2020 by Region*

	Forecasted (Pre Covid-19)	Estimated (Covid-19)	% Change
Africa	4300	2100	-51.2%
Asia-Pacific	49900	20500	-58.9%
Europe	59300	22200	-62.6%
Latin America-Caribbean	10500	5200	-50.5%
Middle East	13200	6200	-53.0%
North America	34700	18300	-47.3%
World	171900	74500	-56.7%

**Source:** Airport Council International

Hence, Covid-19 pandemic has turned into a major crisis and created severe challenges for the civil aviation sector in the last two years. The pandemic has not only affected passenger markets deeply, but it has also generated excessive impacts on the sub-branches and related industries of the civil aviation sector, in terms of operational and financial results. For example, the impact of COVID-19 on the global air cargo volumes became evident in March, 2020 with industry-wide cargo tonne kilometres (CTKs) contracting by 15.2% year-on-year. Global air cargo volumes had been weakening since November 2018 due to global trade tensions (notably US-China) and the COVID-19 outbreak made things even worse. CTKs had fallen in annual terms for 12 consecutive months – the longest period of undisturbed decline

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