
What has been the impact of COVID-19 on airport traffic based on time series analysis?

DATA APPENDIX

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February 29, 2024

Our question and the database

The question we have chosen for our study is: « What has been the impact of COVID-19 on airport traffic? ». We think this question is pertinent because we all know that during the pandemic it was impossible to travel and the impact was on every domain of the worldwide economy. The airport traffic was one of the worst because it was impossible to travel from one country to another. That is why we want to study how important the impact was on it.

Our motivation come from this article. We were surprised that even if the pandemic seemed to be finished for several months, the airport traffic in Blagnac airport is still lower than before it happened. That is why we want to know how important was the impact at the start of the pandemic when Europe was in lockdown, but also during the following months when air traffic was gradually resuming.

Data

The database we will use shows the monthly airport traffic in every airport in Europe between 1998 and 2022 from Eurostat. We will clean it to keep only the most representative airports in every country. We aim to estimate the airport traffic between 2019 and 2022 and compare it to the control data. We will also do some studies for some precise countries to eventually compare if the different government policies have varied the impact of COVID-19 on air traffic.

- Data Source: The dataset originates from Eurostat, focusing on monthly airport traffic.
- Nature of the Data: The dataset comprises time series data detailing airport traffic (number of passengers).
- Data Collection Method: Data is collected on a monthly basis, covering all airports in Europe.
- Sample and Period Considered: The dataset spans from 2002 to 2023. The analysis will focus on the most representative airports in each European country.

Table 1: Travel Restrictions in European Countries (Part 1)

Countries	UE	Borders main UE Period	Duration
France	1	18/03/2020 - 15/06/2020	89
Italy	1	10/03/2020 - 03/06/2020	85
Spain	1	24/03/2020 - 21/06/2020	89
Denmark	1	13/03/2020 - 27/06/2020	106
Norway	0	15/03/2020 - 15/07/2020	122

Table 2: Travel Restrictions in European Countries (Part 2)

Countries	Border non-UE Period	Negative tests Period
France	18/03/2020 - 01/07/2020	04/12/2021 - 10/02/2022
Italy	10/03/2020 - 01/07/2020	16/12/2021 - 31/05/2022
Spain	24/03/2020 - 01/07/2020	23/11/2020 - 20/09/2022
Denmark	13/03/2020 - 01/07/2020	09/01/2021 - 01/02/2022
Norway	15/03/2020 - 01/07/2020	02/01/2021 - 02/02/2022

Table 3: Data Description

Variable	
country	europaan landen
passengers	Number of passenger carried by the airport by month
months	starting in 2002 and ending in 2023