

## SITUATION OF EUROPEAN AIRLINES CAUSED BY COVID-19: RESTRICTIONS, GOVERNMENT SUBSIDIES AND FUTURE PROSPECTS

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**Abstract.** The COVID-19 pandemic has been an unprecedented crisis, severely affecting the economy and many sectors, including the airline industry. This paper reviews this situation to see how airlines have acted since the beginning of COVID-19. The airline industry is dependent on financial support and subsidies to cope with the massive drop in air travel due to the coronavirus. The support received by the major airlines has been examined. In addition, a comparison has been made of all the aviation restrictions that have been implemented by different European governments. Travellers from countries with a higher incidence of cases, or with a growing rate of cases, have the most restrictions on travel to other countries. Furthermore, the strategies and protocols being implemented by certain airlines following the lifting of some of the restrictions on passenger air traffic are analysed. This paper will provide an insight into how airlines are coping with this unfavourable environment, as well as some of the future prospects and strategies of the aviation sector.

**Keywords:** airlines, COVID-19, economy, subsidies, aviation sector, air restrictions.

### Introduction

The COVID-19 pandemic has not only been an unprecedented health crisis, but has also affected the economy and with it many sectors. The airline sector, and aviation in general, is possibly the one that has suffered most from the coronavirus pandemic, an unprecedented crisis (Dunn, 2020a; Monmousseau et al., 2020; Akbar & Kisilowski, 2020; Budd et al., 2020). Airlines have stopped operating many of their flights, on the one hand because of government restrictions and quarantines, and on the other hand because, although many of the restrictions have been lifted, most passengers are waiting for better times to travel again (Hollinger, 2020).

This crisis affects not only airlines as a whole, but also aircraft manufacturers and providers of maintenance, repair and overhaul of aircraft. Aircraft leasing companies have been hit, as have airport operators and all retailers and businesses inside terminal buildings. The negative impact also affects the premises around the airports and the employees.

The International Air Transport Association [IATA] estimates that 25 million jobs that depend on air travel are at risk due to COVID-19 worldwide. In addition, the ACI – Airports Council International – estimates that pas-

senger traffic at European airports will fall by more than 700 million people over the course of 2020 (PwC, 2020).

Passenger demand has fallen drastically, and this factor is the one that most influences the losses of the air industry. At the height of the pandemic, in April, 2020, global air transport was approximately 95% below the previous year's levels (IATA, 2020). Traffic levels in 2020 (in passenger kilometres) are expected to decrease by about 54.7 per cent compared to 2019. The number of passengers will be roughly halved to 2.25 billion, at 2006 levels (IATA, 2020).

In view of the huge number of cancelled flights, travellers have the right to request reimbursement (Amankwah-Amoah, 2020). However, many airlines are offering coupons to postpone travel, in an attempt to retain and persuade passengers to fly at a later date.

With the relaxation of restrictions due to the coronavirus, passengers have gradually begun to travel and to discover that flying is a very different experience from what it was previously. Among other changes, there are fewer on-board meal options, traditional on-board service is no longer available, there are no magazines in the seat backs, and all passengers and crew are required to wear masks. All these measures are expected to help ensure the safety of passengers and crew during flights, and to encourage people to continue to use airspace for travel.

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Passenger revenue is estimated to drop to \$241 billion, a significant drop from \$612 billion in 2019. In addition, load factors are estimated to be 62.7% in 2020, compared to 82.5% in 2019 (IATA, 2020).

However, the price of fuel is a plus for airlines. In 2019, jet fuel cost, on average, \$77 per barrel, while the average forecast for 2020 is \$36.8. In 2019, total fuel costs represented 23.7%, compared to the 15% expected in 2020 (IATA, 2020).

In terms of cargo, it is expected that the total tons of cargo transported will decrease by 10.3 million tons compared to 2019 to 51 million tons. However, the shortage of cargo capacity due to the lack of availability of abdominal cargo on aircraft is likely to lead to an increase in rates by 30%, reaching record revenues of \$110.8 billion in 2020, compared to \$102.4 billion in 2019. Cargo will account for about 26% of total airline profits, compared to 12% in 2019 (IATA, 2020).

Most governments consider aviation to be a strategic sector that significantly influences economic development (Zhang & Graham, 2020). Hence, many airlines are receiving government support to mitigate the effects of the crisis.

Given this global situation, the aim of this study is to find out, through historical and statistical data, how airlines are coping with this unfavourable environment, the support they expect to receive and some of the possible strategies, while expecting better scenarios when the mobility restrictions end (Iacus et al., 2020).

## 1. Air restrictions to contain the pandemic

After the peak of the pandemic in Europe in April 2020, air traffic was closed to contain it. Months later, restrictions began to be lifted between countries. On May 13, the European Commission proposed to restore freedom of movement in a gradual and coordinated way within the EU. However, what now looks like a second wave of the virus (Euronews, 2020) has led to many travel restrictions being re-imposed. More than 130 countries

have introduced some form of travel restriction since the outbreak of COVID-19 began, including detection, mandatory quarantine on arrival, submission of a negative PCR (Polymerase Chain Reaction) in order to avoid such quarantine, and even a ban on travel from high-risk areas.

Table 1 presents a review of existing restrictions in European countries, up to the end of August, 2020, when this work will be carried out, together with information on the rate of new cases of COVID-19 reported per 100,000 inhabitants and the rate of deaths reported per million inhabitants per day and country in 14 days. It can be seen that the restrictions are very diverse depending on the country, from the imposition of quarantine to the obligation to present a negative result of COVID-19 by means of a PCR.

The situation of those infected by COVID-19 and those who have died in each European country as of 9 September, 2020 is also shown in Table 1. Compared to the restrictions imposed by each country, it can be seen that the measures taken by the countries in terms of restrictions are disparate. These restrictions have helped to reduce the spread of the coronavirus, but there is no evidence that airspace closure has been key to containing the pandemic. Countries such as Sweden, which never closed their borders to EU or Schengen countries, although they did do so abroad, do not now have a coronavirus incidence rate as high as other countries, although at the end of May their data were very worrying (Lindström, 2020). Travellers from countries with a higher incidence of cases or with a growing rate of cases are those who have more restrictions on travelling to other countries.

Citizen responsibility, the use of protective masks, sanitizing gel and maintaining the required safety distance are the most effective measures to combat the coronavirus. However, the failure of many citizens to comply with these measures has resulted in governments having to close borders in an attempt to curb the pandemic. The losses for many airlines are immense, and although they have received state support, it is not enough.

Table 1. Passenger traffic restrictions in Europe considering the 14-day reporting rate of COVID-19 cases (source: own elaboration based on public information available on the websites of the Ministries of Health of each country and the European Centre for Disease Prevention and Control, 2020)

Country	Air restrictions	Rate 14 day confirmed cases	Rate 14 day deaths
Albania	It does not have.	62.67	21.66
Andorra	It is possible to enter Andorra from the 26 countries of the Schengen Area, without having to undergo a quarantine.	263.86	0.00
Austria	A negative PCR test is required for travelers from high-risk European countries.	49.24	1.58
Belarus	Foreigners must spend 14 days in quarantine unless they arrive from certain countries. They must present a negative result of COVID-19 on entry. In addition, travelers staying more than 5 days in Belarus must register with the police and indicate the address of their accommodation.	26.26	7.30

Continue of Table 1

Country	Air restrictions	Rate 14 day confirmed cases	Rate 14 day deaths
Belgium	It has restricted entry to all travellers who are not from European Economic Area member states, the United Kingdom or Switzerland. Travellers in the red zones must be isolated for 14 days when they arrive in Belgium; those arriving from countries in the orange category must act with caution.	64.17	3.67
Bosnia and Herzegovina	EU and Schengen area citizens can enter from July 16th if they present a negative PCR test issued within the previous 48 hours (does not apply to Croatian citizens).	110.86	35.05
Bulgaria	It does not have.	24.63	17.14
Croatia	At the entrance to the country, travelers receive a brochure with instructions to follow for 14 days. However, travelers may be required to isolate themselves or spend 14 days in quarantine. The cost of quarantine is borne by the traveler.	92.12	6.87
Cyprus	As of July 1, travelers may enter if they can prove a negative PCR test result (done within 72 hours), but must be quarantined for 14 days at a facility controlled by the authorities and pay for it.	4.22	0.00
Czech Republic	Countries have been classified according to their rate of VOC-19 cases. Travelers from low-risk countries do not have to be quarantined or tested for coronavirus. Other travelers from other countries may enter the Czech Republic only for limited and specific purposes.	68.82	2.35
Denmark	Since August 19th it is open to all countries of the European Economic Area and the United Kingdom (except Belgium, Bulgaria, Spain, Malta and Romania).	32.31	0.86
Estonia	Travelers should be quarantined for 14 days, except those from countries with an infection rate of less than 16 cases per 100,000 people in the previous 14 days.	20.30	0.00
Finland	Since July 13, it is allowed to enter the country from the vast majority of countries, as long as it is for work and other essential purposes.	6.45	0.18
France	Travellers from the United Arab Emirates and the United States (category 1 countries) will be denied boarding if they do not provide proof of a negative COVID-19 test. For category 2 countries it is recommended that they be tested within 72 hours of departure, but may choose to be tested on arrival. Those who refuse to be tested on arrival should be placed in quarantine.	130.37	3.28
Germany	There are different quarantine requirements depending on the status. Passengers coming from areas with more than 50 cases per 100,000 population (high-risk area) will have to be quarantined for 14 days.	20.53	0.70
Greece	Passengers from Albania, Bulgaria, Belgium, Spain, Israel, Malta, North Macedonia, Romania, United Arab Emirates, Sweden and the Netherlands may be refused entry if they do not present a negative test for COVID-19 issued 72 hours before arrival.	26.53	4.38
Hungary	It has restricted entry to most foreign travelers since September 1st, except for Hungarian citizens and residents, as well as foreign citizens participating in some sporting events.	41.84	1.23
Iceland	From August 19, those who travel to Iceland, may choose to undergo a second test of COVID-19 instead of staying 14 days in quarantine. They will have to take a second test 4-5 days after arrival and be quarantined until they receive the result of this second test. In addition, travelers must complete a pre-registration form before departure.	20.45	0.00
Ireland	All travellers arriving in the country, except from Northern Ireland, must complete a health form and undergo a 14-day quarantine. However, some countries have entered a "green list" that exempts them from quarantine.	38.31	0.20
Italy	It has restricted the entry of certain countries and in some cases has made a 14-day quarantine compulsory.	31.44	1.95
Latvia	It has restricted entry to all travellers, except citizens of Latvia, Estonia, Lithuania and permanent residents of those countries.	4.69	1.04
Liechtenstein	Switzerland handles Liechtenstein's immigration and customs affairs, so the entry requirements are the same as in Switzerland.	18.24	0.00
Lithuania	In addition to citizens and residents of Lithuania, it is possible to enter if the incidence rate of COVID-19 in the country is less than 25 cases per 100,000 inhabitants in the last 14 days. On the other hand, passengers coming from countries with a rate of 16-25/100,000 inhabitants have to undergo a 14-day quarantine.	15.64	0.36
Luxembourg	From 12 August, people who wish to enter Luxembourg from a country which is not a member of the EU or one of the countries exempted by the EU must prove a negative result for COVID-19 during the 48 hours prior to arrival.	84.87	0.00
Malta	On 21 August, the Maltese authorities published an "amber list" of countries whose travellers must prove negative to COVID-19. The test must be done before arrival and the result must be issued within 72 hours before departure.	83.27	8.10

End of Table 1

Country	Air restrictions	Rate 14 day confirmed cases	Rate 14 day deaths
Moldova	It has restricted entry to most foreign travellers except citizens and their immediate families, persons with visas or residence permits and diplomatic, humanitarian and transit flights.	153.65	31.48
Monaco	There are no restrictions for European countries.	105.79	0.00
Montenegro	Travellers who have spent the last 15 days in one of the “green list” countries can enter without being tested for COVID-19 or being quarantined.	230.00	40.18
Netherlands	All travellers travelling to the Netherlands from countries at high risk of COVID-19 must submit a completed ‘Health Declaration Form’ before boarding, and will have to be quarantined for 14 days.	52.07	2.14
North Macedonia	As of 9 July, citizens of Serbia, Kosovo, Bosnia and Herzegovina and Montenegro must provide proof of a negative coronavirus test within 72 hours of arrival.	70.00	26.48
Norway	It has removed travel restrictions and quarantine requirements for travellers arriving from Finland, Iceland, Greenland, the Faroe Islands and Denmark.	21.10	0.00
Poland	It allows entry to travellers from the EU. However, since 2 September it has banned aircraft from 44 countries from landing, due to its high incidence of COVID-19. This list will be updated every 15 days.	22.26	4.19
Portugal	It has opened its borders to travellers from Europe. Travellers arriving in Madeira, Porto Santo or the Azores must either show a negative result to a COVID-19 test within three days of arrival or be tested on arrival and isolated until the results are received.	48.49	3.99
Romania	People travelling from high risk countries should be quarantined for 14 days upon arrival and those arriving from low risk countries are exempt from quarantine.	85.72	30.90
Russia	From 15 July, all foreign citizens arriving in Russia must present a medical certificate confirming a negative result to a PCR test of COVID-19 carried out within 3 days prior to arrival. Travellers who do not present it must undergo a test on arrival and bear the costs.	47.69	9.76
Serbia	Travellers coming from Bulgaria, Croatia, Macedonia or Romania who do not have Serbian nationality must prove a negative result to a PCR test issued within the previous 48 hours.	16.86	3.16
Slovakia	Countries that are on the list of countries at risk, regardless of whether they arrive by direct or connecting flight, must be quarantined for 10 days.	23.39	0.73
Slovenia	It has reopened the borders, but applies quarantine restrictions to travelers from countries that have a high rate of COVID-19. The country continues to make changes to the green (non-quarantine), yellow (mandatory quarantine for non-residents), and red (mandatory quarantine and COVID testing) country lists.	26.24	0.96
Spain	Borders have been opened for travelers from the EU, the Schengen area and the United Kingdom. Travelers do not have to present a certificate of residence or be isolated upon arrival in Spain, but must fill out a health questionnaire before arrival through <a href="https://www.spth.gob.es/">https://www.spth.gob.es/</a> and present the QR code generated upon arrival.	263.18	14.00
Sweden	It has restricted entry to most foreign travellers from countries outside Europe until at least 31 October. For European countries it remains open.	24.88	2.15
Switzerland	Travellers who have been in certain countries in the last 14 days are subject to quarantine for 10 days when they arrive in the country. The list of countries is updated on an ongoing basis.	53.46	1.40
Turkey	Travellers must complete a location form before arriving in the country, and undergo a medical examination on arrival to check for symptoms. Those with any symptoms will be required to undergo a PCR test, and those testing positive will be relocated to Ministry of Health facilities or private facilities in Turkey, but will have to bear the costs.	26.92	7.55
Ukraine	Travellers from “red zone” countries (where there is a higher incidence of COVID-19 than in Ukraine in the previous 14 days or where the incidence has increased by 30% in the previous two weeks) should be isolated for 14 days or placed in quarantine for 14 days in government-approved facilities. Since 1 August, Ukraine has been divided into four zones (green, yellow, orange and red) according to the epidemiological risk. Each zone has its own set of quarantine restrictions.	75.33	15.11
United Kingdom	The government regularly updates a list of countries whose travellers will not have to be isolated on arrival, unless they have visited a country not permitted in the previous 14 days.	37.15	2.06

## 2. Current situation in the aviation sector: decisions and strategies adopted

The drop in the number of flights during this health crisis has been immense, especially in the most critical months of the pandemic (April, May and June, 2020), when restrictions and confinement were almost total. Figure 1 shows the change in the number of total flights in various countries since January, 2020 compared to the same period in the previous year. A brief recovery began in July and continued in August, 2020, but scheduled flights are still far below their usual frequency, with an average drop of around 50%, despite the lifting of many restrictions. In absolute terms, the number of flights is falling every week, as expected as we move away from the peak of annual travel at the end of July and August, 2020.

The evolution of flights in Europe from March, 2020 to 8 September, 2020, compared to the same dates in 2019 is shown in Figure 2. In July, air traffic was 78% lower than in 2019, so the recovery is slower than expected (ACI Europe, 2020). Friday 28 August, 2020 is the day with the most movement with 18,802 flights, representing a traffic level of  $-49.2\%$  compared to 2019. The moving average of the last 7 days reflects a decrease of  $-52.4\%$  compared to 2019 showing the effects of the new restrictions and the cancellation of flights by two of the airlines with the most activity during these months (Ryanair and EasyJet).

In addition, intra-European flights, as of 9 September, 2020, have decreased by 51% compared to the equivalent date of 2019 while most other flows are around 70% (Table 2). Among the European states with the highest

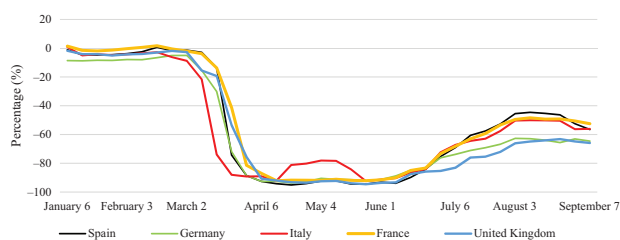


Figure 1. Changes in the total number of global flights year after year (week compared to the equivalent week in the previous year) (source: own elaboration from OAG, 2020)

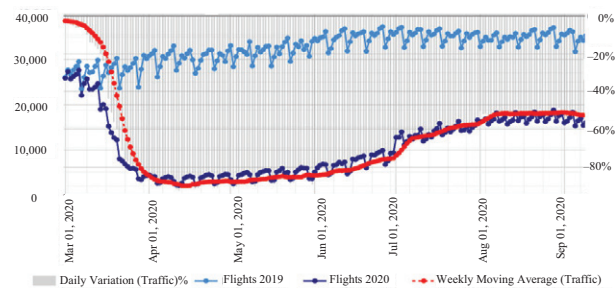


Figure 2. Evolution of flights in Europe from March, 2020 to September, 2020 compared to the same dates in 2019 (source: Eurocontrol, 2020)

volume of passengers, Spain and Portugal are the most affected by this new phase of the pandemic after the end of the state of general alarm, followed by Greece and Italy (Eurocontrol, 2020).

The number of passengers in Europe has been growing during the summer season, remaining at around  $-70\%$  in August, 2020, with 2.8 million passengers on Sunday 30 August, 2020 compared to Sunday 1 September, 2019. In terms of total seating capacity, the week of 31 August, 2020 in Europe was 15.6 million, 6.5% less than the previous week and 57.8% less than the 36.9 million seats occupied in the same week in 2019 (Eurocontrol, 2020).

Figure 3 shows the annual daily changes in the flights of the main European airlines (by passenger traffic in 2019) from June to the first week of September, 2020. Airlines are reducing their activity in Europe because of the uncertainty generated by the re-imposition of restrictions such as quarantines, according to Eurocontrol. Lufthansa, Iberia or Air France have all fallen by around 80%, even in the summer period. For example, the airlines Ryanair and EasyJet have each eliminated almost 300 flights in the first week of September. Ryanair and Wizz Air have announced lower capacity than planned for this autumn, although low-cost airlines are generally ahead of the competition. Europe's domestic (international) seats have fallen in the first week of September by 29.5% (66.2%) year-on-year, compared to  $-27\%$  ( $-63.2\%$ ) in the previous week. Both international and domestic capacity fell week by week, although this is the first time that both have fallen since the beginning of the crisis.

If we compare different airlines as of 8 of September, 2020, they continue to withdraw flights due to the low number of passengers. Ryanair withdrew 292 flights compared to 2 weeks ago, while EasyJet withdrew 294 flights. Despite this, Ryanair remains the airline with the highest number of flights, a total of 1,157 flights operated on Tuesday 8 September, 2020 ( $-20\%$  compared to Tuesday 25 August, 2020). EasyJet was the second airline in terms of number of flights with 601, followed by Turkish Airlines with 578 flights ( $-7\%$ ), Air France with 555 flights ( $+17\%$ ), Lufthansa with 458 flights ( $+10\%$ ), KLM with 439

Table 2. Situation of flights with Europe in 2020 vs 2019 (accumulated until 9 September, 2020), (source: own elaboration based on the information provided by Eurocontrol, 2020)

REGION	% 2019 vs 2020
Intra Europe	$-51\%$
Europe~Asia/Pacific	$-62\%$
Europe~Mid-Atlantic	$-72\%$
Europe~Middle-East	$-72\%$
Europe~North Atlantic	$-72\%$
Europe~North-Africa	$-78\%$
Europe~Other Europe	$-70\%$
Europe~South-Atlantic	$-78\%$
Europe~Southern Africa	$-50\%$

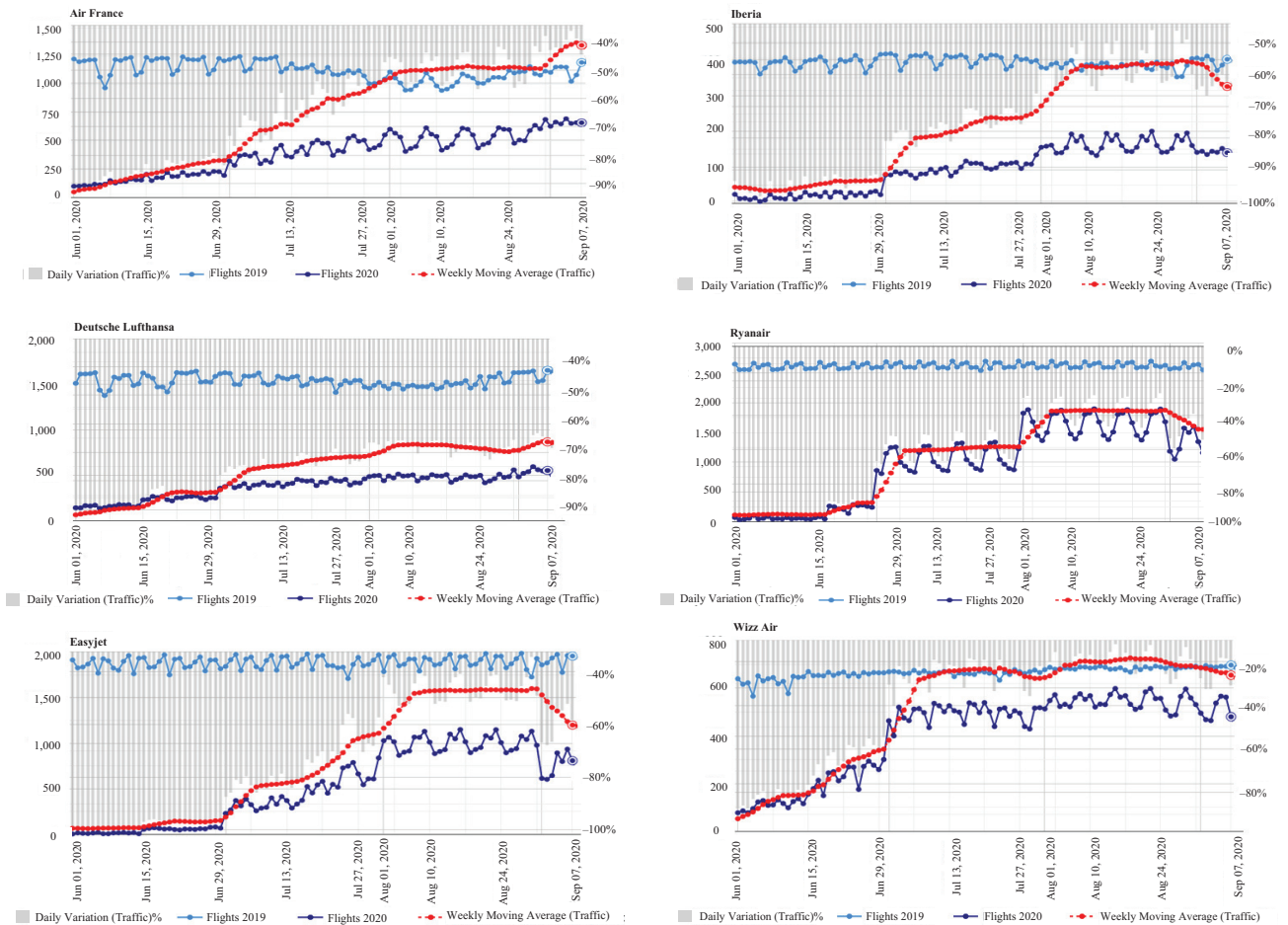


Figure 3. Aircraft operators in Eurocontrol Network (source: Eurocontrol, 2020)

flights (+9%), followed by low-cost airline Wizz Air with 437 (−14%). Most low-cost airlines reduced their capacity. However, compared to the previous two weeks, Air France had the biggest capacity increase (+82 flights), followed by Norwegian Air Shuttle (+56), Lufthansa (+42), KLM (+38), Eurowings (+30) (Eurocontrol, 2020).

However, it seems that low-cost airlines, despite the large drop in occupancy, continue to lead in terms of number of flights operated and ticket sales. The number of Ryanair passengers for August was down 53% compared to the same month last year, a negative figure for low cost, but very positive compared to its rivals, which fell much more. On 30 June, it had 3.9 billion in cash and 333 Boeing 737 aircraft valued at some 7 billion euros. The airline announced that it plans to sell 400 million euros in shares to strengthen its balance sheet in the midst of the Covid-19 crisis and take advantage of growth opportunities as rivals find themselves in trouble. With this 400 million it intends to buy airlines in crisis (Reuters, 2020a). In addition to these 400 million, the company has raised 850 million euros in its first bond issue in three years, with which it will try to take advantage of market weakness to buy aircraft or other airlines (Petrauskaitė, 2020).

Despite the great crisis facing airlines, their behaviour is quite different. Air France-KLM has decided to withdraw its A380 fleet (Dunn, 2020b), while Wizz Air intends to expand into new European markets after the crisis (Reuters, 2020b). For more details on the airlines' general lines of action in the first months of the pandemic, see Albers and Rundshagen (2020).

Many airlines are planning their strategy and making changes for the new season. Brussels Airlines resumed intercontinental flights in September, 2020, re-establishing a total of eleven routes to Africa. Corendon Airlines wants to expand by summer 2021, with new bases in Düsseldorf and Basel, and plans to increase frequencies to Turkey. EasyJet intends to operate less than 40% of the planned capacity by the last quarter of 2020, but plans to open new bases in Malaga and Faro next year. Wizz Air is considering moving into the Indian market after expanding into Abu Dhabi (Eurocontrol, 2020).

So far, acquisitions have not been made or have been postponed. TAP Air Portugal was considered an acquisition target. Lufthansa and United Airlines had considered a coordinated move to keep their Star Alliance partner on board and the acquisition of German Condor by Polish LOT has been cancelled (Shotter & Chazan, 2020).

### 3. Economic situation of airlines: aid and subsidies

Considering that over 60% of the world's commercial aircraft have been grounded (Hollinger, 2020), the drop in airline passenger revenue is incalculable and has caused some airlines to even consider ceasing operations altogether. Flybe in England and four subsidiaries of Norwegian Air Shuttle in Sweden and Denmark have gone bankrupt and announced that they will cease operations (Agence France-Presse, 2020). Lufthansa recorded a pre-extraordinary operating loss of 336 million in the first quarter of the year and the IAG group (British Airways, Iberia, Vueling and Aer Lingus) had a loss of 535 million (World Today News, 2020).

At the onset of the crisis, airlines introduced cuts to drastically reduce costs, but due to the lack of revenue,

many airlines cannot sustain themselves and are turning to their host governments in many important economies.

In Europe, some governments are giving millions of euros to their national airlines (Patel & Wilkes, 2020; Abate et al., 2020). Table 3 shows the total financial support received by the main European airlines and the type of funding, updated to the end of August, 2020.

Some of these grants are conditional on the fulfilment of certain requirements. For example, Air France KLM (French Group) must make carbon emission reductions and discontinue domestic routes where rail connections of less than 2.5 hours are available as alternatives (Ash, 2020). In the aid to Lufthansa, the German government has the option of increasing the shareholding to 25% plus one share to block a possible acquisition; in addition, there is the possibility of exemption from future dividend payments and is committed to reducing carbon emissions (Sweney, 2020).

Table 3. Financial support offered to European Airlines in response to COVID-19 as of end August, 2020  
(source: authors' own elaboration from Transport & Environment, 2020)

Airline	Amount (€ million)	Status	Type
Air France-KLM Group (France)	7000	Agreed	Loan and loan guarantee
Lufthansa AG - Lufthansa (Germany)	6840	Agreed	Loan / Partial takeover
Air France-KLM Group (Netherlands)	3400	Agreed	Loan and loan guarantee
TUI Group (Germany)	1800	Agreed	Loan
Lufthansa AG - SWISS/Edelweiss (Switzerland)	1420	Agreed	Loan
TAP (Portugal)	1200	Agreed	Loan
SAS (Scandinavia)	1130	Agreed	Credit Guarantee
Finnair (Finland)	826/414	Agreed/Under Discussion	Credit guarantee and recapitalisation
IAG - Iberia (Spain)	750	Agreed	Loan
Easy Jet (UK)	670	Agreed	Loan
Ryanair (Ireland)	670	Agreed	Loan
Condor (Germany)	550	Agreed	Loan
Lufthansa AG - Austrian Airlines (Austria)	450	Agreed	State aid and loan
Wizz Air (Hungary)	344	Agreed	Loan
IAG - British Airways (UK)	343	Agreed	Loan
All airlines operating in Sweden	318	Agreed	Loan Guarantee
Lufthansa AG - Brussels Airlines (Belgium)	290	Agreed	Loan
Norwegian Airlines (Norway)	277	Agreed	Loan guarantee
IAG - Vueling (Spain)	260	Agreed	Loan
Air Baltic (Latvia)	250	Agreed	Recapitalisation
SATA Air Açores (Portugal)	133	Agreed	Loan
Wideroe and other small regional carriers in Norway	121	Agreed	Loan guarantee
Blue Air (Romania)	62	Agreed	Loan
Nordica (Estonia)	30	Agreed	Recapitalisation
Alitalia (Italy)	3000	Under Discussion	Takeover
Total agreed	29134		
Total under discussion	3414		
Total	32548		

This aid could change the rules of competition between companies and change the future success prospects of airlines, because while it provides resources it also limits the room for manoeuvre for strategic and operational management decisions of airlines, such as route and hub development, technology and aircraft orders (Albers & Rundshagen, 2020). These government interventions reinforce political influences which may endanger their long-term survival (Habersang et al., 2019). On the other hand, there are companies that do not receive aid and, in the long term, this may favour them as they are not restricted in any way and have the autonomy to decide the best strategy according to the market situation. Airlines can implement different strategies to cope with the pandemic (Albers & Rundshagen, 2020). Among the different strategies are expansion into new markets, elimination of unprofitable air routes or reinforcement of those routes that offer higher profits for the airline with new air frequencies. The best strategy will depend on the economic situation and the deficit of each airline. It would also be advisable to carry out a prior market analysis and act on the basis of achieving the Sustainable Development Goals (Dube et al., 2021).

What is clear is that the airline sector depends on this financial aid and subsidies to be able to cope with the massive drop in air activity due to the coronavirus. Government policy, access to capital and the viability of the industry itself are key factors that will determine whether individual airlines are worth helping.

## Conclusions

The economic recovery of the airline industry after the COVID-19 pandemic is a complex task. The fall of tourism due to the virus and the numerous flight restrictions to protect citizens has led to an unprecedented crisis in aviation. This is why, among other measures, airlines should improve their reputation and convey confidence during the crisis.

The restrictions imposed by governments in different countries are disparate, and have not contributed to a lower incidence of coronavirus cases either. The lack of common standards in the EU when classifying the risk situation of EU countries in relation to coronavirus and the increase in outbreaks is generating confusion and low confidence among passengers, which undoubtedly influences the number of passenger movements. There should be harmonised tests and common epidemiological assessment criteria.

Low-cost airlines, despite the large drop in occupancy, continue to operate the largest number of flights. Despite the great crisis that the companies are facing, their strategy is being quite different, with airlines withdrawing aircraft and others looking for growth opportunities expanding into new markets such as low cost airlines Ryanair and Wizz Air, or taking advantage of market weakness to buy aircraft or other airlines.

Several airlines have gone bankrupt and had to close down permanently as a result of the crisis. To curb this situation and to be able to revive some airlines, governments are offering aid packages. Thus, in Europe, large groups such as Air France-KLM, Lufthansa or IAG have been some of the biggest recipients of financial aid. Other airlines, such as Alitalia, are being rescued by the government and nationalised. The aid has been unevenly distributed by governments, but all of it is necessary in order to be able to face the crisis and begin the process of long-term recovery.

When this pandemic is over, people will want to fly again and the airlines that survive and thrive will depend largely on the success of each country's economic support packages. In addition, those that are able to strengthen their reputation and prestige among consumers, suppliers and authorities will be in a better position to overcome the crisis. To do so, they should take an active role in tasks such as helping to produce or transport the medical supplies needed to deal with the pandemic, or proactively demonstrate the safety procedures they have put in place to ensure the safety of passengers and employees.

Companies, suppliers, manufacturers and lessors should also work closely together to anticipate potential recovery scenarios. The different strategies may vary depending on the type of company and the availability of financial resources, but in all of them it is very important to offer security during the Covid-19 pandemic and a high level of customer service that demonstrates confidence to travel with them. Some airlines will choose to be price leaders in order to attract more customers. In addition, it will be important for airlines to pursue a reconstruction policy along the lines of the European Green Deal (Colli, 2020; Cifuentes-Faura, 2021). Opting for an efficient policy would allow them to cut costs, reduce pollutant emissions and be sustainable (Dube et al., 2021), which would improve their image, and could attract more travellers.

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