



IMPACT OF THE COVID-19 PANDEMIC ON AIRCRAFT LEASING

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Abstract

The article deals with the impact of the COVID-19 pandemic on aircraft leasing. It describes the current state of leasing and airline companies and the overall impact on the aviation industry worldwide. The main objective is to analyze the impact of the COVID-19 pandemic on aircraft leasing and to correctly interpret trends in aircraft leasing during and after the time when the virus was prevalent. The conclusion is devoted to the description of the most advantageous solutions for this sector. As a result of all the issues examined, we have tried to predict what the aviation industry might expect in the coming years.

Keywords

COVID-19, aircraft leasing, trends in aircraft leasing

1. INTRODUCTION

At the beginning of 2020, the COVID-19 pandemic put the aviation industry under unprecedented challenges. This virus has spread all over the world and caused a global crisis. In response to travel restrictions resulting from the outbreak of the pandemic, domestic and international travel has been affected by measures implemented by individual countries around the world. This caused a steep decline in air travel and the airlines face an uncertain future in regaining passengers. The restrictions created by this virus, combined with the condition of large parts of the global economy and travelers fear of virus infection, have caused passenger demand to plummet. Airlines responded to the sudden drop in bookings, revenue, and overcapacity of limited services by laying off employees, grounding aircraft in temporary storage, and asking national governments for financial support. According to Eurocontrol, after the outbreak of the pandemic in early 2020, almost 5,000 aircraft were grounded in 39 Eurocontrol countries. This sudden grounding of aircraft for an unknown period represented immediate challenges for the airlines but was also announced. So, it could be concluded that COVID-19 had a much greater impact on aviation than other recent epidemics.

In recent years, aircraft leasing has become more common than ever. The services of leasing companies are used by low-cost air carriers as well as traditional air carriers. After the outbreak of the virus, many wondered what impact COVID-19 would have on aircraft leasing. As a result, leasing companies experienced a significant drop in revenue as many airlines requested deferred payments on leased aircraft.

It is undoubted, that the COVID-19 pandemic crisis has done serious damage to the aviation industry which has not been encountered in the history of civil aviation. We collected available data from various studies and analyzes and tried to evaluate the impact of the COVID-19 pandemic on aircraft leasing in world regions, namely the USA, China and Europe.

2. CURRENT STATUS OF THE SOLVED PROBLEM

COVID-19 had the most dramatic impact on the airlines and aircraft leasing industry. According to statistics, in April 2020, air traffic decreased by more than 70% compared to the previous year 2019 [1].

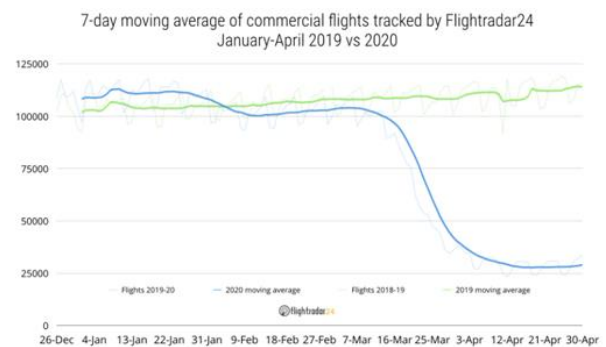


Figure 1 - Commercial flights tracked by Flightradar 24 January-April 2019 vs 2020. Source: [1].

The following images show the capture of the number of flights on the same day 30 April 2019 and 30 April 2020. Before the 2019 outbreak of COVID-19, the density of flights was much higher than in the 2020 outbreak.



Figure 2 - Number of flights on 30 April 2019 Source: [1].

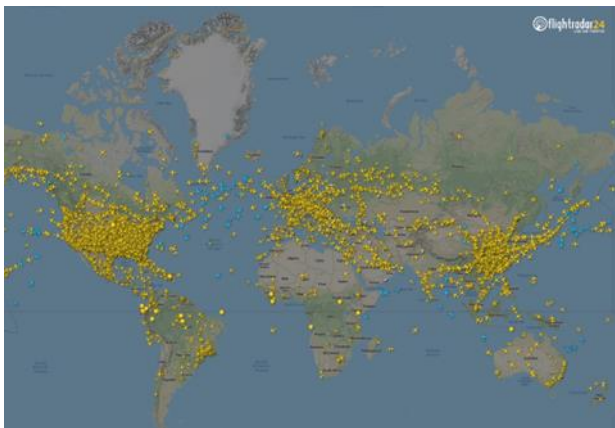


Figure 3 - Number of flights on 30 April 2020 Source: [1].

Currently, disruptions related to the COVID-19 pandemic have begun to ease. Airports are full again and individual flights are occupied. Demand for business and leisure travel has rebounded faster than airlines expected. People are starting to travel again and learning to live with COVID-19. Airlines have also become more flexible because they realize that passengers will tolerate flight cancellations. Before the pandemic, airlines felt they had to continue to operate routes that marked a loss, but today it is crucial to remain profitable, even if it means losing key routes. However, not all airlines were so lucky to survive this crisis. Airlines around the world have declared bankruptcy. The future of the pandemic is still uncertain. This crisis affects all parties in the aviation industry, and each company approaches the decline in sales differently [2].

The COVID-19 pandemic has also affected aircraft leasing companies. With declining demand for air travel, reduced airline revenues due to the measures that have been issued to prevent the spread of the COVID-19 virus, and their inability to pay leases for leased aircraft, leasing companies have also been affected by reduced revenues. After the COVID-19 pandemic subsided in 2022, another unforeseen event hit the leasing companies. February 24th 2022 went down in history when the invasion of Ukraine by the armed forces of Russia began.

After the arrival of the Russian invasion of Ukraine, international sanctions against Russia were introduced after a short time, which has a impact on the aircraft leasing sector. This crisis affected approximately 589 aircraft operated by Russian airlines

and lessors based outside of Russia. The sanctions required the lessors to get these leased aircraft back, but flights between Russia and many other countries were banned and it was very difficult get their aircraft back.

The war in Ukraine has an overall impact on aircraft leasing. However, the impact of the war on aircraft leasing will show in the future, because the situation continues to evolve [3].

3. IMPACT OF COVID-19 ON THE TRANSPORT PERFORMANCE OF TRADITIONAL AND LOW-COST AIR CARRIERS

Most airlines tried to operate a normal flight schedule after the outbreak of the COVID-19 virus until the virus-related measures prevented it. During this period, airlines began to experience a decrease in passengers, which was reflected in a sudden decrease in the number of flights from mid-March 2020, when the borders began to close. As a result, the impact was stronger in international markets than in domestic markets [4].

The following picture shows the decline in domestic air traffic over the same time period as in the graph above. Interestingly, at the end of January 2019, the decline in air traffic in Asia began, but in March 2019, demand began to rise and then the decline came again. Another point of interest is the increase in air traffic in the Middle East at the beginning of March 2020. In other parts of the world, the situation was very similar, in March 2020 the demand for air traffic within domestic flights began to decline.

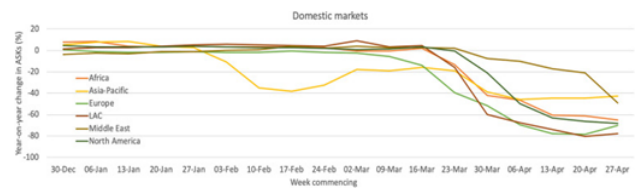


Figure 4 - Domestic Market. Source: [4].

The next picture shows the decline in air traffic in individual world regions in the period from 30 December 2019 to 27 April 2020. Due to the fact that the COVID-19 virus broke out in China and subsequently spread throughout the world, the first declines occurred in Asia at beginning of February 2020, then other world regions were added gradually. In mid-March 2020, demand for air transport in Africa, Europe, the Middle East, North America, and LAC began to decline.

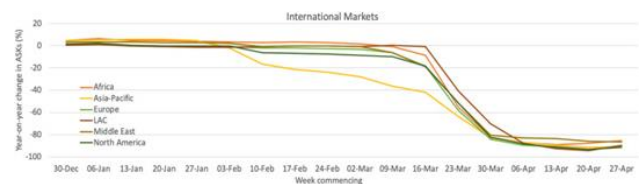


Figure 5 - International Market. Source: [4].

4. AIRCRAFT LEASING DURING THE COVID-19 PANDEMIC

In recent years, aircraft leasing has become more common than ever. Aircraft leasing is mainly used by low-cost air carriers and start-up airlines. Also, traditional air carriers, by leasing gain access to the newest and most comfortable aircraft on the market. After the outbreak of the COVID-19 pandemic in March

2020, many had the question, what impact this virus would have on aircraft leasing. The reality was that many leasing companies experienced a significant decrease in income due to the postponement of lease payments. Some airlines received state aid, but many did not [4] [5].

Airlines have lost a lot of money during the COVID-19 pandemic, but forecasts for the next years point to a profit. In 2022, there was a resurgence in passenger numbers and confidence in travel, which in some regions means a surge in revenue. The rise of aircraft leasing companies accelerated during the pandemic, thanks to the ability to obtain cheaper financing than airlines [7].

In the coming years, aircraft leasing is likely to be a popular option for airlines. It is expected, that the demand for air transport to increase and leasing can provide flexibility and cost saving to airlines, which want expand their fleet.

However, the leasing industry may face some challenges. One potential problem is the availability of aircraft. As the COVID-19 pandemic has led to reduced air travel, which in turn led to reduced demand for new aircraft, this could lead to a shortage of available aircraft for lease. In addition, there may be changes in environmental regulations that could affect the industry. Governments around the world are increasingly focusing on reducing carbon emissions, which could lead to changes in regulations that affect the types of aircraft available for lease.

Overall, it can be concluded that the aircraft leasing industry may face some challenges, but is likely to remain a favourite option for airlines. Flexibility and cost savings provided by leasing will continue to be attractive for airlines wishing to expand their fleet [8].

5. ANALYSIS OF THE IMPACT OF COVID-19 ON AIRCRAFT LEASING IN SELECT WORLD REGIONS

5.1. USA

Like other sectors of the aviation industry, the US aircraft leasing market has been affected by the COVID-19 pandemic. Low-cost airlines were particularly affected, and many of them faced significant financial problems due to reduced demand for air travel. This led to the restriction of activity and the suspension of part of the fleet. The ability to pay for leased aircraft was also affected and many airlines were forced to agree with lessors to renegotiate leasing contract to reduce their costs. Some airlines have been forced to return leased aircraft to lessors to cut costs. In response to the crisis, some aircraft lessors in the US proceeded to lower rents, extend leases and delay payments, which helped airlines with financial pressure. It was most beneficial to low-cost airlines, because they have tighter budgets and less financial flexibility than traditional airlines.

Overall, leasing companies in the US improved significantly in 2021. The sector roughly halved its economic loss in 2021, although performance varied widely. Despite the pandemic, most airlines pay rent for leased aircraft either adjusted to the leasing contract, which are the most advantageous for the airline in question or by deferring payments for aircraft lease [9].

5.2. China

In recent years, the COVID-19 pandemic has affected aircraft leasing companies in China. The virus brought the airline industry to a standstill, resulting in billions of losses. COVID-19 has led to significant reductions in air traffic and grounding of aircraft fleets. Most of the airlines had financial problems and were unable to pay the leases for the leased aircraft, which led to the airlines taking care to delay payments until the demand for air travel returned to normal. Orders for aircraft that the airline wanted to lease were postponed or canceled altogether [5].

Despite the problems, the strongest airlines in China continued to aircraft leasing, especially low-cost airlines, because when measures were relaxed in some part of the country, airlines could expand their operations there and increase their market share, which required leasing more aircraft [5].

The world’s largest aircraft leasing companies have adjusted their business strategies and increased their expansion in the Chinese market, intensifying competition in the Chinese aircraft leasing market. In this context, the market for Chinese aircraft leasing companies has declined. With the revival of China’s economic growth in 2021, the market share of Chinese aircraft leasing companies was projected to return to the level of 2018 and maintain a steady growth trend. According to a study by the Civil Aviation University of China, the market share will reach 69,65% by the end of 2025. The table below shows the market shares and the number of leased aircraft from 2018 to 2025.

Table 1 - Market shares and number of leased aircraft in China 2018-2025. Source: [5].

Year	Number of leased aircraft	Market share
2018	193	61,27%
2019	107	60,11%
2020	36	51,43%
2021	111	63,43%
2022	125	64,77%
2023	142	66,67%
2024	160	68,38%
2025	179	69,65%

5.3. Europe

The COVID-19 pandemic had as significant an impact on the airline industry in Europe as in other parts of the world, as travel restrictions and reduced demand for air transport have led to a drop in revenue not only for airlines but also for leasing companies. In the early stages of the pandemic, many airlines reduced part of their fleets, which led to a drop in demand for leased aircraft. As a result, some aircraft lessors have encountered difficulties in finding lessees for their aircraft, leading to an increase in the number of idle aircraft in their listings. In response to the challenges the industry has faced, some lessors have implemented measures to mitigate the impact of the pandemic. Some have negotiated lease extensions

or deferrals with their tenants, while others have focused on rent adjustments to manage financial difficulties during the pandemic period. Unfortunately, some airlines have been forced to return leased aircraft due to financial difficulties, leading to an increase in aircraft holdings. Some European governments have provided financial support to airlines to help them meet their aircraft lease obligations.

Within the world regions, Europe is among the regions with the largest fleet of aircraft that are operated based on leases from leasing companies. It includes more than 3 500 aircraft currently maintained as leased. The temporary grounding of aircraft and uncertainty about the future forced the airline to reassess its current fleet and future requirements for aircraft. Some airlines announced changes to the size and composition of their fleet, which include the permanent retirement of a particular aircraft type, the reduction or standardization of the fleet or the delivery of new aircraft.

In a crisis, the leasing companies had the option to take their aircraft back and lease them to other airlines. However, the COVID-19 pandemic was unique in that there was no other airline that could lease the aircraft. In this volatile period, the flexibility that airlines offered proved to be a very attractive option. The pandemic has led to sales and leasebacks between airlines and leasing companies, meaning the transactions have been worth billions of dollars. Unfortunately, some of these transactions contributed to the liquidity of the airlines as they were forced to sell the aircraft they owned to leasing companies and lease them back. The pandemic has strengthened the relationship between leasing companies and airlines [10].

Table 2 presents global aircraft leasing companies in 2020 by fleet size. The two main aircraft lessors were General Electric Capital Aviation Services business and AerCap [11].

Table 2 - Aircraft leasing companies in Europe and their fleet size. Source: [11].

Aircraft leasing company	Fleet size
GECAS (Ireland)	more than 1 500 aircraft
AerCap (Ireland)	more than 1 000 aircraft
SMBC Aviation Capital (Ireland)	more than 700 aircraft
Avolon (Ireland)	more than 570 aircraft
BOC Aviation (Singapore with a strong presence in Europe)	more than 500 aircraft
Nordic Aviation Capital (Denmark)	more than 500 aircraft
Air Lease Corporation (California with a strong presence in Europe)	more than 400 aircraft

During 2022, demand for air travel increased in most markets, with the exception of China, where tough measures were only eased towards the end of the year. Total global passenger traffic has grown significantly this year and in November 2022 was

about 75% higher than in 2019. Most world regions are expected that surpass pre-pandemic levels by the end of 2023. However, these forecasts may be subject to downside risks if travel restrictions are re-imposed [12].

6. CONCLUSION

The COVID-19 pandemic had a significant impact on the entire aviation industry, but the industry appears to be gradually recovering. As airlines continue to adapt to the post-pandemic situation, leasing companies must be more flexible and innovative to meet the changing needs of airlines.

We found that due to the COVID-19 pandemic, the impact was stronger in international markets than in domestic markets, because domestic markets experienced a slower response to the spread of the virus. The deterioration in the financial situation of airlines due to the COVID-19 pandemic, the conflict in Ukraine, an inflation, higher prices for jet fuel increases the risk that aircraft lease payments will be delayed, reduced or remain unpaid.

Leasing companies were doing very well before the COVID-19 pandemic. One of the key factors was the growing popularity of low-cost carriers, which often use aircraft leasing to reduce their costs. Another factor was the growth of air travel in emerging markets, particularly in Asia, where new airlines were established and older airlines expanded their fleets. After the outbreak of the COVID-19 pandemic, this growth trend changed. Many airlines demanded that leasing companies postpone their payments for leased aircraft and this meant a decrease in their revenues. Demanded payment deferrals negatively affected leasing companies, but despite that, they did not fare too badly.

While commercial air travel recovered significantly in 2022, the COVID-19 pandemic continues to introduce risks for leasing companies. The emergence of new variants, the development of the situation in the public health, the re-introduction of travel restrictions and other complications related to the pandemic could have a negative impact on the business of leasing companies. Also, the COVID-19 pandemic may continue to have a negative impact on the financial situation of airlines and this would mean a disadvantage for leasing companies, because their income could decrease again.

One of the factors for the growth of aircraft leasing after the end of the COVID-19 pandemic could be the leasing of smaller and more fuel-efficient aircraft. As many airlines looking to reduce costs and improve their environmental sustainability, they are more likely to lease these types of aircraft than buy them outright. Another factor is stabilization within the industry. As airlines want to reduce their costs and make their operations more efficient, they can lease aircraft from larger lessors who can offer a wider range of services. The development of new technologies could also create new opportunities for the aircraft leasing industry. Since new technologies require significant investment, it is more profitable to lease them than to buy.

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