

Air Cargo Operations in Turkey in the Pandemic Period: The Example of Turkish Airlines

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Abstract: The Covid-19 pandemic, which emerged in China, negatively affected all airline companies in the world and caused airline companies to make losses. While many companies in the world went bankrupt due to the loss, Turkish Airlines (THY) resorted to various methods to avoid this negative situation with the least damage. Having an option such as Istanbul Airport (IGA), THY has converted passenger planes into cargo planes. Within the body of Turkish Cargo, it has highlighted the most needed cargo transportation in this period and aimed to successfully bypass the process. In this study, THY, which separated from the crisis with minimum damage, was examined operationally with the steps it took with air transport.

Keywords: Turkish Airlines, Covid-19, Pandemic, Istanbul Airport

JEL Classification: L93

1. Introduction

Air transport is one of the sectors first affected by this pandemic, as it is easy for the Covid-19 pandemic to spread from person to person (Pereira and Mello, 2020). Among the sectors negatively affected by the pandemic, commercial aviation ranks first with 40% and aviation travel with 36% (Şen and All, 2021). With all air operations coming to a near standstill, a total of 17,000 aircraft in the world (which is approximately 64% of the total passenger fleet in the world) until mid-April in 2020 could not provide flights for at least 7 days and aircraft hangars had to wait at airports (Adrienne, Budd and Ison, 2020). In 2020, there was a 66% loss in passenger revenues compared to previous years, and airlines announced that they made a total net loss of 118.5 billion dollars. Again, when compared to 2019, the number of flights was 38.9 million, but this number decreased to 16.4 million in 2020 (IATA, 2020). All these data can tell us about an economic crisis that all airlines in the world are experiencing.

The cessation of passenger transport due to the pandemic has sent airlines to different markets and transport operations (Amankwah–Amoah, 2020). Cargo operation comes first among these operations. According to the International Civil Aviation Organization (ICAO) 2020 data, airline companies around the world redesigned their passenger planes and used some of them as cargo planes during the pandemic. Turkey has a high potential in terms of air cargo transportation. It is also one of the countries with the greatest potential for growth in the global market. The increase in the need for cargo has resulted from the need for health products and meeting other needs of people. Airline companies wanted to minimize the financial crisis they experienced thanks to air cargo transportation. In the IATA (International Air Transport Association) evaluation report for 2020, air cargo transportation was less affected by the Covid-19 pandemic with respect to passenger transportation. Compared to September 2020 and September 2019, air cargo transportation decreased by only 8% (IATA, 2020). During the pandemic period, air cargo transportation provided a financial support to airline companies.

In 2020, when the pandemic started in Turkey, THY has a large fleet with 360 aircraft. THY reorganized 50 passenger planes by converting them into cargo planes. At the same time, Turkish Cargo, a subsidiary of THY, is planned to continue its operations as a separate company in order to increase its share in cargo in 2021 (THY, 2020). In the Turkish 2023 logistics sector, the air cargo sector has shown a continuous growth in recent years and it still has the potential to do better.

2. Air Cargo Transport In The Covid-19 Pandemic

According to the international postal convention, air cargo refers to all kinds of shipments, other than baggage, registered with mail or documents, subject to customs and having a bill of lading (General Directorate of Civil Aviation). According to IATA rules; The packaging and labeling of products other than mail and baggage, the preparation of documents and at the same time ensuring their transportation by air is called Air Cargo Transportation (Turşucu, 1995). In another definition, baggage that is not carried by the carrier or the passenger, i.e. the baggage that is not carried with him and is sent by issuing a bill of lading, is called cargo, except for the products that are delivered by mail or carried under the conditions of international postal agreements (Öktem, 1992).

The most important advantage that distinguishes air cargo transportation from other transportations and makes it competitive by making it superior is its speed, loading frequency and safety. With the acceleration of globalization in the last 40 years, it is one of the most important issues to deliver the products to the desired region as soon as

possible. Air transportation, which is seen as a sub-system of air transportation, is low in volume and weight, but high value products are transported (Gün, 2007). Fast delivery, high security, planned cargo movements, no political obstacles; Conditions such as lower insurance premiums and the spread of the airport all over the world are strong features of air cargo transportation (Kurt, 2010).

The COVID-19 pandemic, which became an epidemic in China in 2019 and all over the world in 2020, adversely affected not only the passenger transportation sector, but also the air cargo market. In particular, the travel bans and the decrease in demand had a negative impact on air transport. It significantly reduced the international traffic, significantly reduced its load, and the daily international cargo capacity decreased by almost 35–40% in March compared to the previous year (Saslavsky and Rastogi, 2020). When we look at the companies carrying air cargo, the measures taken have mostly progressed on the basis of continuing the delivery of products by air. Considering that 40% of the air cargo products transported in the world are sent by passenger planes annually, many airline companies have made arrangements to carry cargo on passenger planes in this period. For example, Air Canada company removed 422 passenger seats and created cargo areas to secure the lightweight boxes via the mesh (Akdağ, 2020).

In the first days of March 2020, when airline companies ended their initially international and then domestic flights, IATA's statement mentioned the possibility of the market incurring a loss of \$252 billion annually. Later, in April, this number was updated to 314 billion dollars. The revenue loss calculated by IATA from January 2021 is estimated at \$419 billion (IATA, 2020). Despite this negative situation in the aviation sector, some of the significant loss in passenger capacity was compensated with the income from e-commerce. With the curfews and social distancing practices between people, the demand for cargo has increased and this has been a savior for many international airline companies (Öçal, 2022).

3. Turkish Airlines Operations During The Pandemic Period

At the beginning of the Covid-19 pandemic, they stopped their flights in Turkey like other countries in order to prevent the spread of the epidemic among people and continued their flights on a limited basis afterwards. Only THY is allowed to operate the flights of canceled flights in Turkey. In the later process, a special permission was required from the General Directorate of Civil Aviation (SHGM) and almost all of the evacuation flights were made by THY (SHGM, 2020). Within the framework of the Covid-

19 epidemic that came to Turkey in March, its spread both in our country and in the world at the end of March has affected THY as well as the aviation sector in the world (THY, 2020).

In the aviation sector, one of the most important conditions that ensures that airlines do not make losses and at the same time make profits is that the aircraft fly as much as possible and serve operationally. If an airplane stays on the ground, costs such as extra parking fees, inability to provide financial income from planned flights, inability to stock in the aviation industry, insurance premiums, and rental fees that must be paid in case of renting the aircraft financially strain companies (Ata, 2021). Table 1 shows the number of planes that landed in March, which is accepted as the start date of Covid-19 in Turkey.

Table.1. March 2020 Number of Aircraft Landed by Airline Operators in Turkey (Airport Haber, 2020).

Airlines	Squadron	Planes on the Ground	Plane on the Ground/ Squadron (%)
Turkish Airlines/Anadolu Jet	357	255	71
Pegasus	82	82	100
Sun Express	51	48	94
Onur Air	27	27	100
Corendon Group	22	21	95
Freebird	10	10	100
Tailwind	5	3	60
MNG	6	1	17
ULS	3	0	0
ACT	5	2	40
TOPLAM	568	449	79

As an important brand of Turkey under THY, Turkish Cargo aims to be among the top 5 in the world by 2023. The majority of cargo operations are carried out in Turkey. The limited and insufficient capacity for cargo at Istanbul Atatürk Airport is seen as a major obstacle to the development potential of air cargo for Turkey (Kılıç and Turgut, 2019). Considering this situation, the construction of Istanbul Airport (IGA), which aims to increase the competitiveness of the market, was deemed appropriate. IGA, which was planned in 2010, was laid in 2014. At the end of October 2018, the airport started operating. Although the majority of air cargo transportation is at İGA and Atatürk airports, air cargo needs to develop in the Western Mediterranean region, which is Turkey's fresh fruit and cut flower delivery center. This has benefited both the regional

and national economy. At the same time, it is important to review the benefits for our country in the trade and global chain that emerged with Covid-19 (Öçal, 2022). Turkey has been one of the countries that survived this epidemic with the least damage thanks to the cargo transportation sector.

THY has displayed a strategic attitude since the beginning of the pandemic and has succeeded in achieving a good position by raising itself to a higher level. THY, which terminated both domestic and international flights at the beginning of April 2020, tried to maintain its income stability in April and May thanks to its success and attitude in cargo transportation (Sucu, 2021). Making great progress during the Covid-19 period, THY has redesigned some passenger planes and used them for cargo transportation due to the increase in the need in the cargo sector and the intensity of demand in parallel. Carrying over 50 thousand tons of medical supplies in 2020 played a role in reducing the effects of the pandemic. With its cargo transportation, it increased its cargo revenues by 66% and achieved a record revenue of 2.7 billion USD with a 61% cargo revenue growth. THY Turkish Cargo increased its market share from 1% in 2011 to 4.7% in 2020 and rose to the 6th rank worldwide (THY, 2021). In cargo transportation, THY has been the most effective operating company (Turkish Airlines, 2021).

The lowest capacity demand of 87% in the airline industry in the world, THY ended up with a decrease of 62.4% in this period. As a result of this situation, THY became the company that carries the most passengers in Europe in 2020. It received this title with the flights made from IGA. Turkish Cargo company of Turkish Airlines, which is the air cargo with the highest supply especially during the Covid-19 period, added 8 new flight regions to its cat flights in 2020 and organized flights to 95 destinations globally. The point, which was 95, was increased to 98 in 2021. Playing an active role in the cold chain created for vaccines as well as the equipment used to combat the pandemic, THY carried more than 50,000 tons of personal protective equipment only during this period. Turkish Cargo increased its revenues by 53.8% in 2020. In addition, this company won the “Best Cargo Airline–Europe” award in 2020 (Turkish Airlines, 2020).

When the overall performance of Turkish Cargo during the pandemic is examined, it has played a very active company role by cooperating in a period when airline companies and companies with air cargo transportation activities in Europe were quite stagnant. When the operations performed in July 2020 are evaluated, a total increase of 29% was observed in the comparison of July 2019. Returning to passenger planes due to the inability of airline companies to use passenger planes and the insufficient capacity of

existing cargo planes, Turkish Cargo also used some of its planes as (wide body) cargo planes. This situation has increased the average usage time of aircraft to 11 hours per day. This number has been the highest usage time of all times of THY. According to Turkish Cargo General Manager Turhan Özen, THY has become a company that has the potential to provide air cargo transportation services to more than 300 areas in 127 countries with its fleet of 361 aircraft. With the growth experienced by the impact of Covid-19, Turkish Cargo aims to be one of the top five airline cargo transportation companies in the world (Airport Haber, 2020).

Thanks to THY's current positive image, Turkish Cargo has had the chance to manage the operations and processes of orders that are above its own potential in this time period. This Covid-19 pandemic has created an important managerial and commercial opportunity for Turkish Cargo to show itself as a qualified air cargo transportation company. (Aeroportist, 2020). During the pandemic period, while many airline companies around the world, as well as companies engaged in air cargo transportation, either downsized or reconsidered their operations, Turkish Cargo took important steps in terms of growth. Türkiye has successfully left this process. Although the whole world has problems in terms of trade due to the epidemic, our country has succeeded in turning this process into an opportunity with air cargo transportation (Anadolu Agency, 2020).

In the light of all this information, it can be said that the effective success of THY during the pandemic period both protected them from very high losses during the pandemic period and enabled them to recover to a certain extent in 2021, despite the continuing effects of the pandemic. As of the end of 2021, Turkish Cargo ranked 3rd in the world and continued to maintain this position. Despite all the shortcomings and difficulties of the pandemic, THY has drawn a successful profile; They benefited from support such as tax deduction, income tax withholding support, employer's share of insurance premium, employee insurance premium support, interest support and investment location allocation (Turkish Airlines, 2022).

4. Conclusion

The airports, which were least affected by the pandemic, which suddenly affected the whole world, have become institutions that have a strong institutional structure and attach importance to their management strategies. The superior success in the management strategies, which are the common features of these institutions, enabled a quick attitude even in the face of such a big disaster (Kaya, 2022). Airline companies wanted to compensate for this negative situation. Air cargo transportation has been in

an important position to turn this situation into an opportunity. This opportunity will not only save the moment, but will also be an alternative source of income for airline companies that have been hit hard for the near future, and will be important in order to retain their employee portfolio. On the other hand, it also showed how the airplanes that exist in airline companies and are not used much can be turned into profit. Considering the financial damage of large-bodied aircraft not flying during the pandemic or keeping them in the hangar, the use of passenger aircraft in air cargo transportation has turned into an advantage. Many airline companies in the world have dismantled their large-scale aircraft and non-flying aircraft, changed their interior design and transformed the aircraft into cargo aircraft by shaping the cabin structure according to the cargoes. They both turned the disadvantage into an advantage and also seized the opportunity of a new sector. Although this of course brought additional costs for the airline companies, they thought that these transformations were an investment for the future.

Although it has experienced a certain decline, especially with the Covid-19 pandemic, the interest in air cargo has increased over time. During the pandemic period, airline companies removed the seats of some passenger planes and turned them into cargo planes. It has shown the importance of international cold chain air cargo transportation created for Covid-19 vaccines (Semercioğlu and Özkoç, 2021). Within the cold chain created, THY cargo took the first place in Europe in 2021. At this point, among the airline cargo companies serving as domestic and international lines in the world, the largest international transaction volume is made by Emirates airline. While THY ranked 8th in Table 11 in 2018, it managed to rank among the 1st largest airline cargo company in the world with Turkish Cargo, according to 2021 data (Akoğlu and Fidan, 2020). In the course of development of THY's cargo traffic between 2011 and 2020, there has been a continuous increase in domestic flights between 2011 and 2018. This increase decreased in 2017-2018, and it weakened in 2019 compared to 2018, and decreased by almost 5.9% in 2019. However, when we look at 2020 as a result of the entry of Covid-19 into our lives, the decrease is almost 40% compared to 2019. Considering the international cargo traffic, although there is an almost constant and continuous increase between 2011 and 2019, the domestic and international cargo traffic is close to each other (DHMI, 2021).

The position of İGA, on the other hand, tried to minimize its impact during the Covid-19 pandemic with the new regulations. Considering the results in terms of İGA, it was affected to the least extent by the success of the strategic plans made. In October 2021, İGA won the Best Airport in Europe award (Anadolu News Agency, 2021). The category

in which he received the award is the category "More than 40 million passengers". The members of the jury evaluated the airport as "a state-of-the-art airport that supports efficient operations and provides the highest quality service to passengers and airport stakeholders". IGA, which defines itself as "the most reliable airport for Covid-19" during the pandemic, reveals its repositioning strategy. In addition to positioning the airport as the largest airport in the world, it was deemed wide enough for the implementation of the social distance rule and therefore reliable. When looking at IGA from a general perspective, it is not only in the press but also in quantitative terms that it is shown as the airport with the highest number of flights and carrying the most passengers between March 2020 and July 2021 in Covid-19 in the results of the 19 July 2021 Euro Control Aviation Organization. It also shows that it has a successful strategy (Euro Control Organization, 2021).

As a result, both Turkish Airlines and Istanbul Airport have successfully managed the Covid-19 pandemic period with their strategic attitudes. Taking Turkish Cargo, a subsidiary of THY, forward with the right steps and generating financial income from cargo transportation accordingly, THY managed to minimize its losses in this challenging period. However, THY gained momentum by finding the chance to benefit from a large airport like İGA. On top of this study, meeting with white collars within Turkish Cargo and researching the process qualitatively and quantitatively, reaching detailed and statistical results will be a creative approach to one of the research topics to be made in the future.

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