

The coronavirus pandemic, which has paralyzed the entire world unexpectedly, wreaked havoc on the aviation and tourism industry, and then opened the door to an unprecedented contraction in the global economy by affecting almost all sectors. The virus crisis suddenly caught the world woefully unprepared.

The progression of the crisis, starting in China and spreading to the North American continent, has become directly linked to the economy. Capital markets are focusing on the number of patients and death tolls of countries rather than the macroeconomic data. The number of cases and related deaths are closely monitored on a daily basis. With these figures, everybody is striving to forecast the progress of the crisis by trying to wipe away the smoke screen that blurs the vision of the future ahead of them.

The most asked question is 'when will the fight against this outbreak be over?'; in a month or two, or in a year or more. The common opinion is that it will take 1 or 1.5 years

Financial Impact of Coronavirus on Aviation Industry



to find out medicines and vaccines, however, the expectation is that the wheel of the economy will start to spin again as of June and July this year at the latest. Whether or not the fight against the virus becomes successful sooner or will be later on, an approach to deal with the spinning economic wheel now is vital before it is too late, and this has been expressed with concern in economic circles.

No matter how the fight against virus progresses, the aviation and tourism industry have undoubtedly been suffering from these crises. Whether the virus-related crisis is settled in the short term or in the long term, the aviation industry is one of the

primary sectors affected by the crisis and will be among the last to come out of the crisis.

The aviation industry is revising its strategies. Companies are exerting their maximum efforts to maintain their current status and human resources, with the assumption that the crisis will be overcome at the beginning of this summer. But the main issue is the strategy to be adopted if the crisis prolongs. Certainly, the strategies of airline companies, which are at the center of industry dynamics, will affect the entire industry. Additionally, in what way and to what extent the states and financial circles will support airline companies is also the

key issue. Recovery and development after the outbreak-related crisis depends upon several major criteria.

For the future of the industry, the questions on the following main topics need to be answered:

- Whether the crisis will be short, medium or long term.
- Whether the effects of the virus will be completely over, or whether life will continue with the virus for a certain period of time,
- The extent and scope of the states' support to their industries,
- The approach and stance of financial circles towards the sector,

- The financial structures and indebtedness of companies in the sector, especially airline companies,
- Whether the effects of the virus differ regionally

It would not be wrong to say that the larger part of the aviation sector of a country, where the fight against the virus lasts through the medium and long term, coupled with the lack of enough support from state and financial circles, will no longer exist. All the sub-sectors of aviation are formed by the volume and efficiency of airline companies' activities. Therefore, the critical factor to overcome the crisis as the industry is directly proportional to the survival of the airline companies as stated above

Airline companies have high fixed charges. Whether the flights are conducted or not, payments for chartering agreements, staff salaries,

technical and insurance expenses (ACMI: Aircraft, Crew, Maintenance. Insurance) must be made on a monthly basis. The average monthly fixed cost of a mid-size aircraft, including the charter fire (although it varies depending on the model and type), is around US\$ 500.000-600,000, and around US\$ 700,000-1,000,000 for a wide-body aircraft. For instance, if we think that the monthly cost of an airline company with 10 mid-size airplanes will be at least US\$ 5 million, the suspension of flights for three months possibly leads to a loss of US\$ 15 million. Of course, making partial or no payments to leasing companies or creditors for rental and the reduction of salaries of high-paid crews due to force majeure may minimize some of this loss. The cost reduction is directly related with the airline's success in managing the process.

However, in the end, there may be a reduction in fixed costs up to 60-65% or some delays in expenditures. It is inevitable that airlines will be faced with an expense of at least US\$ 250,000-300,000 per aircraft to maintain the existing fleet and the crew under all circumstances.

The airline also has to manage its liabilities regarding previous expenses for flight operations. Deferred liabilities to suppliers and airports due to operational expenses such as handling services taken at the airports where they fly, fuel, flight taxes and etc. should also be managed well. In addition to the fixed costs and deferred liabilities, the loan repayment should be postponed and/or restructured

A model needs to be developed to compensate for losses that may incur due to derivative transactions against foreign exchange risk and/ or fuel price increase risk. For example, it is difficult for an airline company to cover its loss of fuel prices hedged at a high price, when the due date comes.

As it is seen, there is no way for the airline company to financially compensate for the loss caused by the virus-related crisis singlehandedly. The effective and proper crisis management of the airline company, the stimulus package of the state, the approach of the financial sponsors, the understanding and tolerance to be shown by the staff and the flexibility of the suppliers are all indispensable to surpass the crisis.

The aviation industry plays a key role in determining the power of countries in the global economy as it interacts with many other sectors, especially

OUTBREAK CRISIS TRANSITION PROCESS				
SUPPORT OF STATE AND FINANCIAL CIRCLES	POST-CRISIS SITUATION	SHORT (3-4 months)	MEDIUM (5-9 months)	LONG (more than 10 months)
	HIGH (Financing of the entire loss)	More strong and taking advantage of opportunities	More strong	Pre-Crisis situation
	MODERATE (Financing at least half of the loss)	Pre-Crisis situation	Market loss and Pre-Crisis situation	Recession and high financial distress
	WEAK (Financing less than half of the loss)	Market loss and financial distress	Recession and moderate financial distress	Business closure, bankruptcy

Photo Caption: The matrix is prepared with the assumption that the company's financial structure is satisfactory. For companies with a higher level of debt, it is necessary to consider that its position in the matrix should be one box forward and below.

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within the tourism sector. There are many burning questions about the future of the industry. However, regardless of the perspective we look, it is obvious that the future of the aviation industry depends primarily on the time of exit from the outbreak crisis as well as the approach that the states and financial circles take with the industry. The level and effects of these factors can be seen in the matrix provided below:

There is also a need for a well-structured plan to launch activities from the moment that the crisis is over. Support systems need to be provided during the crisis and applications such as denied boarding compensation, carbon emission taxes, etc. should be suspended for a certain period of time, for the companies' compensation of losses after the resumption of flights.

Since aircraft OEMs have halted or slowed down production, it is envisaged that after the crisis the supply will fall short of meeting demand in the industry, capacity problems will arise, and aircraft prices will go up. Companies should conduct studies that address the additional demand that may occur, as part of their plans to be implemented in the



aftermath of the crisis, and this will enable them to overcome the crisis more favorably.

If the effects of the crisis fade out on a regional basis, the regions and countries that recover from the crisis rapidly will be more advantageous. There may be capacity transfers between companies. For instance, the transfer of both fleets and flight crews to the regions having a high number of flights is likely to take place. The fact that China's leaving behind the impact of the crisis early (currently owns nearly 40% of the world's aircrafts) may be a great opportunity for the East Asian and Southeast Asian aviation industry.

The environmental impacts of the reduced flights can be

closely monitored by some environmental organizations. Due to the low number of flights during the outbreak related crisis, many studies and research on the effects of climate change and carbon emissions can be conducted. Studies on climate change may also lead to significant outputs for the future of the aviation industry.

Even though it is not possible to predict the exact time of the end of the crisis, it is apparent that many companies have put a stop to their operations if it takes longer. In order to fill the gap after the crisis, it is expected that the surviving companies will take advantage of the opportunities and new companies and collaborations may emerge.

It is obvious that aviation industry will be reshaped after the crisis, as is true for many areas of the economy. Regardless of the perspective from which we look at the sector, the aviation industry plays a key role in the economic growth of countries and their global effectiveness. Countries that can manage to find an exit from this virus crisis in a short time and that stand behind the aviation industry will be able to turn this crisis into an opportunity with respect to aviation and will gain a great economic advantage in terms of the global economy. Countries wishing to reduce the effects of the crisis right away will eventually realize that ignoring the aviation industry is not a viable option 😊