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Will There Be an Open Sky Again? The Impact on COVID-19 on the Airline Industry

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Abstract

Travel restriction, bans and lock downs imposed by many countries have made air travel almost nonexistent. This has directly impacted the airline industry with more than 80% of the fleet grounded. Dry of passenger revenue, will make survival extremely difficult for the airlines. New strategies will have to be adopted to survive the crisis and to make the airline industry ready for the future.

Keywords: airline; survival; cargo; government support; COVID-19.

1. Severe turbulence in the sky: Significant impact on air travel

The outbreak of COVID -19, which was triggered from Wuhan city in Hubei province in China has now spread across the world. Though the initial epicenter was China, this has spread throughout the world with epic centers shifting from China to areas of Iran, Japan, South Korea, Italy, Europe and US. The Public health emergency declared on 30th January by the World Health Organisation (WHO) was raised to a global pandemic on 11th of March with the growing number of cases. With over 3.5 million people infected around the world many countries have closed their boarders for travelers [1].With close downing of airports and imposing of travel restrictions by many countries, the demand for travel is almost nonexistence. Spending on travel in US is expected to decrease by USD 519 billion resulting in an economic impact of USD 1.2 trillion [2]. The impact on the airline industry is estimated to be USD 314 billion (55%) of passenger revenue in 2020 driven by existing travel restrictions, confidence in travelers and global recession [3].

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Revenue Passenger Kilometer (RPK) is forecasted to be 50% lower than previous year which has resulted in more than 80% of capacity grounded worldwide [4]. Many airlines have temporary suspended their operation. These predictions have surpassed the impact of September 11 and Global financial crisis by many folds.

2. A nosedive: Airlines are on 'survival mode'

With a high level of fixed cost in the airline industry, survival will be a challenging task during this period due to the dry out of cash. Many of the airlines would go bankrupt by end May without coordinated and government intervention [5]. President of Emirates Tim Clark and CEO of Etihad Airways Tony Douglas predicts more than 85% of the airlines globally will face insolvency by the end of the year without intervention from the governments [7]. Airline such as Flybe, Virgin Australia, Air Mauritius and South African Airways have already entered voluntary administration. With ambiguity in timelines of airlines reaching pre-Covid levels of demand, airlines are mainly focusing on 'survival mode'. Some experts in the aviation industry predict it would be long as 2023 to reach pre-COVID demand levels [7]. The period of survival will depend on the 'V-shape path' or 'U-shape path' of recovery. International Civil Aviation Organisation (ICAO) predicts that a 'V-shape' recovery (scenario 1) predicts first sign of recovery in late May while 'U-shape' recovery (scenario 2) predicts signs of recovery third quarter or beyond forecasting a seat capacity reduction in the range of 39%-72% from baseline and seat capacity reduction in the range of 37%-71% compared to previous year.

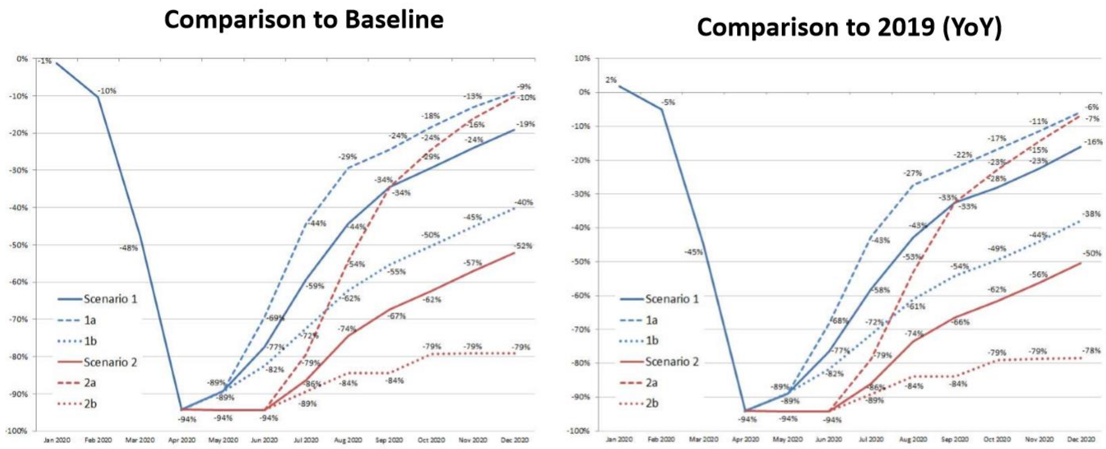

Figure 1: Seat capacity comparison.

Scenario 1: Smooth capacity recovery to 75% of Baseline level by September but weak demand return.

1a: Strong capacity rebound to 90% in tandem with quick demand return

1b: Slow progression to recover 50% capacity by September with downside risk in demand

Scenario 2: Slow progression of capacity recovery to 40% of Baseline with sluggish demand growth

2a: Strong capacity rebound to 70% by September, outpacing demand recovery

2b: Prolonged downturn towards September or later with marginal summer adjustments

Source : ICAO estimates of seat capacity reduction based on OAG, Routes Online and airline websites, April 2020

The airline industry can be analysed using a six stage model developed by author in [6]. The six stages are; coping, rethinking, initiating, sensing, intervening and sandbagging.

Stage 1: Coping

This stage mainly focusses on managing the crisis with measures that are needed to reduce the potential damage and loss resulting due to the crisis. Disaster recovery plans (DRP), crisis management plans (CMP) are some forms of strategies that businesses have developed to cope with crisis situations in businesses.

Stage 2: Rethinking

This stage mainly focusses on consciously searching for solutions to overcome the crisis in the future. The effectiveness and adequacy of the DRP and CMP will be tested during the ‘Rethinking’ stage.

Stage 3: Initiating

During the ‘Initiating’ stage solutions that arose in the ‘Rethinking’ stage will be actioned by the business.

Stage 4: Sensing

Through the close monitoring of the internal and external environment warning signals needs to be sensed of a potential crisis. Focus on trends and developments monitored closely during this stage.

Stage 5: Intervening

Based on the detection of early warning signals, steps are needed to take to intervene to protect the negative impact of the business. If not neutralized at an early stage crisis have a tendency to intensify, proliferate and transform into something even more fatal and uncontrollable.

Stage 6: Sandbagging

‘Sandbagging’ measures will need to be implemented in when intervention steps are less effective and have not eliminated the crisis. All resources must be mobilized to support the ‘sandbagging’ actions of the company. Failure of sandbagging will move an organization to the coping stage and subsequent stages afterwards.

3. Coping: Surviving the crisis

Table 1: Government Support for the airline industry

Country	Description of support
Australia [15,17]	• A$715 Mn (US$430 Mn) aid package comprising refunds and forward waivers on fuel taxes, and domestic air navigation and regional aviation security charges. • Reimbursement of fee collected from airlines since 1st February 2020 (AUD159 Mn). • A$298 Mn for regional airlines within the country for flying domestic routes.
Brazil [18]	• To postpone payments of air navigation and airport fees.
China [9]	• Special fund to support the industry with a 1.6% p.a. interest rate. • Exempt airlines from the contribution to the civil aviation development fund. • Subsidies for all international flight of RMB 0.0176 per ASK for each shared operating international flight and RMB 0.0528 per ASK for every independently operated international flight up to 30th June. • Reductions in landing, parking, airport and air navigation charges for all local and international airlines.
Denmark [19]	• $300 Mn in state loan guarantees for the national carrier.
Hong Kong [11,12]	• Total relief package of HK$2.6 Bn (US$335 Mn) for the airlines including waivers on airport charges on parking and aerobridge fees (HK$ 630 Mn) and certain licensing fees, rent reductions. • Subsidies based on aircraft fleet of HK$1 Mn (US$129,000) for every large aircraft registered in Hong Kong, and HK$200,000 for every small aircraft. • Airport Authority Hong Kong will purchase 500,000 tickets from the four local carriers to help with cash flows which will be used to stimulate travel once the epidemic is contained.
India [16]	• Financial package of US$1.6 Bn for the aviation sector. • Waive off all taxes from jet fuel and extending two months credit from oil companies, waiving landing and parking charges, Offer soft loans with interest of 1%-1.5% p.a. to airlines.
Malaysia [15]	• 15% discount on the electricity bills for airline companies. • Rebate on landing and parking charges and rent at airports.
New Zealand [15]	• NZ$900 Mn (US$580 Mn) loan facility to the national carrier as well as an additional NZ$600 Mn relief package for the aviation sector.
Norway [19]	• State loan-guarantee for its aviation industry totaling NKr6 Bn (US$533 Mn).
Singapore[15]	• SGD 112Mn (US$82 Mn) including rebates on airport charges, assistance to ground handling agents, and rental rebates at Changi Airport. • Funding 75% of up to SGD 4,600 of aviation workers' monthly pay and providing SGD 350Mn in fee relief for airlines. • SIA will offer shareholders SGD5.3Bn in new equity and up to SGD 9.7Bn through 10year mandatory convertible bond. • SGD 4 Bn bridge loan facility with the Singaporean DBS Bank.
South Korea [15]	• KRW300 Bn in unsecured loans to help low cost airlines • Reduction of airport landing charges by 20% and deferment of 3 months, deferred payments of airport landing, parking and facility fees • 30-50% aircraft property tax reduction for major airlines • KDB and KEXIM - state owned banks in Korea, agree to extend KRW 200Bn (US$164 Mn) loans to back Jeju Air's acquisition of Easter Jet, including recapitalizing the new merged entity.
Sweden [19]	• $300 Mn in state loan guarantees for the national carrier.
Taiwan [13]	• Loans upto NT$50Bn (US$1.7Bn) with subsidized interest rates. • Lowering or waiving landing and parking charges at airports.
Thailand [14]	• Loan of THB 58 Bn (US$1.8 Bn) to be provided to Thai Airways. • Reduce Landing and Parking fees by 50%, navigation charges of 50% for domestic flights and 20% for international flights, Reduce passenger service charge by THB 5, reduction in jet fuel excise taxes and rent at airport upto 31st December 2020.

With cash depleting at an exponential rate, many airlines are looking at different funding options. Singapore airlines successfully raised USD 6.2 billion through a rights issue of which 42% to fund operational cash requirements, 38% to fund capital expenditure and 20% to fund fixed commitments of debt and contractual payments. Many governments have proposed bail-out packages for the airline industry. US government put forward a proposal of USD 29 billion targeting US airlines while a EUR 45 billion for EU airlines and a USD 9 billion for Norwegian airlines are examples of government bail-out packages in terms of loans granted to airlines. Furthermore, concession on fuel prices and deferments of payments, incentive for flights that are in operation, subsidies on airport fees and ground handling fees, cost reimbursements, guarantee percentages of wage to employees are other forms of government support that have been extended to airlines by different governments across the world. Table 1 lists out the support given by different governments to the airline industry. With passenger travel at an all-time low many airlines are focusing on cargo operations. Converting passenger aircrafts into cargo air freighters, removing seats to store cargo, storing cargo in overhead bins and on seats are some of the initiatives airlines have taken to enhance cargo capacity.With more than 80% of the capacity currently grounded, airlines are in deep negotiation with Airbus and Boeing, the two main airline suppliers, for cancellation of existing orders, rescheduling delivering, change in scope and swapping old aircrafts for new aircrafts. Furthermore, airlines worldwide are searching for relief from lessors for discounts, haircuts, deferments and even defaults of lease payments. With 66% of owned fleet, Singapore airlines are examining the option of sale and lease back of some of its owned aircrafts to release cash to survive the crisis [8] while Cathay Pacific airlines have already performed the sale and lease back on six aircrafts [11]. Cost optimization strategies have been adopted throughout the airline industry. Pilots and cabin crew layoffs, salary cuts of airline staff, job amalgamation activities, voluntary and mandatory no pay leave schemes and freeze of recruitment activities have been a common phenomenon on employment related initiatives airlines have adopted across the industry. Full service airlines have cut down on their onboard meal services, on board WiFi facilities and Inflight Entertainment. Flight schedules have been modified or cancelled and frequencies have been reduced to increase cabin factors. ‘Ghost flights’ are been operated to some destinations such as Heathrow to retain the airport slots, maintain the aircrafts airworthiness and allow training for pilots in the case of non-accessibility of simulator services due to country lockdown. Furthermore Amidst all the above initiatives, weathering the storm and surviving will depend on the depth of cash reserve of the airline.

4. Rethinking and Initiating: Readiness for the future

Many airlines are have taken this as an opportunity to right size it’s fleet through shredding excess capacity. Furthermore conversion of passenger aircrafts to cargo aircrafts are a common phenomenon. Reshaping the cost structure have been a major focus through cost optimization initiatives enabling the airlines to adopt a flexible lean structure minimizing its fixed costs which eventually reduces its CASK (Cost per Average Seat Kilometer). With safety protocols taking center stage, early adoption will be key for airline survival. Initiatives of wearing masks onboard and checking temperature prior to boarding, requesting previous and future travel itineraries which are currently adopted by Chinese airlines will be new norms in the airline industry. Emirates have already adopted PCR (Polymerase Chain Reaction) test on all onboarding passengers on its flights. With social distancing been a key aspect of consideration, some of the airline seat manufactures have already proposed new designs.

5. Sensing and Intervening: Supporting the needs of travelers

Post-COVID world of air travel will be drastically different compared to pre-Covid air travel. With the confidence in travel and global recession impacting passenger travel the mix of passenger to cargo will change in the short to medium term in the Post-Covid world of air travel. With the new norms of business meetings through online platforms such as Microsoft Teams, Zoom, Cisco Webex etc. business travel will be at a bare minimum level. Internal travel bans in companies and budget freezes will further reduce business travel. Leisure travel will be impacted due to fear of contraction through airports, planes and destination of travel even after containment of Covid-19. Therefore, airlines are concurrently searching for future proof strategies to be adopted on a post Covid world of air travel. Travel demand in the future would be different compared to the pre-Covid era. Due to the change in passenger preferences, demographics and behaviors some of the traditional methods of determining routes, ticket prices and incentives will need to be reevaluated by the airlines. Government restriction in travel, region and area specific restrictions will also complicate the travel patterns in the future. These changes will have to be dynamically updated in airline revenue management and route planning systems.

6. Sandbagging: Collaboration of all players

With the possibility of government restrictions differing from country to country, driving for uniformity on regulations would be a key to stimulate demand for early travel similar to the precautions taken in airports and aircrafts after September 11 incident. Furthermore collaboration with hotels, tour operators, transportation services through forward and backward integration would be key to enhance travel confidence and ease of travel in the future.

7. Recommendations: Preparation for takeoff - Future of airlines

With travel demand diminishing in quick succession and more than 80% of the fleet grounded airline decision makers will have to take a two prone approach in the form of weathering the current storm through survival mode tactics and been future prone to be capable of operating in the post-Covid world of air travel. While readiness for the future will be very important supporting the future traveler, collaboration of players will be key to future success as discussed above for the airline industry. With establish players diminishing and new players emerging, the competitive landscape in the future will be different and survival will be determined by agility and responsiveness of the business model of the airlines.

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