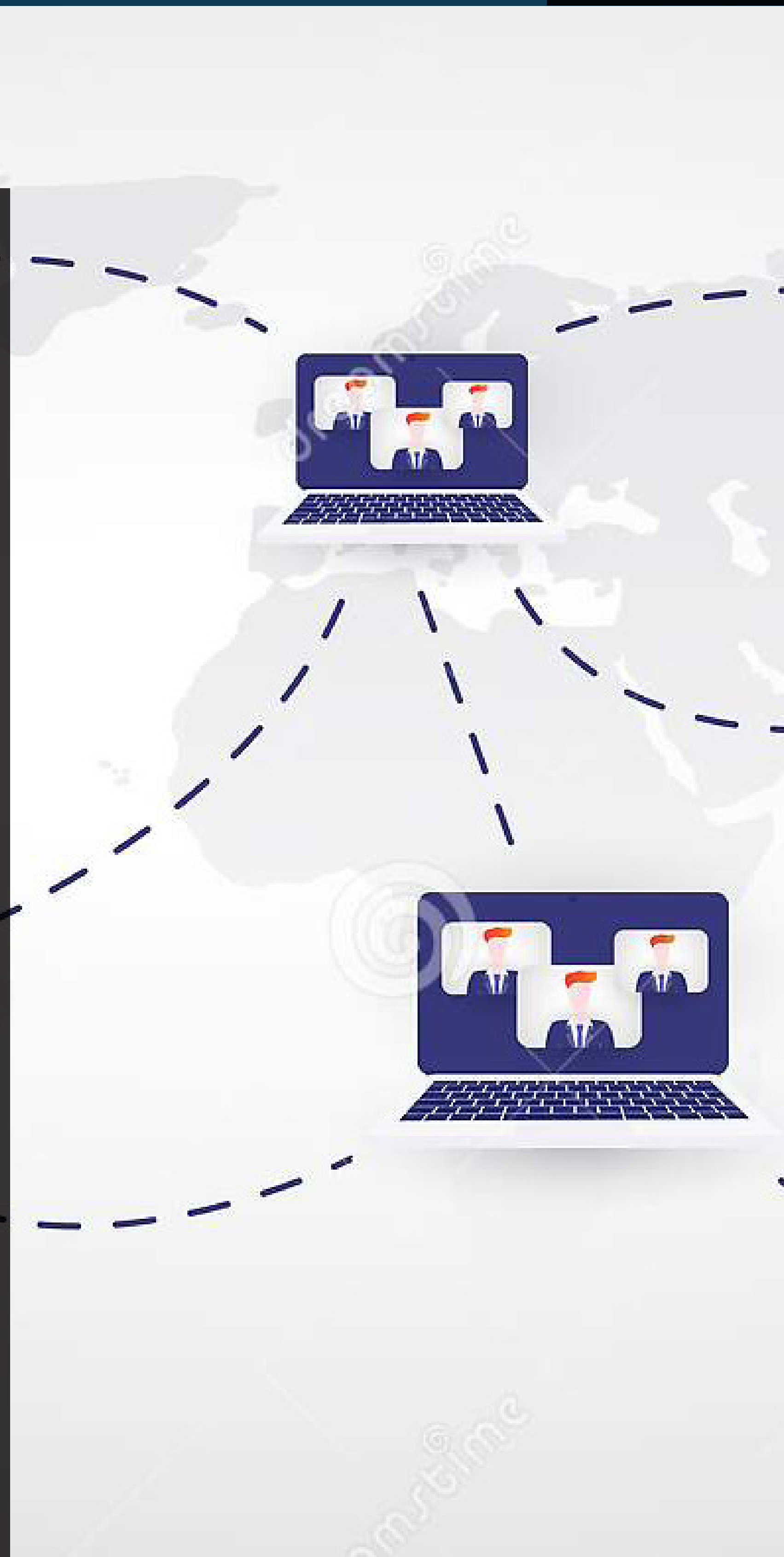
AIRA Journal

Volume 34 No. 1



WHAT'S INSIDE

AIRA Announces New Distinguished Fellows Program for Long-Standing Members with Exceptional Contributions to the Industry, **see p.15**

HOW THE AIRLINE INDUSTRY IS RESPONDING TO COVID-19'S CRIPPLING PUNCH

DAVID MILLER, CIRA, CDBV; JAMES CLARKE, and MICHAEL RUTNER
Alvarez & Marsal

INTRODUCTION

The airline industry faces a long, arduous path to recovery in the wake of the unprecedented disruption to passenger travel caused by the coronavirus pandemic. In early 2020, the COVID-19 virus quickly spread around the globe, devastating demand for air transportation and compelling governments to mandate travel restrictions. As airlines ramped down their business, most of them had no more than two or three months of liquidity, according to the International Air Transportation Association (IATA), but have since secured loans, bailouts and other funding options, while numerous international carriers have filed for bankruptcy protection. The crisis, which came suddenly, is global in nature with uncertain duration and consequently the recovery will likely be painfully slow, even with the relatively expeditious regulatory approval of several vaccines.

In the U.S., approximately 750,000 people work in the airline industry and another 500,000 work in the aerospace manufacturing sector. As a result of the crisis, approximately 32,000 employees have been furloughed or laid off in the U.S. as of October. While the $15 billion airlines received from the second stimulus package requires furloughed workers be reinstated, employees will again be at risk when the funding runs out. (As of publication, a third and possibly final round of stimulus grants and loans being ironed out by Congress could provide another $14 billion in aid for the airline industry.)

Contributing to the economic toll, many consumers won't be able to fly for some time due to unemployment and the new work-from-home protocols (which are likely to stay in place for the foreseeable future). Coming after many profitable years for U.S. airlines and significant balance sheet repair during the last decade, COVID-19 and its resulting impact on air travel will significantly affect the sector for years to come.

Travel and hospitality remain among the hardest hit sectors of this pandemic. Both industries involve high levels of social interaction and will likely only recover when the virus subsides to the point that people feel comfortable flying, dining out and staying in hotels. Until that happens, the broader travel and entertainment sectors are facing the grim reality of unprecedented business disruption.

While carriers have taken immediate steps to cut costs, Alvarez & Marsal (A&M) expects a phased recovery as the industry initially seeks bailouts, raises capital and substantially reduces flying schedules, aircraft fleets, and finally turns to longer term relief through restructuring and consolidation.

COVID-19'S IMPACT WAS SWIFT AND DEEP, FORCING IMMEDIATE ACTION

As the global aerospace industry is facing the greatest calamity in its history, it may suffer many years of sustained disruption and will require significant financial and operational restructuring to survive.

While the industry very successfully recovered from the financial recession of a decade ago, there have been warning signs in recent years that global profits and traffic were slowing and had passed their collective post-recession peak. From 2017 to 2019, the sector experienced a decline of net profits from $38 billion to $26 billion. In 2019, annual growth in passenger traffic rose by mere single digits, hinting at a slowing of what had previously been a very long, strong cycle tracing back to the end of the global financial crisis. As a result, several low-cost carriers filed for bankruptcy in 2019 and some larger, established airlines like Jet Airways in India also sought court protection.

When the pandemic hit, airlines immediately began to strategically cut costs by furloughing employees, encouraging early retirements, retiring aircraft and

Exhibit 1: Fewer global destinations have closed to international tourism in recent months.

70% PERCENTAGE OF WORLDWIDE DESTINATIONS WHICH HAVE EASED COVID-19 RESTRICTIONS	**27%** PERCENTAGE OF BORDERS CLOSED IN NOVEMBER 2020
65% PERCENTAGE OF BORDERS CLOSED IN JUNE 2020	**54%** PERCENTAGE OF BORDERS CLOSED OR PARTIALLY CLOSED IN NOVEMBER 2020

Source: UNTWO, December 2020.

deferring aircraft rents. Further, they have been forced to take historic actions to ameliorate their losses, such as severely cutting capacity, trimming executive compensation, and shifting passenger capacity to cargo capacity in some cases by removing passenger seats in passenger aircraft. Unfortunately, in most cases these decisions have proven largely insufficient, and industry players continue to seek opportunities to cut expenses. By late third quarter, American Airlines, United Airlines and JetBlue warned they could eventually lay off more than 70,000 employees combined, while Delta Air Lines and Southwest announced that they were working to avoid layoffs through voluntary retirements. However, Delta later warned it will follow suit with massive layoffs of its own, and American told its employees in February 2021 to expect 13,000 furloughs once the second stimulus package runs out. A third round of aid could prevent or delay a massive layoff.

In the meantime, carriers have been burning cash at an alarming rate. Airlines have reduced the $10 billion-a-month of burn in late March to approximately $5 billion per month in the third quarter of 2020 yet are expected to continue burning cash through Q2 of 2021. In June 2020, airlines' collective cash burn was $61 billion with an estimated loss of $39 billion, according to IATA. (The International Air Transport Association said airlines will likely have burned through more than $77 billion during the second half of 2020.) The organization now forecasts year-over-year industry passenger revenues will fall a staggering $500 billion in 2020. Additionally, the International Civil Aviation Organization (ICAO) expects air travel to remain well below pre-COVID levels through the end of 2024, even by its most optimistic scenarios. The industry's total losses in 2020 are projected to be $118 billion, according to IATA, with demand down 61% from 2019; that compares to a healthy profit of $26 billion in 2019.

In addition to cost cutting, airlines have sought to maintain liquidity through government aid or raising capital through debt issuances, secondary equity issuances, and sale leasebacks of owned aircraft. In the U.S., carriers raised a remarkable $47 billion of debt and equity capital through the end of the second quarter (excluding the Cares Act payroll and loan programs and significantly large sale leasebacks completed by carriers such as United and Delta) and recently there have been signs by the larger U.S. carriers to raise more capital in 2021. Globally, governments have made more than $180 billion available to help airlines weather the crisis, mainly in the form of loans, loan guarantees and wage concessions. However, the aid has been unevenly distributed by global region, with the U.S. airlines receiving the equivalent of 25% of such assistance and European airlines receiving about 15%.

According to the trade group Airlines for America (A4A) and its member companies, travel bans, passenger fears and a global recession are driving a sustained decline in demand. At a glance, these economic shocks are creating a historic crisis for the industry:

Travel Restrictions — In June 2020, 65% of countries were completely closed to international tourist traffic, and over 95% had some travel restrictions in place (Exhibit 1). By November, many countries, including the U.S., had relaxed some international travel restrictions, but more than two dozen countries still observe the strictest level of travel ban. Europe has lifted restrictions for intra-European travel, and while other countries have followed suit, a few, such as France and Germany imposed new country-wide lockdowns at the end of 2020 after facing a second wave of the pandemic. In January, the European Commission adopted a position that all non-essential travel should be strongly discouraged. And while restrictions have been loosening since the Spring of 2020, overall international passenger volume was still down over 60% versus 2019, evidence of travelers' continued reticence to fly. Domestically, travel was down 58% in January 2021 while international air travel was down 63%.

Evaporating Demand — As passenger fears over travel safety have intensified, global net revenue bookings have fallen dramatically, dropping 90% in the U.S. at the outset of the pandemic and remaining nearly 60% below their pre-crisis levels.

Continued from p.7

Global Impact — While the downturn began in Asia, it quickly became a global phenomenon, striking every major travel region and evincing only modest recovery since March 2020.

Macroeconomic Recession — The virus is causing a sharp global economic downturn of the broader economy, contributing directly to lower industry demand.

Uncertain Future — The impacts of the COVID-19 pandemic continue into 2021, and travelers may be reluctant to book flights until the crisis and its associated risks are resolved (and even for a period of time thereafter).

CAPACITY AND PASSENGER TRAFFIC DECREASED INSTANTLY AND REMAIN LOW

Demand for travel and aircraft capacity plunged swiftly at the outset of the pandemic crisis and has not yet recovered (Exhibit 2). A sharp decrease in air travel is still evident as year-over-year bookings for future flights have dropped from about a 7% year-over-year gain in January 2020 to approximately a 79% year-over-year decline in June (and near that level in July), which still represented a modest improvement from the nadir of a 89% year-over-year decline in mid-April.

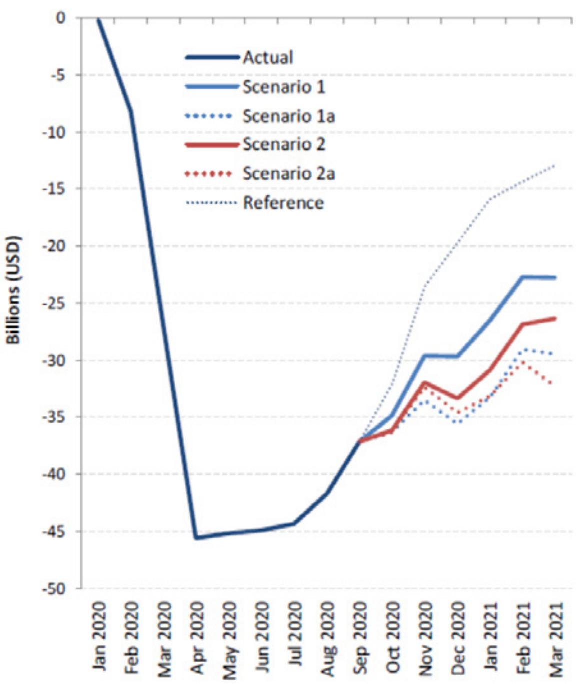
Across almost all metrics, capacity and demand reached unprecedented lows during this crisis. Global impacts include:

- Year-over-year demand in China declined to negative 87% five weeks into the crisis but is down only 3% today, while European capacity remains down 75% from a year ago. And while U.S. capacity improved by November to 28,000 flights per day, that level of flying remains a fraction of the roughly 110,000 daily flights before the crisis.[1]
- By January 2021, year-over-year U.S. domestic passenger volumes were down 58% and international flights down 63%.[2]
- The weekly average number of passengers processed through TSA checkpoints daily reached a trough of 95,000 during the week of April 11-17. Since then, passenger volume recovered slightly to 665,000 in July and surpassed 1 million passengers during key weeks around the holidays before falling back down to approximately 700,000. In comparison, the pre-COVID weekly average was about 2.4 million passengers.[3]
- While the decline of demand for future U.S. air travel seems to have plateaued in June, passenger traffic is still down about 66% and revenue has decreased 61% from pre-pandemic levels.[4]
- Nearly 40% of the U.S. aircraft fleet remains idle. At the peak of the crisis in May, 52% of the fleet was grounded. The largest portion of idle aircraft are

[1] ARC Travel Demand, arccorp.com; Airlines for America (A4A), airlines.org. November 2020.
[2] A4A, January 2021.
[3] Transportation Security Administration, tsa.gov. November 2020.
[4] ARC Travel Demand, November 2020.

Exhibit 2: Passenger demand and revenues will be depressed for some time.

Forecasted Global Passenger Revenues



Scenarios depend on the duration of the pandemic, degree of consumer confidence, and economic conditions:

- **Baseline: counterfactual scenario, in which the COVID-19 pandemic does not occur, that is, originally planned or business as usual**
- **Scenario 1: two (2) different paths (similar to Nike swoosh- and W-shaped)**
- **Scenario 2: two (2) different paths (similar to U- and L-shaped)**
- **Reference: information only, based on latest airline schedules (similar to V-shaped)**

Source: ICAO estimates based on ICAO ADS-B, OAG, ICAO-ICM MIDT, ICAO LTF, ICAO RCA, IATA Economics, and IMF Economic Outlook.

Reprinted with permission from *AIRA Journal*

larger widebody and older aircraft, such as B777s and in the case of Delta, MD80 and MD90s.[5]

Airlines are taking significant steps to reduce capacity, relegating entire fleets to long-term storage or part-out programs. For example, British Airways, the largest operator of 747-400s, grounded its entire 747 fleet of 31 planes in July because of the pandemic, four years earlier than it had planned.

A CURRENT SNAPSHOT OF THE INDUSTRY AND WHERE IT'S HEADING

When the impact of the 9/11 attacks hit the airline sector, it took the industry four years to recover to its pre-9/11 revenue. Throughout that time, capacity lagged behind pre-crisis levels. By contrast, following the global financial crisis that began in 2008, the industry only took one year to recover. How long the current shock will impact carriers until they are able to return to 2019 revenue levels is yet to be seen, but it is theorized that this particular impact is so devastating that it could take much longer than a year or two to resolve (Exhibit 3).

Passenger traffic will likely return slowly, with high paying business travelers lagging the return of vacationers and those visiting friends and family. Business travel and entertainment expenses are often cut in a crisis and are unlikely to quickly return to pre-pandemic levels once the crisis is over.

We expect that the post-pandemic recovery of the airline industry will be long and will play out in two or more phases before the sector fully recovers. Below are some highlights of how we anticipate the recovery to unfold over the next few years. Note that this overview is predicated on a number of factors, including how long it will take for passengers to feel safe flying again.

Overall effect of COVID-19 on the industry: Through 2020, IATA estimates the industry's year-over-year loss in passenger revenue is over $500 billion, an unprecedented blow for the sector. In October, the organization provided an even grimmer outlook for 2021 as it lowered its industry revenue projection for the year by 25%, saying it expects total revenues to be negative 49% compared to 2019 levels. As a result, it is likely that there will be a number of airlines that will be forced to restructure, liquidate or merge all or parts of their operations with more stable or larger airlines.

A&M has modelled traffic scenarios for different industry segments and geographic regions and envisions different recovery scenarios for narrow-body and wide-body aircraft, and substantial impacts on the aerospace supply chain.

Restructuring landscape and supply chain impacts: During this ongoing recovery period, we expect to see a multi-phased response in the aviation industry, characterized by bailouts and initial capacity reductions to be followed by deeper restructurings, insolvencies and structural changes in capacity.

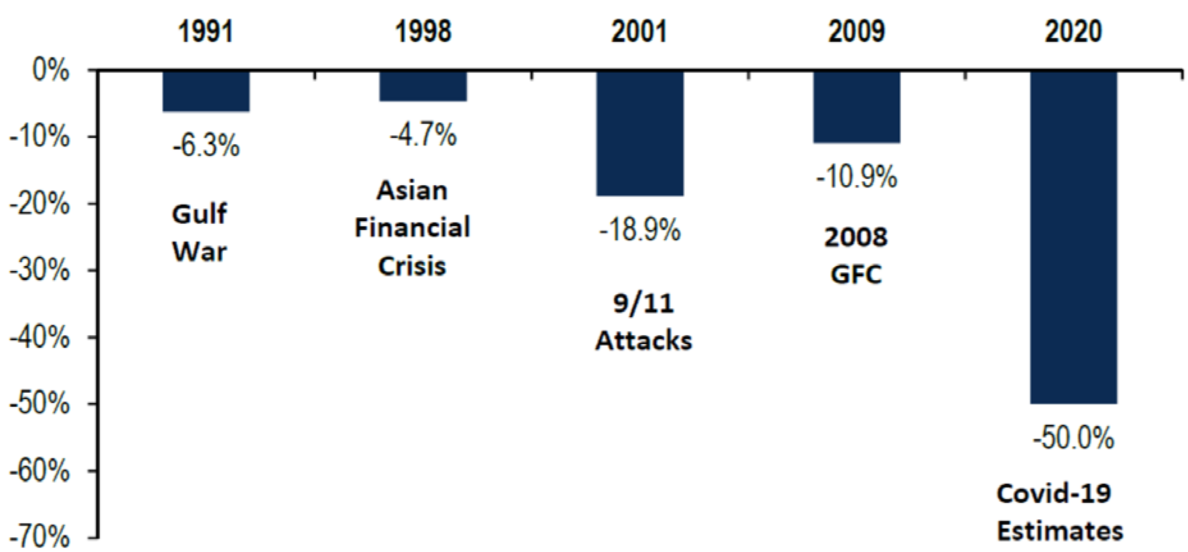
Suppliers are also expected to experience a potential wave of restructuring and insolvencies, and those that are prepared to sustain lost revenues, excess inventory and potential defaults are far more likely to survive the ongoing turbulence.

Impact on production and maintenance, repair and overhaul (MRO) volumes: Several senior aerospace industry executives have informed A&M that they are focused on minimizing cash outflow and beginning to

5 masFlight, masflightbigdata.com, November 2020.

Exhibit 3: Airlines have weathered shocks to the sector, but none so deep as the present crisis.

Largest U.S. Carrier Capacity Reductions Year-over-year

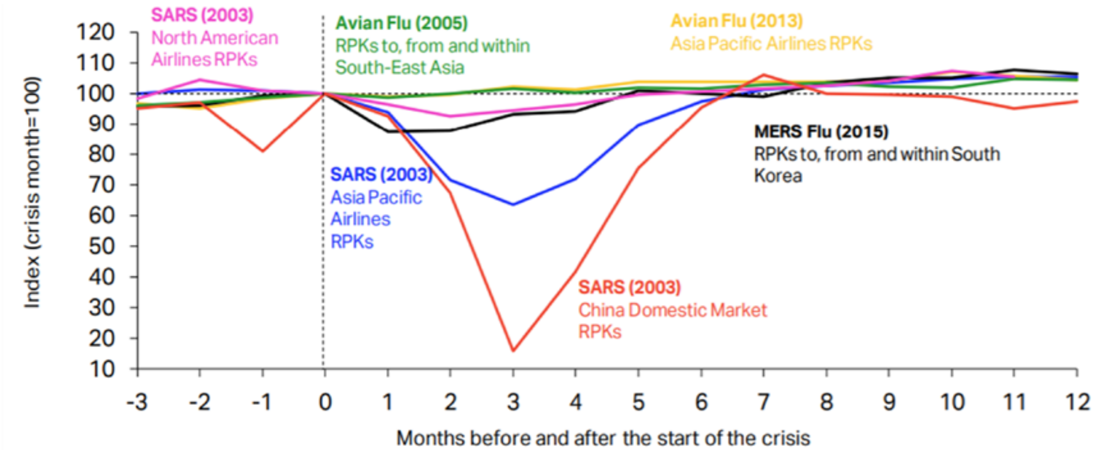


Source: BofA Global Research, IATA

Continued from p.9

Exhibit 4: Recovery from the impacts of COVID-19 will be longer than previous outbreak crises.

Impacts of Past Disease Outbreaks on Aviation



Source: IATA – COVID-19 Updated Impact Assessment.

plan for restructuring. Despite having a record pre-pandemic backlog, manufacturers have needed to slash production rates, indicating the depth of the demand slump that is now directly affecting the supply chain.

By comparison, however, spending on aircraft for defense has shielded demand in the near term, though it is uncertain whether continued disruptions in the commercial sector and related supply chain will bleed over into the broader manufacturing sector.

In sum, the road to recovery for the industry depends on many factors, including the public's sentiment about air travel, how soon effective vaccines can be distributed, and how deep the supply chain disruptions ultimately impact the sector and whether these disruptions can be easily overcome.

RECOVERY TIME AND THE FUTURE FINANCIAL IMPACT

IATA predicts that the financial impact on the industry will be long and painful, anticipating that 2020 will be the worst year in the history of the industry for airlines. In October, it estimated that the sector will experience $130 billion in losses and $500 billion in total passenger revenue losses. Significant sector losses will continue (though to a lesser extent) in 2021 (Exhibit 4).

By contrast, during the 2003 SARS outbreak, passenger demand took approximately 6 months to return to pre-SARS levels. However, as a deeper secular economic recession is expected to follow the COVID-19 crisis, unemployment and the loss of discretionary income may affect more of the population. Additionally, the altered business traveler behavior may have a more profound effect on the global airline sector and related verticals, and IATA has thus extended its prediction for the industry's recovery to not occur until 2024.

SCENARIO MODELING INDICATES HOW DIFFERENT REGIONS AND ROUTE TYPES MAY RECOVER

Traffic recovery scenarios are expected to be very different depending on the region and types of flights. Not all regions are recovering. For example, while China's domestic routes have been restored, long-haul flights across Asia are still mostly nonexistent.

To gain insight into the potential shape of the recovery, A&M modelled traffic and capacity by revenue passenger kilometres (RPKs) and available seat kilometers (ASKs) to determine possible recovery scenarios for the industry in light of the global crisis (Exhibit 5).

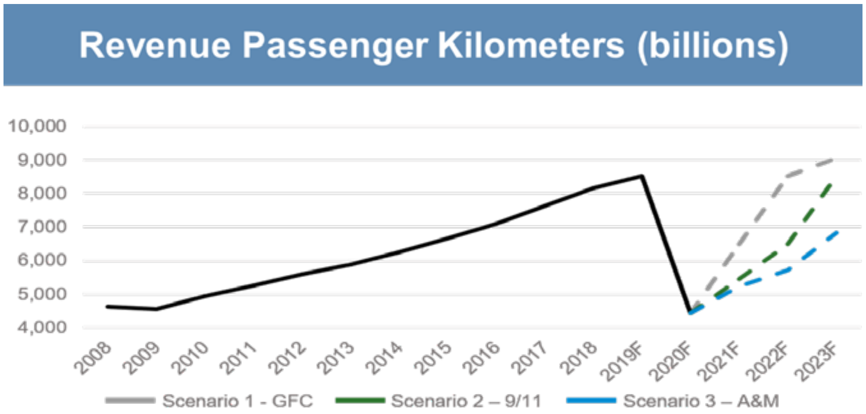
Under the RPK scenario modelling, A&M looked at major global traffic routes, comparing recovery curves following the global financial crisis of the mid-2000s, the 9/11 attacks and the current pandemic crisis. This model overlaid the current IATA estimated reduction in traffic of 48% through the rest of 2020 and beyond. In comparing the different scenarios, recovery was quicker (more 'V-shaped') after the 2008 financial crisis, but much slower (more 'U-shaped') after the 9/11 attacks. The model expects the post-COVID-19 recovery to be longer, returning to pre-crisis levels by 2022 or 2023. A significant driver of recovery will be the broad distribution of recently approved vaccines for COVID-19.

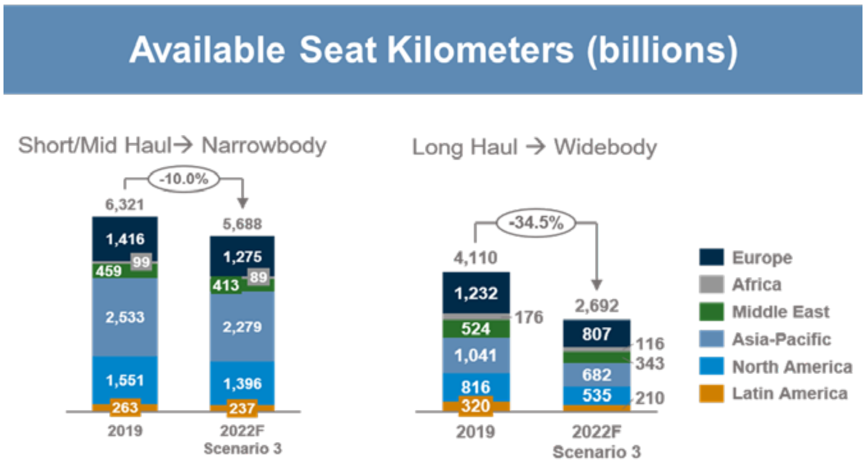
The model also predicts a faster recovery of short-haul and intra-regional traffic as restrictions are lifted, but a slower recovery for long-haul traffic to a revised lower peak as significant capacity reductions and prolonged suppressed passenger demand are expected. A&M expects 2023 passenger demand to still be about 20% below pre-pandemic levels.

The ASK scenario model looks at impacts on capacity and activity, which vary by region and fleet types, and appear to be in line with current OEM production

Exhibit 5: Recovery will differ based on region, route type and size of aircraft.

Traffic and Capacity Model Scenarios by Region and Route Type



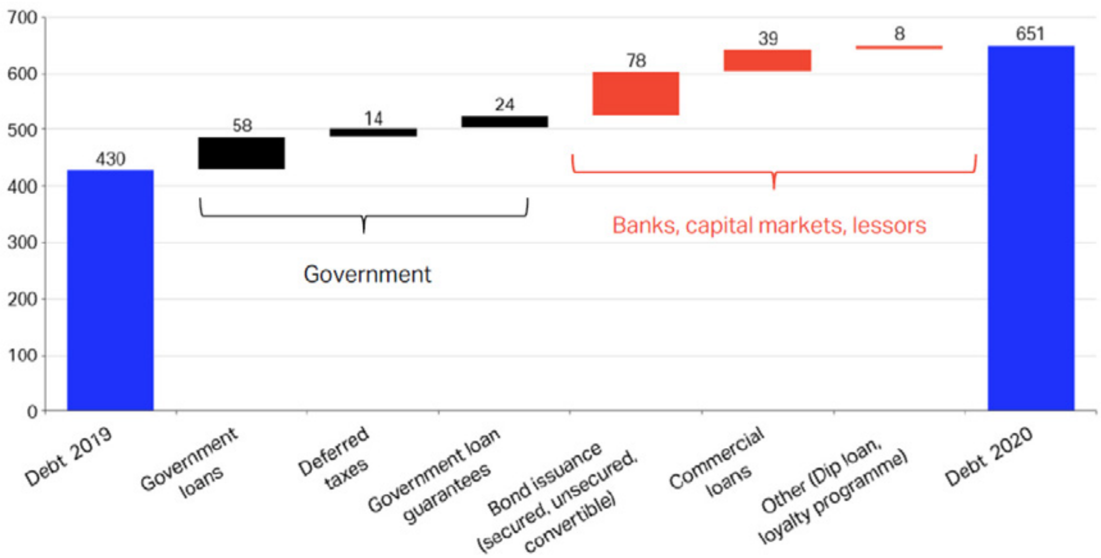


Source: Boeing – Commercial Outlook Assessment; www.icao.int, A&M Analysis.

Exhibit 6: Airlines are using all available resources to increase liquidity.

Sources of Airline Liquidity

Airlines took on an additional $125B in new debt, $78B in bond issuance, $39B in commercial loans and $8B in other loans and programs.



Source: IATA, November 2020.

Continued from p.11

expectations. Specifically, short-haul capacity levels are expected to recover further and faster, especially in the Asia Pacific region and in North America. Europe and the Middle East are expected to take longer based on their relatively higher reliance on long-haul fleets and routes.

AIRLINES ARE SEARCHING EVERYWHERE FOR CASH

Following the immediate pandemic lockdown and facing travel restrictions and a long, slow recovery, airlines have quickly and creatively acquired needed liquidity, raising $123 billion in government aid with $67 billion to be repaid as of October 2020 (and subsequently increased further). In addition to government grants and loans, airlines have tapped the debt markets as well as issuing highly dilutive equity and engaging in sale-leaseback transactions on core fleet types, indicating the industry will likely be in recovery mode for some time (Exhibit 6).

These efforts to manage liquidity will leave U.S. carriers more leveraged, reversing years of debt reductions for the sector. Total debt across the industry is projected to increase 44% from the end of 2019 to the end of 2020. Standard & Poor's has already lowered its credit rating on every U.S. carrier to account for their weakened financial positions and the heightened risk in this crisis. As a result, airlines will soon have no choice but to begin reducing debt, and further equity issuances are expected to help rebalance stressed capital structures.

Through December 2020, governments have or are executing more than $140 billion in confirmed bailouts or assistance measures for airlines globally, according to Ishka Advisory, which focuses on airline credit health. Unconfirmed reports, and allocations deemed likely, suggest the total tally could increase to about $161 billion in the near-term.

AIRLINES WILL RESTRUCTURE, IF THEY HAVEN'T STARTED ALREADY

In order to stabilize the industry, the U.S. government initially provided $50 billion in taxpayer-funded aid to carriers, including $25 billion in grants and loans to cover wage and benefit expenses through September 30, 2020. To participate in the aid programs, airlines have been required to provide compensation to the government in the form of equity, stock, warrants or other forms of payment and have been prohibited from engaging in any involuntary pay cuts, layoffs, or furloughs until at least September 30. Other conditions included maintaining a baseline number of flights and clarifying the process for customer refunds. The second round of stimulus aid arrived in December, giving airlines a total of $15 billion that will pay employees through March 2021 and carry many of the same restrictions as in the previous aid package. A third, proposed stimulus package would provide approximately $14 billion, if approved.

Relief and recovery for carriers in the industry will most likely require them to significantly restructure their businesses and right-size in order to stabilize themselves during the pandemic's economic impacts and aftermath. Significant government aid, as valuable as it has been, is insufficient for carriers to become profitable again.

After the profound impact on the balance sheets of airlines due to industry bailouts, equity funding, and debt is assessed, carriers will likely begin restructuring in the next year or two in order to return to long-term stability. Lufthansa has already embarked on a plan to reduce its fleet by 13% and is considering cutting up to 22,000 jobs. United Airlines, which received a $3.5 billion grant and a $1.5 billion payroll protection loan, has furloughed 13,000 employees as of mid-October 2020 and may need to lay off more.

As more airlines begin paring and resizing operations, we expect the restructuring to unfold in multiple phases:

Phase 1 — Government bailouts and fleet rationalization: Throughout 2020 and into early-2021, we expect carriers to continue to accept a number of high-profile government bailout packages and phase out older aircraft or ground parts of their fleets. OEMs are expected to continue to cancel or postpone deliveries from suppliers. Across the sector, companies will likely seek shorter term cost cutting and adjust their working capital strategies, such as enacting furlough schemes and payment deferrals.

Phase 2 — Insolvency, restructuring and M&A: Globally, there were 25 airlines that ceased operating in 2020 according to Ishka (this was less than the numbers in 2018 and 2019, which totalled 26 and 35 respectively). Airlines are expected to be able to assess the "new normal" within the industry by 2021 in order to get a sense of their own projected recovery rate and the overall improvement of global travel demand. Once the new market conditions become clearer, we expect additional insolvencies and mergers and acquisitions over the medium- to long-term. There may also be a second wave of restructurings as airlines adapt to the changing market conditions.

Phase 3 — Full recovery, altered landscape: At the point when the COVID-19 pandemic is safely in the past, possibly due to the widespread adoption of effective vaccines, the airlines that are able to manage their operations during the next 12-24 months will nonetheless face new and longer-term challenges resulting from the crisis.

As their balance sheets may have been materially burdened by additional leverage, reduced networks and smaller fleets, airlines may need to consider additional restructurings and bankruptcies, as well as further strategic M&A and industry consolidation in order to create greater efficiencies and to "rescue" weaker carriers.

In all likelihood, airlines will use their alliances (One World, Sky Team, Star Alliance) to forge additional partnerships, though this may require addressing the current Open Skies limitations as they relate to foreign carrier ownership.

CONCLUSION

Carriers and OEMs across the sector are restructuring their companies to meet the unparalleled disruption caused by the COVID-19 crisis. Their initial actions to cut expenses and stop cash outflows, while undoubtedly necessary, are not solely enough to sustain their operations in the longer term. Industry executives will need to consider flexible restructuring plans that can respond to varying degrees of operational impact in order to mirror changes in demand.

Beyond restructuring, airlines will need to develop plans to amortize the massive debt burdens that they have incurred in order to weather this crisis and develop plans to divest themselves of government obligations they may have incurred due to bailout funds that they received.

While the race for effective medical treatments for COVID-19 is mainly out of their hands, airlines will need to address passengers' health and safety concerns by communicating any health safeguards they establish, whether on the ground (airports) or in flight, in order to reassure passengers that it is relatively safe to travel by air. Ultimately, it will be the passengers' fears that will drive much of their demand, which makes the timing of flying recovery and return extremely difficult to predict.

SOURCES

International Air Transport Association (IATA), general and specific reports.

Airlines for America (A4A), general and specific reports.

International Civil Aviation Organization (ICAO), The United Nations.

BofA Global Research.

Jefferies Equity Research, October 2020.

masFlight, July 2020.

Standard & Poor's, June 2020.

Air Passenger Market Analysis, IATA, August 2020.

"Tracking the Impacts of COVID-19," A4A, October 2020.

"Tracking the Impacts of COVID-19," A4A, December 21, 2020

"Tracking the Impacts of COVID-19," A4A, January 14, 2020.

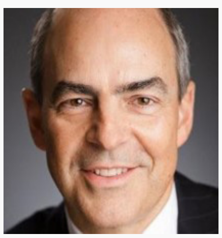
Continued on the next page>>

ABOUT THE AUTHORS

David S. Miller, CIRA, CDBV

Managing Director, Turnaround and Restructuring, Alvarez & Marsal

Mr. Miller brings more than 30 years of experience in restructuring, M&A transactions and financing as a Managing Director with Alvarez & Marsal in Atlanta. He has worked on more than 150 transactions during his career, primarily involving Chapter 11 reorganizations or out of court restructurings and including M&A and corporate finance transactions. Mr. Miller has advised on transactions in a wide range of industries, including aerospace, automotive, broadcast media, building products, business services, capital equipment, consumer products, distribution, financial services, infrastructure, metals, oil and natural gas, oilfield services, passenger airlines, plastics, real estate, retail, and transportation. He can be reached at **david.miller@alvarezandmarsal.com**.



James Clarke

Managing Director, Turnaround and Restructuring, Alvarez & Marsal

Mr. Clarke has more than 33 years of senior management and transaction experience in finance, planning and strategy, general corporate finance and structured asset finance, risk management and restructuring, with area focus in commercial aviation and logistics. He has developed with financial partners (as principal and advisor) over $10 billion of long-term, enterprise and equipment capital in all economic cycles and company growth phases. Mr. Clarke's airline and leasing industry experience includes: Chief Financial Officer of Eastern Airlines, LLC, SVP and Chief Financial Officer of Aloha Airlines, Inc., Chief Financial Officer of Air Lease Corporation, and other top-level engagements in the industry. He can be reached at **jclarke@alvarezandmarsal.com**.

Michael Rutner

Director, Turnaround and Restructuring, Alvarez & Marsal

Mr. Rutner has more than 18 years of professional experience in restructuring, strategic management and private investment, with significant experience assisting companies in the energy, aviation, and technology sectors. His experience includes overseeing global acquisitions, divestitures and leases of commercial aircraft as Transaction Manager for Q Aviation, an aircraft leasing company and subsidiary of Q Investments, serving as Senior Financial Analyst for American Airlines, operating within the Capital Strategy and Financial Planning and Analysis divisions, and advising on reorganizations of large companies as an attorney in the Bankruptcy division of the New York office of Shearman & Sterling, a multinational law firm. He can be reached at **mrutner@alvarezandmarsal.com**.

Continued from p.13

"Industry Review: Allocating Capital to Benefit Customers, Employees and Investors," A4A, December 2020.

"Air Passenger Market Analysis," IATA, August 2020.

IATA – 2019 End-year report, Boeing Commercial Outlook 2018 – 2038, www.icao.int.

"Industry Fact Sheet," IATA, November 2020.

"2019 End-year report, Boeing Commercial Outlook 2018 – 2038," IATA.

"Ishka Airline Demands vs Government Support," Ishka, January 8, 2021.

"Airline Failures of 2020," Ishka, January 8, 2021.

"First Quarter 2020 U.S. Airline Financial Data," Bureau of Transportation Statistics, June 2020.

"Corporate vs. Leisure Domestic Ticket Volume Growth", Airlines Reporting Corporation (ARC), May 2020.

"First Quarter 2020 U.S. Airline Financial Data," Bureau of Transportation Statistics, June 2020.

Corporate vs. Leisure Domestic Ticket Volume Growth, ARC, May 2020.

"Effect of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis," ICAO, July 2020.

"Expecting slower demand recovery, but positive on long-term industry profitability," Goldman Sachs, June 2020.

Wolfe Research estimates and filings of Alaska, Allegiant, American, Delta, Hawaiian, JetBlue, Southwest, Spirit and United, July 2020.