Air Passenger Market Analysis

Air passenger demand comes to a standstill amidst lockdowns

- Industry-wide revenue passenger kilometres (RPKs) shrank by 94.3% year-on-year in April, the largest contraction in recent history amidst large scale lockdowns linked to COVID-19. The decline was broad-based across all regions.
- April's outcome might represent the lowest point in the crisis. More countries have been easing their lockdowns throughout May and some airlines announced plans to partially resume their operations.
- Industry-wide available seat kilometres (ASKs) plummeted by 87% year-on-year in April. With demand declining faster than capacity, industry-wide passenger load factor fell by 46.6ppts compared to a year ago.

Unprecedented fall in air passenger volumes...

The 2020 public health crisis has led to a de facto shutdown of international and domestic aviation. Revenue passenger kilometres (RPKs) fell by more than 94% year-on-year in April – a rate never seen in the history of our time series that goes back to 1990. The contraction builds on the massive 55% year-onyear decline seen in March.

Unsurprisingly, seasonally adjusted (SA) volumes (i.e. RPKs stripped of seasonal ups and downs) followed a similar pattern, reaching the lowest point in the past 30 years (Chart 1).



Chart 1 – Air passenger volumes

International aviation hit more than domestic markets

The dramatic decline in passenger volumes was anticipated since April was the first full month of largescale shutdowns linked to the COVID-19 crisis. All regions recorded year-on-year contractions close to

Air passenger market overview - April 2020

100%. International aviation shrank by 98.4% year-onyear, about 10ppts faster rate of decline than markets (-86.9%vov). This domestic faster contraction was a result of border closures introduced to limit the international spread of the virus. Indeed, in the first week of April, 75% of the countries that IATA regularly tracks had a complete ban of entry, putting all international flights to a halt. An additional 19% of the countries had either a ban of entry for some nationalities arriving from a specific country or required a compulsory quarantine after passenger's arrival (Chart 2).

Chart 2 – Coronavirus travel regulations map



On a more positive note, April might be the lowest point of the crisis for air passenger volumes. Although the situation remains critical, some of the countries have started to gradually ease their restrictive measures linked to COVID-19 and some airlines announced a partial return to operation in the coming months.

	World	April 2020 (% year-on-year)				% year-to-date				
	share ¹	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	
TOTAL MARKET	100.0%	-94.3%	-87.0%	-46.6%	36.6%	-41.9%	-33.8%	-9.9%	71.5%	
International	63.8%	-98.4%	-95.1%	-55.3%	27.5%	-42.7%	-37.1%	-7.1%	73.7%	
Domestic	36.2%	-86.9%	-72.1%	-44.3%	39.5%	-40.4%	-27.9%	-14.4%	68.2%	

1% of industry RPKs in 2019

²Year-on-year change in load factor

³Load factor level

Drivers reflect the wide-spread lockdowns

Given the unique nature of the shock, traditional drivers of air travel demand play temporarily a less significant role in determining RPK developments. That said, these drivers will gain their importance again in the near term once lockdowns and restrictions are lifted and the industry starts its path towards recovery.

Business confidence in the manufacturing and service sector in April shows the detrimental impact of the closures (Chart 3). Despite the massive fiscal stimulus, businesses around the world remain pessimistic as shown by a 50% fall in the global Purchasing Managers' Index (PMI) since the start of this year. That said, China's PMI V-shaped recovery – albeit not yet to the levels preceding the virus outbreak – gives some optimism about future developments in economies who started to lift their lockdowns in later stages.

Chart 3: Economic conditions (monthly data from composite PMIs, selected regions, and countries)



Initial economic results for Q1 confirm the negative picture from business confidence. Economic activity in both emerging and advanced markets fell well below the levels seen in late-2019. Global GDP declined by ~1.7% in Q1 and is expected to contract by around 5% in 2020 as a whole, according to Oxford Economics. That said, a gradual recovery is expected in 2021 amid unprecedented government aid to support spending.

Revamp in air travel is estimated to lag that of GDP since it may take some time to restore consumer confidence. Reliable tests and wide-spread acceptance of new security measures will be essential. Domestic markets are expected to reopen first, in order to help support the economic restart. China – which significantly reduced the number of new cases and reopened about two months ago - can give some hints about the possible path of countries that are still in the lockdown. Although it has already seen a pickup in RPKs, the recovery was relatively slow, and there is still substantially fewer domestic flights compared to January (Chart 4).

Chart 4: Flights in China domestic market & COVID-19 new cases



Large scale opening of international markets is expected to lag that of domestic markets. It will depend on solving health challenges such as reducing the risk of transmitting COVID-19 from one country to the other. The side effect of this delayed recovery is an expected fall in the average trip length by approximately 8.5% in 2020.

Load factors reach new record-low levels

Industry-wide capacity (ASKs) contracted by a dramatic 87% year-on-year in April – more than twice the rate of decline in March (-38%yoy).

Despite halving the global fleet in service to ~13,000 between January and April, RPKs continued to fall faster than ASKs. As a result, the industry-wide passenger load factor (PLF) fell by 46ppts and reached a new record low of 36.6% (Chart 5).





The industry-wide ASK and PLF falls were in parallel across all regional markets. The sharpest load factor declines were registered by airlines in North America (-70ppts) and Africa (-63ppts).

Int's RPKs evaporated amidst border closures

International RPKs shrank by eyeballing 98.4% yearon-year in April, vs. -58.1% annual contraction in March, amidst widespread ban on international flights. The RPK decline of more than 95% was common across all regions (Chart 6).

Capacity (ASKs) reductions ranged from -88% for African carriers to -97% reported by airlines based in Europe and Latin America. As a result of less radical capacity cuts, the largest fall in international PLF was registered by African airlines (-65ppts).





Sources: IATA Economics, IATA Monthly Statistics

The timing of the outbreak has been reflected in yearto-date growth rates. Asia Pacific was affected by travel restrictions already in January and also posted the sharpest -49% contraction in Jan-April period compared to the same time a year ago. Other regions that were impacted by COVID-19 disruptions at a relatively later stage posted international RPK declines between 36% to 42% YTD.

In line with the aggregated results, all key international segment based routes fell by more than 95% year-on-year in April – about twice the pace of shrinkage seen in March (Chart 7).

Chart 7 – Growth in the international segment based RPKs, selected routes



Domestic RPKs contracted slightly slower than int'l

Domestic RPKs fell by 86.9% year-on-year – a sharp deterioration from 51% shrinkage in March (Chart 8).

Passenger volumes in domestic **China** declined by ~67%yoy – a pace broadly unchanged from the previous month, but an improvement from -85% trough in February. Market's tentative recovery reflects the resumption of domestic flights and lifting of restrictive measures in the country as the number of confirmed cases fell close to zero. PLF recorded by Chinese carriers lifted to 66.4% in April, from 60.6% in March.

Carriers based in **Russia** flew 82.7% less domestic RPKs vs. April 2019. The slower shrinkage compared to the other key domestic markets can be attributed to the later timing of the outbreak in the country.

Japan had not been implementing any widespread lockdowns but following a steep increase in a number of confirmed cases, it proclaimed the state of emergency in April. As a result, domestic RPKs contracted by 88.7%, compared to -54.1% decline in the previous month. At the same time, capacity shrank by more than half, leading to the second sharpest fall in PLF amongst the key domestic markets.

Chart 8 - Domestic RPK growth by market



Sources: IATA Economics, IATA Monthly Statistics

Domestic passenger volumes in **Brazil**, **the US**, and **Australia** were impacted the most significantly by the outbreak and related measures, falling by 93%-97% yoy in April. Carriers in Brazil and Australia reacted to plunging RPKs and lockdown restrictions by ~92% year-on-year capacity cuts. Airlines in the US responded with less radical capacity adjustments, which led to their load factor falling in the sharpest pace of all key domestic markets (-72ppts).

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Air passenger market detail - April 2020

	World	April 2020 (% year-on-year)			1	% year-to-date			
	share ¹	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	RPK	ASK	PLF (%-pt) ²	PLF (level)
OTAL MARKET	100.0%	-94.3%	-87.0%	-46.6%	36.6%	-41.9%	-33.8%	-9.9%	71.5%
Africa	2.1%	-98.3%	-88.4%	-62.8%	11.1%	-37.3%	-29.4%	-8.0%	63.9%
Asia Pacific	34.7%	-88.5%	-82.5%	-28.2%	53.8%	-48.4%	-39.5%	-12.0%	69.9%
Europe	26.8%	-98.1%	-94.9%	-53.2%	32.0%	-40.4%	-35.8%	-5.9%	76.9%
Latin America	5.1%	-96.0%	-94.0%	-27.1%	55.0%	-32.1%	-28.6%	-3.9%	78.09
Middle East	9.0%	-97.3%	-92.4%	-52.1%	28.4%	-36.2%	-31.8%	-4.9%	70.49
North America	22.2%	-96.6%	-80.5%	-69.9%	15.0%	-38.0%	-24.8%	-14.5%	68.2%
International	63.8%	-98.4%	-95.1%	-55.3%	27.5%	-42.7%	-37.1%	-7.1%	73.7%
Africa	1.8%	-98.7%	-87.7%	-65.3%	7.7%	-37.0%	-29.0%	-8.0%	63.29
Asia Pacific	19.1%	-98.0%	-94.9%	-49.9%	31.3%	-48.8%	-41.5%	-10.2%	71.09
Europe	24.0%	-99.0%	-97.0%	-58.0%	27.7%	-41.6%	-37.7%	-5.2%	78.19
Latin America	2.7%	-98.3%	-97.0%	-34.5%	48.1%	-36.2%	-32.7%	-4.2%	77.99
Middle East	8.7%	-97.3%	-92.3%	-52.9%	27.9%	-36.4%	-31.9%	-5.0%	70.39
North America	7.5%	-98.3%	-94.4%	-57.2%	25.7%	-40.8%	-34.7%	-7.7%	73.99
Domestic	36.2%	-86.9%	-72.1%	-44.3%	39.5%	-40.4%	-27.9%	-14.4%	68.2%
Dom. Australia ⁴	0.8%	-96.8%	-92.5%	-46.1%	34.6%	-36.1%	-30.5%	-6.3%	72.79
Domestic Brazil ⁴	1.1%	-93.1%	-91.4%	-15.9%	65.9%	-27.6%	-26.0%	-1.9%	80.59
Dom. China P.R. ⁴	9.8%	-66.6%	-57.2%	-18.6%	66.4%	-56.8%	-45.7%	-17.3%	67.79
Domestic Japan ⁴	1.1%	-88.7%	-54.6%	-51.8%	17.1%	-36.6%	-15.6%	-17.6%	53.29
Dom. Russian Fed. ⁴	1.5%	-82.7%	-62.4%	-43.8%	37.1%	-23.8%	-11.0%	-11.3%	67.19
Domestic US ⁴	14.0%	-95.7%	-72.9%	-72.3%	13.5%	-36.6%	-19.4%	-17.8%	65.69

¹% of industry RPKs in 2019

²Year-on-year change in load factor

³Load factor level

⁴ Note: the six domestic passenger markets for which broken-down data are available account for 28% of global total RPKs and approximately 78% of total domestic RPKs

Note: The total industry and regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the region in which the carrier is registrated; it should not be considered as regional traffic.

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