

# Air Cargo Market Analysis

**April 2020** 

## Air cargo volumes fall further but load factors up sharply

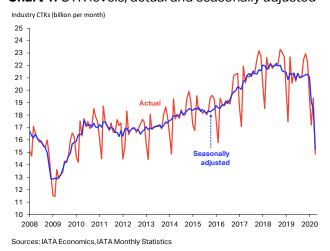
- The decline in industry-wide cargo tonne kilometres (CTKs) accelerated in April, to 27.7% year-on-year versus 14.7% in March. This was due to subdued demand together with the disruption in manufacturing activity as COVID-19 reached all regions of the world.
- Industry-wide cargo capacity declined by 42.0% annually, stemming from the evaporation of the belly capacity of
  passenger aircraft. Airlines raised freighters capacity notably by converting passenger aircraft into freighters to
  meet demand. The capacity crunch is however likely to have led to some pent-up demand for air cargo. This drove
  the cargo load factor up 11.5ppts year-on-year in April to an all-time high level since the start of our series in 1990.
- The acceleration in the pace of decline in international CTKs was widespread across all the regions in April, with North America being the most resilient region, and Latin America the most impacted.

## The fall in cargo volumes accelerated in April...

With COVID-19 having reached most regions of the world, lockdowns and travel restrictions were widespread in April 2020. This has depressed manufacturing activity and goods demand as well as affected cargo capacity. As a result, industry-wide cargo tonne kilometres (CTKs) contracted 27.7% year-on-year. This is the sharpest fall in the history of our industry-wide series started in 1990, worse than declines seen during the Global Financial Crisis (e.g. - 23.9% in January 2009).

In seasonally adjusted (SA) terms, industry-wide CTKs experienced a large monthly decline (-17.6%), after a moderate fall in March (-3.0%). This has brought air cargo volumes back to levels last seen during the post GFC rebound at the end of 2009 (Chart 1).

Chart 1: CTK levels, actual and seasonally adjusted



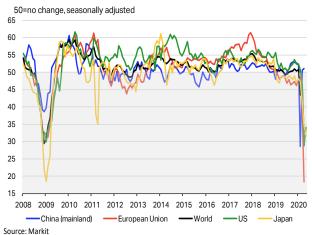
All the regions we track contributed to the decline in air cargo demand. Airlines in Asia Pacific were the largest contributors to the year-on-year fall, followed by airlines in Europe and the Middle East.

## ...amidst generally deteriorating drivers in April

In April, extensive lockdowns and stay-at-home orders in most of the world kept manufacturing activity at low levels. The global manufacturing Purchasing Managers' Index (PMI) dived to levels last seen in early 2009 – after briefly improving in March – driven by the EU and Japan indices among others.

On the brighter side, the US PMI lifted off the bottom in May, and the China index trended in values consistent with expanding manufacturing output (in month-onmonth terms) for the second consecutive month (Chart 2).

Chart 2: Manufacturing output component of PMI



#### Air cargo market overview - April 2020

-	World April 2020 (% year-on-year)					% year-to-date				
	share 1	CTK	ACTK	CLF (%-pt) <sup>2</sup>	CLF (level) <sup>3</sup>	CTK	ACTK	CLF (%-pt) <sup>2</sup>	CLF (level) <sup>3</sup>	
TOTAL MARKET	100.0%	-27.7%	-42.0%	11.5%	58.0%	-12.7%	-16.7%	2.3%	49.4%	
International	86.8%	-29.5%	-40.9%	9.9%	61.4%	-13.1%	-16.4%	2.0%	54.0%	

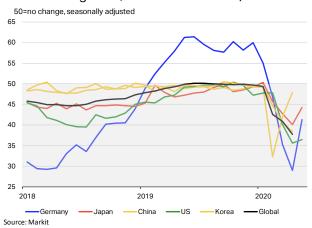
<sup>1%</sup> of industry CTKs in 2019

<sup>&</sup>lt;sup>2</sup>Year-on-year change in load factor

<sup>3</sup>Load factor level

Policies aiming at battling COVID-19 have also caused delays in the transportation and treatment of shipments. As indicated by the supplier delivery times component of the Manufacturing PMI – in which a value below 50 means longer delivery times – those delays increased in key exporting economies in April, except for China. Early PMI indicators for May hints that increases in delivery times are decelerating in some economies (Chart 3).

**Chart 3:** Supplier delivery times (monthly data from manufacturing PMIs, selected countries)



In normal times, this would be consistent with improving air cargo demand. But the current lack of air cargo capacity prevents that demand from materializing, and instead leads to elevated air cargo rates and load factors.

New export orders remained largely muted in April, with the corresponding PMIs registering sharp declines that month, including in China. Early PMIs for May suggest new orders are bouncing along the bottom (Chart 4).

**Chart 4:** CTK demand heat-map (monthly data from manufacturing PMIs, selected countries)

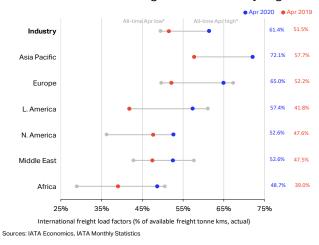


#### Load factors rise to record levels as capacity tumbles

With the evaporation of passenger flights in most regions of the globe, industry-wide available cargo tonne kilometres (ACTKs) dropped an even 42% year-on-year in April. There were large regional variations, partly depending on the possibility to raise freighter capacity. North America was the most resilient region (-26% annually) and Latin America the most impacted (-65%).

The industry-wide cargo load factor (CLF) rose a sizeable 11.5ppts annually in April, the largest increase in our series started in 1990. The magnitude of the climb suggests that there is significant pent-up demand for air cargo, which cannot be met because of the capacity crunch. This unusual supply-demand balance pushed the CLF to an all-time high record for any month (Chart 5).

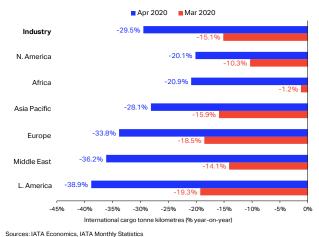
Chart 5: International cargo load factors by region



International CTK decline worsens in all major regions

Total international CTKs contracted by 29.5% year-on-year in April, an acceleration from the 15.1% fall registered in March. While no regions were left unharmed, there was some large differences across the regions, partly because of differences in travel ban policies, pent-up demand and availability of dedicated freighters (Chart 6).

Chart 6: International CTK growth



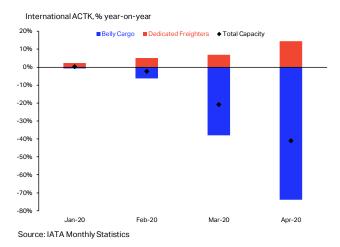
Sources: IATA Economics, IATA Monthly Statistics

#### Belly vs freighter traffic divergence accentuates

With passenger traffic slowing to a trickle in April due to flight cancellations, the international cargo capacity going into the belly of passenger aircraft fell by roughly 75% annually in April.

Lockdowns, falling consumer income and the loss of manufacturing output undoubtedly mean that demand for air cargo was subdued that month. Belly capacity was however not sufficient to reach demand, forcing airlines to turn to dedicated freighters (up 15%, Chart 7). This also led cargo load factors, rates and yields to rise significantly, sometimes to record levels.

**Chart 7**: International belly cargo and freighter capacity growth



#### Airlines in North America were the most resilient...

North American carriers recorded a 20.1% year-onyear fall in international cargo volumes in April. While an impressive decline, this remains less than growth rates seen at the height of the Global Financial Crisis (e.g. -32.3% in April 2009).

In addition to that, the fall in international ACTKs (27.7%) was the most moderate among the regions, with the smallest increase in the load factor (+5.0ppts). The large easily available freighter fleets of integrator carriers in the region are likely to have helped to meet demand, on top of perhaps less stringent lockdowns in some areas.

#### ...and African airlines were also less affected in April

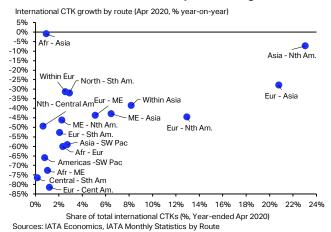
International CTK of African carriers plunged 20.9% in April 2020 compared to April 2019, an acceleration from the small 1.2% decline seen in March. The region has been relatively less impacted by the pandemic, with containment measures being also less strict than elsewhere. Despite the quasi-complete stop of activities of South African Airways, the small Africa-Asia market was the most resilient (in the current context) route in April – as often in the recent period (Chart 8).

#### Load factors in Europe and APAC rose swiftly...

Airlines registered in Asia Pacific posted a 28.1% annual decline in international cargo volumes in April. The tentative recovery in manufacturing activity in

China and the importance of the region in personal protective equipment (PPE) production supported the growth outcome, with the large Asia-Nth America market registering a 7.3% fall in CTKs. Airlines in the region were also among the first to convert stranded passenger aircraft to full freighters, thus helping to support capacity (Chart 8).

Chart 8: International CTKs by route (segment-based)



Carriers based in Europe penciled in a 33.8% year-onyear (yoy) fall in international CTKs in April, down from 18.5% in March. The large Eur-Asia route faced a 27.8% decline in volumes, with remaining demand driven by shipments of PPE and other crucial goods. While local airlines were able to raise freighter capacity, strict lockdowns in Europe dragged activity down.

In both regions, the lack of air passenger traffic resulted in sharp hikes in cargo load factors, up 14.4ppts yoy in Asia Pacific and 12.8ppts in Europe, in both cases the largest annual increase in the series.

#### ... with Middle East and Latin Am closing the ranking

Middle Eastern airlines reported that their international air cargo volumes tumbled 36.2% yoy in April, significantly worse than the 14.1% fall observed in March. Even though several carriers in the region maintained some cargo capacity, traffic on all the key cargo routes was muted in April (Chart 8).

The COVID-19 crisis is particularly challenging for airlines based in Latin America, with strict containment measures in many countries, insufficient freighters availability and lack of government support. International CTKs lost 38.9% compared to last year's volumes in April. The decline in international ACTKs was the largest among the regions in April (-55.5% yoy), leading to a 15.6ppts gain in the load factor.

IATA Economics economics@iata.org 2<sup>nd</sup> June 2020

#### Air cargo market detail - April 2020

	World	April 2020 (% year-on-year)				% year-to-date				
	share 1	CTK	ACTK	CLF (%-pt) <sup>2</sup>	CLF (level)3	CTK	ACTK	CLF (%-pt) <sup>2</sup>	CLF (level)3	
TOTAL MARKET	100.0%	-27.7%	-42.0%	11.5%	58.0%	-12.7%	-16.7%	2.3%	49.4%	
Africa	1.8%	-21.7%	-38.7%	10.5%	48.6%	-4.1%	-9.1%	2.0%	39.0%	
Asia Pacific	34.6%	-31.0%	-48.3%	17.3%	69.1%	-15.4%	-24.6%	6.2%	57.2%	
Europe	23.6%	-33.7%	-48.8%	14.8%	64.8%	-16.0%	-20.6%	3.0%	55.5%	
Latin America	2.8%	-43.7%	-64.5%	20.5%	55.4%	-15.6%	-24.2%	3.8%	37.2%	
Middle East	13.0%	-36.3%	-43.4%	5.9%	52.5%	-12.2%	-13.7%	0.8%	47.6%	
North America	24.3%	-11.5%	-26.4%	8.2%	48.7%	-6.0%	-5.7%	-0.2%	41.4%	
International	86.8%	-29.5%	-40.9%	9.9%	61.4%	-13.1%	-16.4%	2.0%	54.0%	
Africa	1.8%	-20.9%	-36.6%	9.7%	48.7%	-3.6%	-7.5%	1.6%	39.7%	
Asia Pacific	30.4%	-28.1%	-42.5%	14.4%	72.1%	-13.0%	-20.0%	5.1%	62.6%	
Europe	23.3%	-33.8%	-46.9%	12.8%	65.0%	-16.2%	-20.2%	2.7%	57.0%	
Latin America	2.3%	-38.9%	-55.5%	15.6%	57.4%	-15.5%	-25.0%	5.2%	46.0%	
Middle East	13.0%	-36.2%	-42.4%	5.1%	52.6%	-12.2%	-13.3%	0.6%	47.8%	
North America	16.0%	-20.1%	-27.7%	5.0%	52.6%	-10.5%	-8.1%	-1.3%	47.0%	

<sup>&</sup>lt;sup>1</sup>% of industry CTKs in 2019

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 registered; it should not be considered as regional traffic. Historical statistics are subject to revision.

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Please note that as of January 2020 onwards, we have clarified the terminology of the Industry and Regional series from 'Freight' to 'Cargo' (the corresponding metrics being FTK (change to 'CTK'), AFTK (change to 'ACTK'), and FLF (change to 'CLF')), in order to reflect that the series have been consisting of Cargo (Freight plus Mail) rather than Freight. The data series themselves have not been changed. Airline individual data retain the FTK metric.

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<sup>&</sup>lt;sup>2</sup>Year-on-year change in load factor

<sup>3</sup>Load factor level