

Air Cargo Market Analysis

February 2020

Air cargo growth slumps in February as COVID-19 takes hold

- In seasonally adjusted terms, industry-wide cargo tonne kilometres (CTKs) plunged by 9.1% in February, confirming the significant early impacts of the COVID-19 virus outbreak on air cargo.
- Although the global spread of COVID-19 intensified in February, the initial impacts were most keenly experienced in Asia Pacific, via factory closures and supply chain bottlenecks in the region.
- In year-on-year terms, CTKs were 1.4% lower than their level of February 2019, however this relatively moderate decline in light of the above largely reflects the weak outcome observed a year ago.
- Numerous cancellations of passenger flights in Asia and elsewhere in February 2020 removed considerable bellyhold
 capacity from the market. Consequently, industry-wide cargo capacity contracted by 4.4% annually, largely driven by
 the fall in capacity for airlines in APAC (-17.7%). This pushed the global cargo load factor up 1.5ppts in February.

SA air cargo volumes tumble in Feb on Coronavirus

In seasonally adjusted (SA) terms, industry-wide air cargo tonne kilometres (CTKs) fell precipitously in February, by 9.1% – the largest ever monthly decline for that series. This takes the SA series to levels not seen since mid-2016 and makes clear the significant and immediate impact that COVID-19 had on the global air cargo industry.

On an 'as reported' basis (ie not adjusted to remove the seasonal influences), industry-wide CTKs decreased by 1.4% year-on-year in February, up from a fall of 3.9% in January. This seemingly inconsistent outcome can be explained by the very weak outcome in February 2019 (Chart 1).

Chart 1: CTK levels, actual and seasonally adjusted



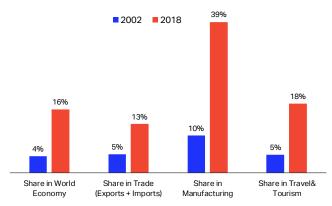
The weakness of a year-ago reflects two main factors, the timing of the Chinese New Year celebrations (fully in February in 2019 but mostly in January in 2020), as well as the effect of the China-US trade war which was arguably at its peak in early 2019. In addition, this year was a leap year, which means an additional day of activity compared with last year.

For the unadjusted data, Asia Pacific, along with both Europe and North America recorded year-on-year CTK declines this month. In contrast, a robust traffic performance in the Middle East provided some welcome support.

Developments in China matter for the world economy

What happens in China strongly influences both the global economy and air transport outcomes. This reflects the rising importance of the People's Republic across a range of relevant indicators over the past two decades or so (Chart 2).

Chart 2: Change in China's economic importance



Source: IATA Economics using data from the IMF WEO, UN, WTTC

Air cargo market overview - February 2020

	World	Febru	ary 2020 (% year-on-ye		% year-to-date			
	share 1	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	-1.4%	-4.4%	1.5%	46.4%	-2.7%	-1.7%	-0.5%	45.5%
International	86.8%	-0.9%	-3.5%	1.4%	52.0%	-2.6%	-1.6%	-0.5%	49.9%

¹% of industry CTKs in 2019

²Year-on-year change in load factor

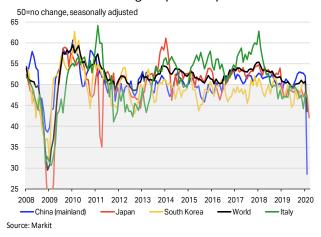
The spread of COVID-19 intensified in February, with significant clusters of infections emerging in large economies like South Korea, Japan and Italy. That said, it was mostly in China and, for the last week of February, Italy where factory closures and shutdowns were most widespread.

While developments in China were key for the initial impact of the virus outbreak on air freight, outcomes in subsequent months will increasingly reflect the spread of the virus across other regions.

Production fell sharply, supply chains were disrupted

Manufacturing production collapsed in China in February primarily due to widespread factory closures and travel restrictions, at least for the first half of the month. Survey data from the manufacturing PMI for February shows output falling to historically low levels in China (Chart 3).

Chart 3: Manufacturing output component of PMI

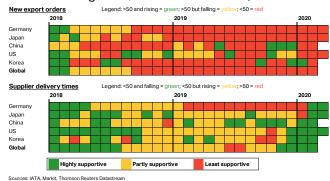


This situation was further compounded by the numerous cancellations of passenger flights to and from China and in other impacted markets. In February 2019, roughly 65% of the total cargo capacity worldwide was put in the belly of passenger aircraft. This share fell to 62% in February 2020.

Although some airlines have started operating cargoonly passenger aircraft flights, the ability to move air freight around the world has substantially diminished with this reduction in availably bellyhold capacity. On top of shuttered factories and airports, this has added to transportation bottlenecks in China and other areas afflicted by COVID-19.

The disruption to global supply chains is also reflected in increased supplier delivery times and sharply lower new export orders, both elements of the manufacturing PMIs (Chart 4). For most of the world's key exporting countries, new export orders have reached levels not seen since the GFC in 2009.

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



Falling capacity in APAC pushes load factors upwards

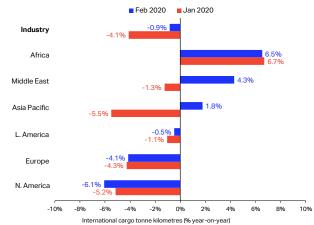
Industry-wide available cargo tonne kilometres (ACTKs) fell by 4.4% annually in February, down from a 0.8% rise in January. This outcome was largely driven by falling capacity for airlines in Asia Pacific (down 17.7% year-on-year), as flights were cancelled throughout the region. Capacity also fell in Europe (3.8%). In consequence, the industry-wide cargo load factor increased by 1.5 ppts in February compared with a year ago – and surged by 8.6 ppts in APAC.

International cargo growth varies across regions...

In February, total international CTKs decreased by 0.9% year-on-year, up from a decline of 4.1% in January. As was the case for total volumes, this compares with a particularly weak February 2019.

The regional performance was mixed, with yoy cargo volumes rising in Africa and the Middle East but growth slowing further in the North America international market (Chart 5).

Chart 5: International CTK growth



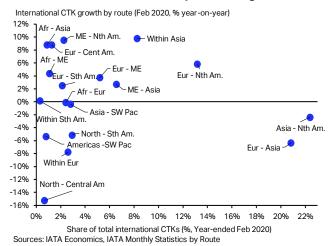
Sources: IATA Economics, IATA Monthly Statistics

... with African airlines resilient to disruptions in Feb...

Year-on-year growth in international CTKs of African airlines in February (6.5%) was unchanged from that of January. The Africa-Asia and Africa-Middle East trade lanes continue to bring robust growth to the region (Chart 6). Despite that, a downward trend seems to

have started in SA cargo volumes, after a peak in November 2019.

Chart 6: International CTKs by route (segment-based)

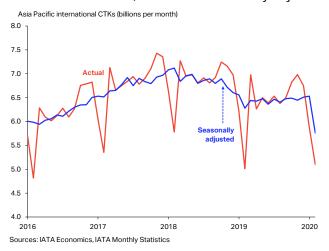


International CTKs fall sharply in AsPac in February

In SA terms, international CTKs for the Asia Pacific airlines fell by around 12% in February, to levels last seen in early 2014. This demonstrates the impact of COVID-19 at the regional level – for the world's primary manufacturing and distribution hub, accounting for around 30% of total international CTKs.

However, in non-adjusted terms and as a result of the very weak outcome for February 2019 – the height of the China-US trade war – airlines based in Asia Pacific registered a 1.8% year-on-year *increase* in cargo volumes (Chart 7). This follows a 5.5% year-on-year fall in January.

Chart 7: AsPac CTKs, actual and seasonally adjusted



International cargo capacity (ACTKs) in the region fell by 8.1% year-on-year in February, the largest fall since early 2013. Cargo capacity for China international routes, in particular, fell abruptly and sharply in February with the withdrawal of significant bellyhold capacity from the market.

The ability for airlines to utilize passenger aircraft for cargo operations could be an important contributor to near-term outcomes for air cargo, as well as ensuring that essential supplies can be made available wherever they are needed.

... and growth improving for airlines in the Middle East

International CTKs reported by carriers in the Middle East grew 4.3% in February versus the same month a year ago. This represents a stark improvement over the weak outcomes of the past months – indeed international cargo volumes shrunk by 4.6% in 2019.

Even though some of the larger carriers in the region had to reduce their passenger capacity to Asia Pacific due to the outbreak, cargo capacity increased by 6% year-on-year in February to sustain the upturn in demand over the latter part of 2019.

Growth unchanged in Latin America and Europe...

In February, carriers based in Latin America posted a 0.5% year-on-year decline in their international CTKs, mostly unchanged from January (1.1%).

While the region was relatively unaffected initially by the COVID-19 outbreak, disrupted global supply chains and a fragile economic backdrop in some economies in the region both help to explain the soft outcome this month.

European carriers reported a 4.1% annual drop in international cargo volumes in February, in line with the outcome for January. European carriers were amongst the first to cancel flights to and from Asia, and this contributed to the weak February outcome.

In addition, however, the sharp fall in traffic for the Within Europe market (down 7.8% year-on-year in February) is significant (Chart 6). This suggests that the region was also affected by global supply chain disruptions and early containment measures – notably in Northern Italy, an important manufacturing-intensive region.

... but continues to fall in North America

International CTKs of North American airlines dipped 6.1% annually in February, down from a 5.2% fall in January. Cargo traffic on the Asia-North America trade lanes decreased by 2.4% year-on-year in February, evidencing the impact of the factory closures and bottlenecks at warehouses and airports in Asia. The upwards trend in SA CTKs for the region appears to have come to an end in February.

IATA Economics economics@iata.org 1st April 2020

Air cargo market detail - February 2020

	World share ¹	February 2020 (% year-on-year)				% year-to-date			
		CTK	ACTK	CLF (%-pt) ²	CLF (level)3	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	-1.4%	-4.4%	1.5%	46.4%	-2.7%	-1.7%	-0.5%	45.5%
Africa	1.8%	6.2%	3.0%	1.1%	36.8%	6.4%	6.4%	0.0%	35.5%
Asia Pacific	34.6%	-2.2%	-17.7%	8.6%	54.3%	-4.6%	-8.8%	2.2%	50.4%
Europe	23.6%	-4.1%	-3.8%	-0.2%	53.1%	-4.2%	-2.7%	-0.8%	51.0%
Latin America	2.8%	1.8%	-2.6%	1.5%	34.2%	1.4%	-0.1%	0.5%	32.5%
Middle East	13.0%	4.3%	6.0%	-0.7%	46.1%	1.5%	4.3%	-1.3%	44.3%
North America	24.3%	-1.8%	4.1%	-2.2%	37.2%	-2.2%	3.7%	-2.4%	39.6%
International	86.8%	-0.9%	-3.5%	1.4%	52.0%	-2.6%	-1.6%	-0.5%	49.9%
Africa	1.8%	6.5%	3.3%	1.2%	38.0%	6.6%	7.7%	-0.4%	36.2%
Asia Pacific	30.4%	1.8%	-8.1%	5.7%	59.2%	-2.3%	-3.9%	0.9%	55.7%
Europe	23.3%	-4.1%	-4.1%	0.0%	54.9%	-4.2%	-3.0%	-0.7%	52.7%
Latin America	2.3%	-0.5%	-5.9%	2.3%	42.3%	-0.8%	-2.8%	0.8%	40.4%
Middle East	13.0%	4.3%	5.9%	-0.7%	46.5%	1.4%	4.3%	-1.2%	44.6%
North America	16.0%	-6.1%	-4.1%	-1.0%	46.4%	-5.6%	-2.4%	-1.6%	45.7%

^{1%} 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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²Year-on-year change in load factor

³Load factor level