



Air Cargo Market Analysis

April 2023

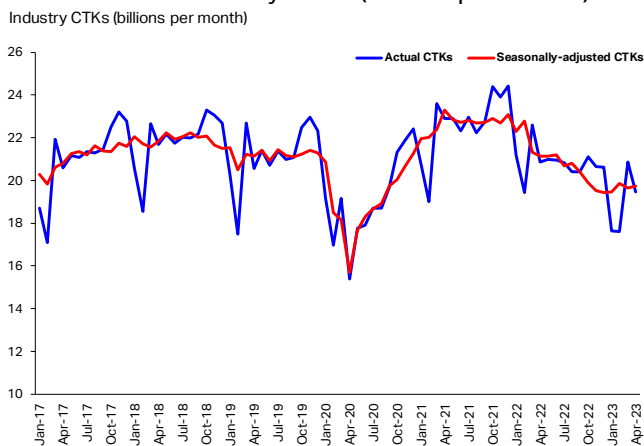
Capacity returns to pre-Covid levels as traffic decline slows

- Global air cargo demand in April continued its year-on-year decline at a slower rate than the first three months of 2023, with cargo tonne-kilometers (CTKs) falling by 6.6% compared to April 2022.
- Industry-wide cargo capacity returned pre-pandemic levels for the first time in three years, with available cargo-tonne kilometers (ACTKs) surpassing April 2019 levels by 3.2%.
- Global cross-border trade and new export orders PMIs, the two critical indicators of air cargo demand, both saw year-on-year growth for the first time in several months.
- North American airlines experienced notable declines in international CTKs compared to the previous year, primarily due to decreased air cargo traffic on the North America-Europe and North America-Asia trade lanes.

Air cargo continues to decline at a slower pace

Industry-wide cargo tonne-kilometers (CTKs) in April were 6.6% below their 2022 levels. Despite the decline, this represents a continued improvement from the double-digit annual contractions of CTKs experienced earlier in 2023 (**Chart 1**). As a result, the gap between 2022 and 2023 year-to-date CTKs has narrowed from -16.8% in January to -10.1% in April. Compared with the pre-pandemic period, industry CTKs decreased by 5.3% over April 2019 levels, which also indicates an improvement from the 8.1% contraction in the previous month. Moreover, seasonally adjusted CTKs increased slightly by 0.5% in April compared to the March level.

Chart 1 Global Industry CTKs (billions per month)



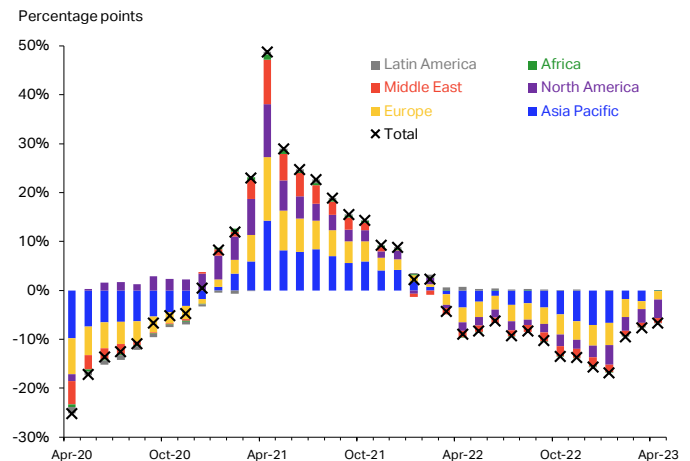
Sources: IATA Sustainability and Economics, IATA Monthly Statistics

International air cargo demand, which accounts for around 85% of the industry-wide total CTKs, saw a 7.0% decline in April, slightly more than the annual

decline of the industry-wide CTKs, indicating a stronger performance from domestic CTKs in April.

The annual contraction of cargo demand in April was driven by the softening demand for carriers in North America and Europe (**Chart 2**). However, there were signs of improvement in CTKs for airlines in the Asia Pacific region, which accounted for a relatively small portion of the overall 6.6% annual decline in industry-wide CTKs. Notably, African airlines made the only positive contribution to the year-on-year change in industry-wide CTKs among the various regions.

Chart 2 Regional contributions to industry-wide annual CTK growth



Sources: IATA Sustainability and Economics, IATA Monthly Statistics

Global cross-border trade picked up while remaining decoupled with trends in industry-wide CTKs

By the end of the first quarter of 2023, global cross-border trade and industrial production remained higher

Air cargo market overview - April 2023

	World share ¹	April 2023 (% year-on-year)				April 2023 (% ch vs the same month in 2019)			
		CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	-6.6%	13.4%	-9.2%	42.7%	-5.3%	3.2%	-2.2%	42.7%
International	86.8%	-7.0%	10.7%	-9.4%	49.3%	-5.1%	-0.9%	-0.8%	49.3%

¹% of industry CTKs in 2022

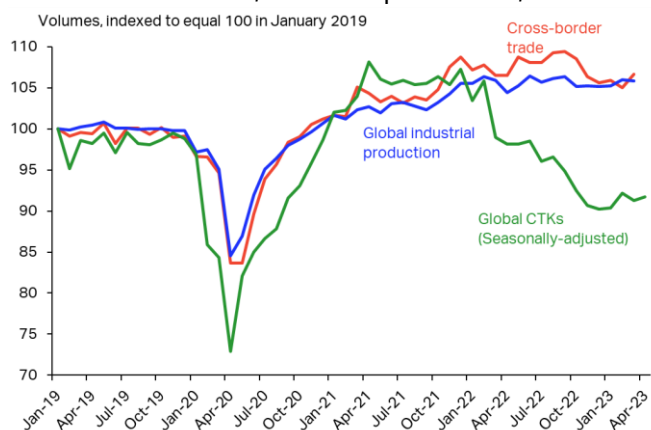
²Change in load factor

³Load factor level

than 2019 levels by 7.1% and 5.6%, respectively. International trade also increased 0.2% in March, marking the first annual growth since November 2022. However, there has been a divergence between the downward trend in global CTGs and the evolutions in cross-border trade and industrial production since February 2022, and this gap had been progressively widening until recently (**Chart 3**).

The divergent trend in global CTGs can be attributed to the slower decline in air cargo yields compared to the decrease in maritime cargo yields over the same period. In March 2023, air cargo yields remained 45% higher than yields in 2019, whereas container yields had declined to be within 8% of their 2019 levels. This difference in yield performance helps explain the competitive advantage the maritime cargo industry enjoys amid elevated levels of global trade and industrial production.

Chart 3 Global trade, industrial production, and CTGs



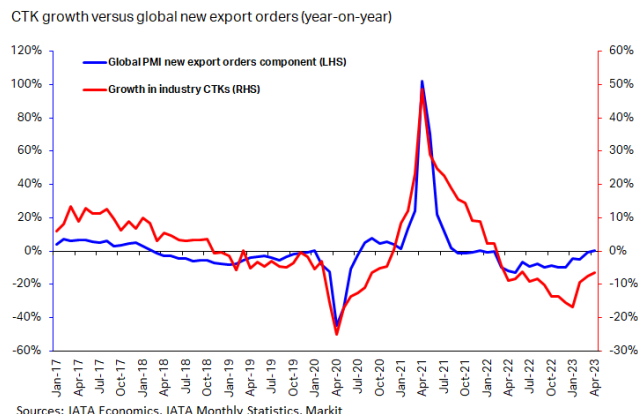
Source: IATA Sustainability and Economics using data from Netherlands CPB

New export orders PMI sees first annual growth in over a year

In April, the new export orders manufacturing Purchasing Managers Index (PMI) experienced its first annual growth in 16 months, with a modest 0.2% increase. This positive development aligns with the improvement of global air cargo demand, even though it remains in the negative territory compared with the previous year (**Chart 4**). Historical data for this PMI have demonstrated a robust correlation with the growth rate of global air cargo demand. Therefore, we have been closely monitoring the manufacturing PMI at a global level and for major economies.

In line with the expansion of global trade in April, there was an improvement observed in the PMI for new export orders at the global level, although it remained below the critical threshold represented by the 50-mark (**Chart 5**).

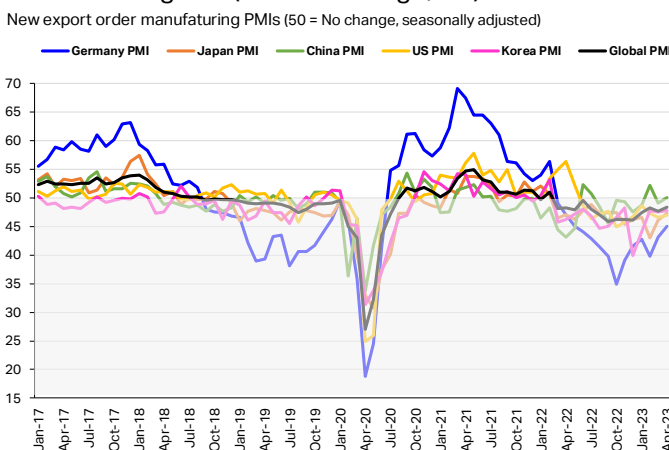
Chart 4 CTK growth, change in global new export orders (YoY)



Sources: IATA Economics, IATA Monthly Statistics, Markit

China’s PMI inched above the 50-line in April, making it the only major economy that had an expansion in new export orders in April (**Chart 5**). Other major economies, including Germany, Japan, US, and Korea, all registered a contraction in April compared to March. It is worth noting, however, that both Germany and Japan witnessed constant improvements in their PMIs, suggesting a slowdown in the rate of contraction in these economies.

Chart 5 Global new export orders, component of the manufacturing PMI (50 = no change, SA)



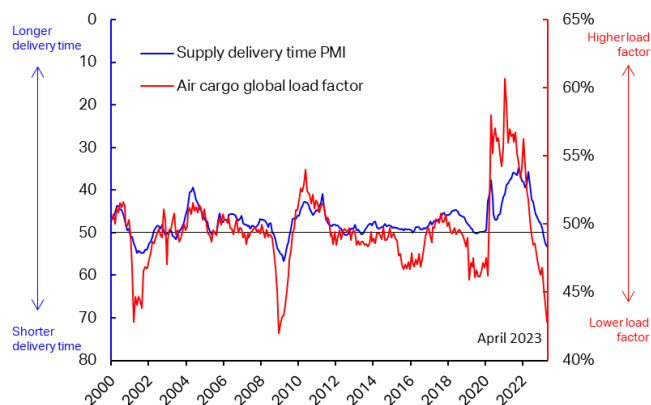
Sources: IATA Sustainability and Economics using S&P Global Markit data

There was a notable reduction in supplier delivery times in April, especially in the US and Germany, resulting in a global supplier delivery time index of 53. This index has rebounded from its lowest point of 35, which was recorded in October 2021 (**Chart 6**). The threshold of 50 for this indicator represents stability in supplier delivery times, and a higher PMI indicates a greater proportion of shorter delivery times compared to the previous month. A sustained increase in the PMI suggests a faster rate of shortening delivery times.

The significant shift towards shorter delivery times within a span of less than a year has sustained the decrease in air cargo load factors, reaching 42.8% in April. The combination of increased belly-hold capacity from passenger aircraft and reduced demand for air cargo has contributed to the decline in load factors.

However, this situation has also brought some relief to supply chains and transportation networks.

Chart 6 Air cargo load factors and supplier delivery times PMIs (50 = no change)

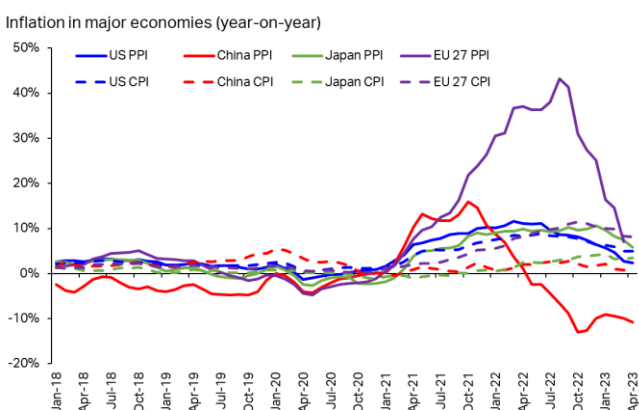


Sources: IATA Sustainability and Economics, IATA Monthly Statistics, S&P Global Market

Price increases in major economies continue to ease

Consumer and producer price increases in major economies have decelerated in recent months. In April, the annual increase in headline Consumer Price Index (CPI) recorded rates of 5.0% in the US, 0.3% in China, 3.5% in Japan, and 8.1% in the EU 27 countries (Chart 7). And the Producer Price Index (PPI), which measures changes in producer prices, stood at 2.4% in the US, -10.7% in China, and 5.8% in Japan (April PPI data for EU 27 countries has not been released). Although the PPI in Europe has significantly decreased from its peak in September 2022, it remains high. The main factor driving the cooling in these price indexes is the recent decline in global oil prices.

Chart 7 Headline CPI and PPI inflation (YoY) in major economies



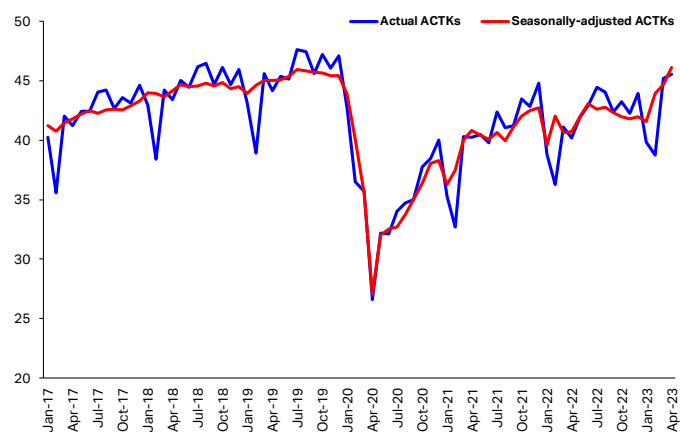
Sources: IATA Sustainability and Economics, using data from Marobond

Excluding volatile oil and food prices, China's core inflation remained below 1% since mid-2022. During the same period, PPI remained in the negative territory, suggesting a moderation in the price of inputs for producers. Both readings suggest a weak demand environment, reflecting the lingering impacts of the pandemic's restrictions on China's manufacturing sector.

Air cargo capacity exceeds 2019 levels in April

The air cargo industry continued to see significant growth in its capacity this month, as measured by available cargo tonne-kilometers (ACTKs), which increased by 13.4% compared to the previous year (Chart 8). This expansion propelled the industry's capacity to surpass pre-Covid levels by 3.2%, marking the first time in three years that such levels have been achieved.

Chart 8 Global ACTKs (billions per month)
Industry ACTKs (billions per month)



Sources: IATA Sustainability and Economics, IATA Monthly Statistics

The recovery of air cargo capacity can be attributed to the restoration of belly-hold cargo capacity provided by passenger aircraft. The ACTKs from passenger flights experienced a remarkable increase of 47.9% this month, while ACTKs from dedicated freighters contracted by 2.3%. Moreover, April witnessed the absence of scheduled passenger freighters (also known as preighters) globally for the first time in two and a half years, after they played an essential role during the pandemic. In April, International capacity increased 10.7% YoY, consistent with the faster recovery of belly-hold cargo capacity in international passenger markets.

Despite the full recovery of air cargo capacity, the industry continues to be challenged by softening demand, leading to a decline in air cargo load factors. Cargo load factors dropped to 42.8% in April, 9.1 percentage points (ppts) lower than the previous year. This decline can be attributed to the combination of increased capacity and weaker air cargo demand.

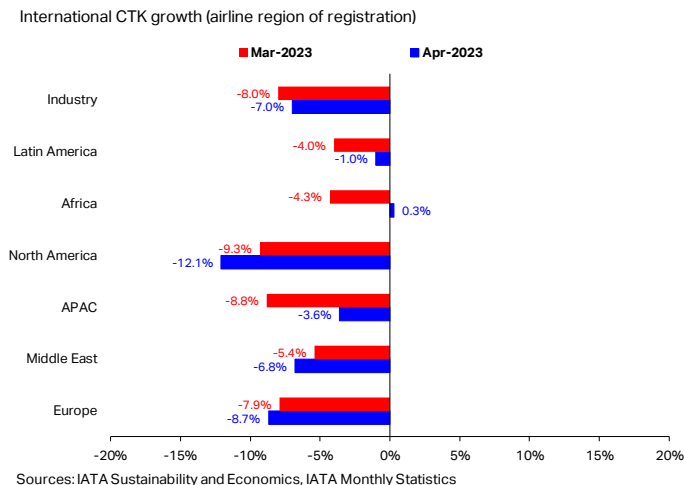
Mixed performance of international CTKs across regions

International cargo demand witnessed a year-on-year decline of 7.0% in April, aligning with the overall industry-wide contraction of 6.6% in CTKs. Among the different regions, Asia Pacific, Latin America, and Africa airlines showed improvements in their international cargo performance compared to the previous month's

year-on-year change. Specifically, **Asia Pacific** airlines witnessed an annual decline in traffic of 3.6% in April, while **Latin America** saw a decrease of 1.0%. **African** airlines achieved a small increase of 0.3% in international cargo demand (**Chart 9**). We note that carriers registered in **Asia Pacific** grew their traffic from a lower base, as Chinese airlines in particular were restricted by Covid-related lockdowns in April 2022.

On the other hand, **North American** carriers faced a worsening annual contraction in their international CTGs, with the decline increasing from 9.3% in March to 12.1% in April. Similarly, **European** airlines experienced a larger decrease in their international cargo traffic, with the figure dropping from -7.9% in March to -8.7% in April. Additionally, **Middle East** carriers witnessed a decline in their year-on-year growth rate of CTGs, from -5.4% in March to -6.8% in April.

Chart 9 Growth in international CTGs by region (YoY)



Performance of air cargo on trade lanes also varied

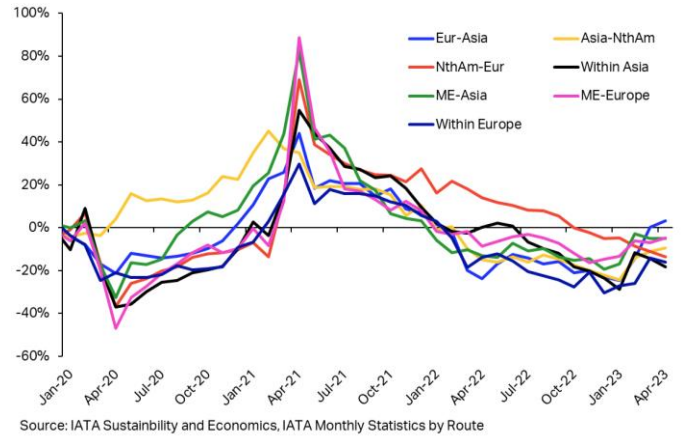
The changes in international air cargo demand among different regions can be explained by the performance of key trade lanes. **North America** carriers experienced a significant contraction of 12.1% in international air cargo demand in April. This decline can be attributed to annual declines in international CTGs on two major trade lanes: **North America-Europe** (-13.5%) and **North America-Asia** (-9.3%) (**Chart 10**).

The performance of the **North America-Europe** trade lane also affected **European** airlines, which faced a 16.1% YoY decline in air cargo demand **within Europe**. Although these route areas experienced double-digit contractions in April, the robust growth of air cargo traffic on the **Europe-Asia** route area (up 3.4% YoY) helped mitigate the overall decline in demand for the region. Growth in this route area

reflects a shift in cargo traffic from Russian carriers to other airlines operating routes through the Middle East.

In contrast to the other regions, **African** airlines achieved year-on-year growth in April. This trend was supported by the notable 20.0% annual increase in cargo demand on the **Africa-Asia** trade lane (**Chart 10**). The remarkable performance in this route area reflects the strengthening trade relationship between Africa and Asia, particularly the commercial ties between China and African countries.

Chart 10 Seasonally adjusted growth of international CTGs by route area (YoY)



Air cargo market in detail - April 2023

	<i>World share</i> ¹	April 2023 (% year-on-year)				April 2023 (% ch vs the same month in 2019)			
		CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	-6.6%	13.4%	-9.2%	42.7%	-5.3%	3.2%	-3.8%	42.7%
Africa	2.0%	0.9%	5.3%	-2.1%	48.2%	9.9%	-13.2%	10.1%	48.2%
Asia Pacific	32.4%	-0.4%	41.2%	-18.5%	44.2%	-9.0%	6.6%	-7.6%	44.2%
Europe	21.8%	-8.2%	7.8%	-8.6%	49.7%	-12.2%	-11.6%	-0.3%	49.7%
Latin America	2.7%	-1.6%	8.1%	-3.6%	36.4%	-3.4%	-7.3%	1.5%	36.4%
Middle East	13.0%	-6.8%	10.0%	-7.8%	43.1%	-2.9%	5.1%	-3.5%	43.1%
North America	28.1%	-13.1%	-1.5%	-5.0%	37.3%	3.6%	12.5%	-3.2%	37.3%
International	86.8%	-7.0%	10.7%	-9.4%	49.3%	-5.1%	-0.9%	-2.2%	49.3%
Africa	2.0%	0.3%	5.0%	-2.3%	49.1%	10.4%	-12.2%	10.0%	49.1%
Asia Pacific	29.7%	-3.6%	23.7%	-15.4%	54.4%	-6.8%	-1.2%	-3.3%	54.4%
Europe	21.5%	-8.7%	7.4%	-9.0%	51.3%	-12.7%	-11.3%	-0.8%	51.3%
Latin America	2.3%	-1.0%	11.0%	-5.0%	41.7%	-0.7%	-0.5%	-0.1%	41.7%
Middle East	13.0%	-6.8%	10.1%	-7.9%	43.4%	-2.8%	6.2%	-4.1%	43.4%
North America	18.4%	-12.1%	0.0%	-6.3%	45.9%	4.6%	8.5%	-1.7%	45.9%

¹% of industry CTKs in 2022

²Change in load factor

³Load factor level

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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