



Air Cargo Market Analysis

May 2023

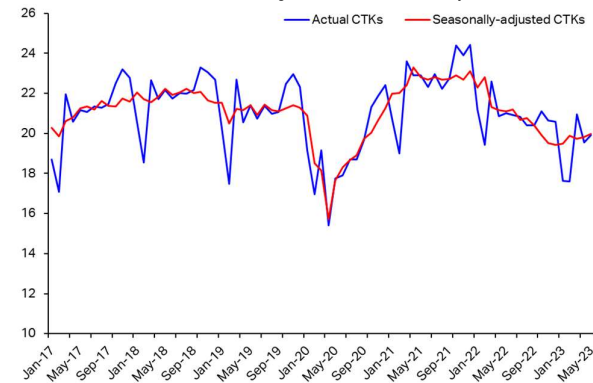
Air cargo demand remains weak, amid soft drivers

- Industry-wide air cargo demand in May was 5.2% below last year’s level. The annual decline in cargo tonne-kilometers, however, has narrowed from 16.8% in January to 9.0% year-to-date in May.
- Available cargo-tonne kilometers continued to climb this month after returning to pre-pandemic levels for the first time in April. ACTKs grew by 14.5% year-on-year and were 5.9% above May 2019 levels.
- Key indicators of air cargo demand, including cross-border trade, new export orders PMI, and production PMI, were weaker in May, pointing to the constraints on supply chains and the slowing global economy.
- Carriers in Latin America expanded their international cargo demand in May, amid falling volumes in other regions.

Decline in CTKs slowed down further in May

Cargo tonne-kilometers (CTKs) across the industry experienced a 5.2% decline in May year-on-year (YoY), reflecting sustained improvement from the double-digit contractions witnessed earlier in 2023 (**Chart 1**). Consequently, the annual contraction in CTKs has narrowed from 16.8% in January to 9.0% year-to-date (YTD) in May. In comparison to May 2019 levels, industry CTKs fell by 7.0%, contracting more than the 5.0% decline observed last month. On a positive note, seasonally adjusted (SA) CTKs slightly improved by 1 percentage point (ppt) compared to the April level, albeit still with an annual decline of 5.3% in May.

Chart 1 – Global Industry CTKs (billions per month)

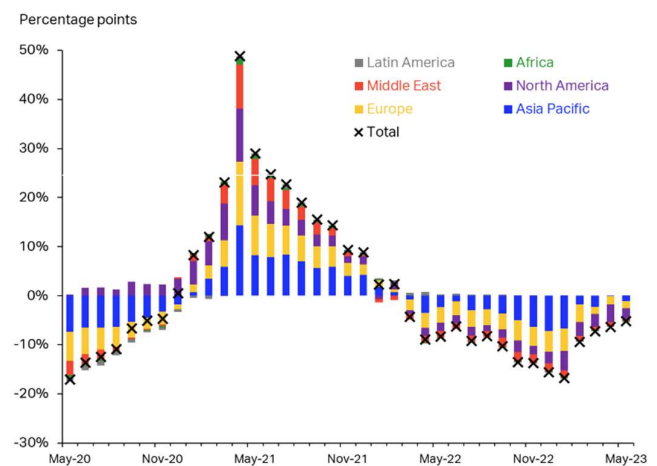


Sources: IATA Sustainability and Economics, IATA Monthly Statistics

The annual contraction in industry-wide CTKs was still principally driven by the softening demand experienced by carriers in North America and Europe (**Chart 2**), owing to the relatively high inflation rates in the US and the Euro Area despite the recent declines. Additionally, the war in Ukraine and the disruption of

supply chains following the pandemic have significantly impacted cargo demand in Europe. Airlines in the Asia Pacific region also expanded their contribution to the 5.2% annual decline in global CTKs.

Chart 2 – Regional contributions to industry-wide annual CTK growth



Sources: IATA Sustainability and Economics, IATA Monthly Statistics

Cross-border trade fell while favoring container cargo

Global cross-border trade contracted by 0.8% in April, amid supply chain constraints and a challenging macroeconomic environment. However, the demand for global maritime cargo continued to improve, shrinking its annual decline from -3.1% in March to -0.2% in April. In comparison, air cargo demand contracted by 6.3% in April. As such, the relative performance of air cargo suggests that container cargo continued to suffer less from the slow down in global trade (**Chart 3**).

Air cargo market overview - May 2023

	World share ¹	May 2023 (% year-on-year)				May 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%	-5.2%	14.5%	-8.6%	41.5%	-7.0%	5.9%	-5.7%	41.5%
International	86.9%	-6.0%	11.2%	-8.8%	47.8%	-7.1%	1.6%	-4.5%	47.8%

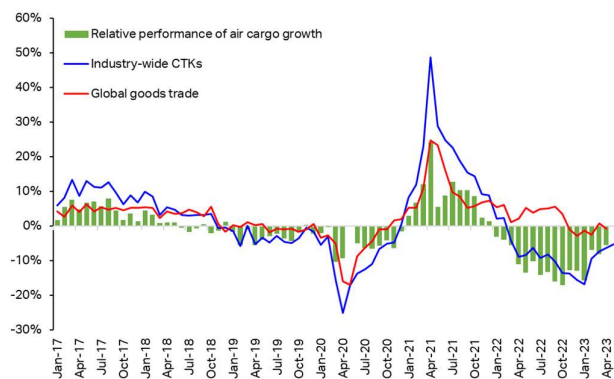
¹% of industry CTKs in 2022

²Change in load factor

³Load factor level

The weaker performance in global air cargo demand compared to maritime shipping in part also reflects the trends in the relative pricing between the two modes. Air cargo yields in April remained 46% higher than yields in 2019, whereas container yields were only 17% higher than their 2019 levels.

Chart 3 – Growth in global goods trade and CTKs (YoY)

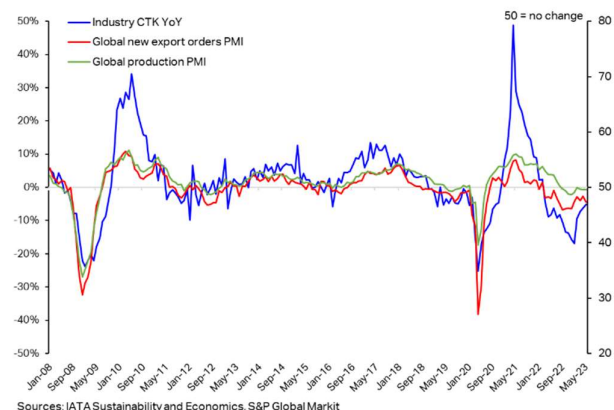


Sources: IATA Sustainability and Economics, IATA Monthly Statistics, Netherlands CPB

New export orders and production PMIs point to slow down in Manufacturing

Owing to the robust correlation observed in historical data between the manufacturing Purchasing Managers Index (PMI) and the growth rate of global air cargo demand, we have been closely monitoring the manufacturing PMIs at a global level and for major economies (**Chart 4**).

Chart 4 – CTK growth YoY, and global new export orders and production PMIs (50 = no change)



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

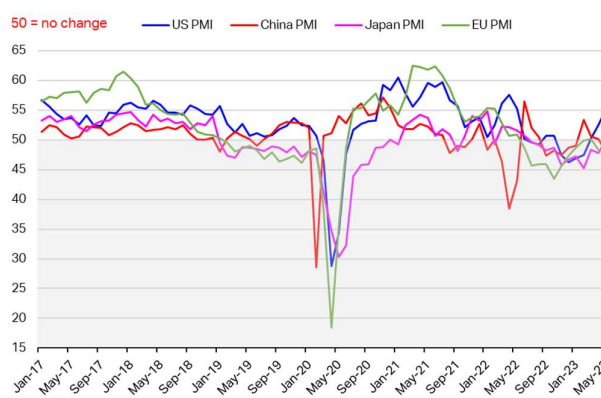
In May, new export orders recorded a 1.4% contraction YoY, down to 47.3, and the production PMI also declined by 5.2% to 49.6, suggesting that manufacturing demand was cooling globally.

In line with the contraction of the global production PMI in May, production PMIs of major economies, except for the US, also stayed below the critical threshold represented by the 50-mark, implying a

deterioration of manufacturing output in these economies (**Chart 5**).

The US recorded an improvement of its production PMI in May, rising from 52.4 in April to 55.0 this month. In comparison, China's production PMI inched above the 50-line in April, but declined to 48.2 in May, indicating mixed performance of its manufacturing output (**Chart 5**). Other major economies, including Japan and the European Union (EU), all registered a deterioration of production PMIs in May. It is worth noting, however, that Japan's production PMIs improved this month compared to April, suggesting a deceleration in the country's manufacturing contraction.

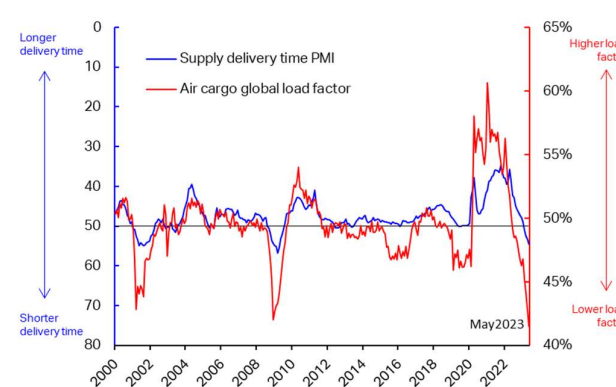
Chart 5 – Global manufacturing production, component of the manufacturing PMI (50 = no change)



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

The global supplier delivery time PMI index continued to improve, reaching 54.5 in May. 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 but also reflects weaker demand for global goods trade.

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

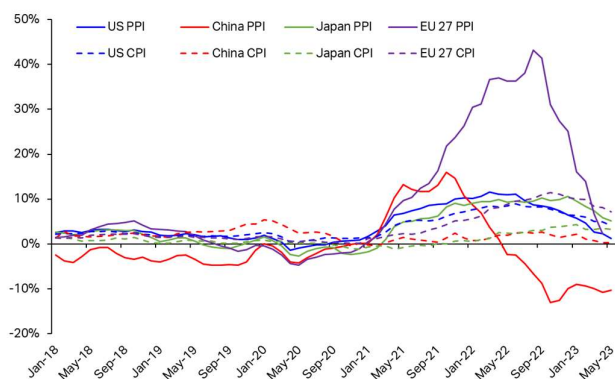
The recent significant shift towards shorter delivery times has also sustained the decrease in air cargo load factors, reaching 41.5% in May. The combination of increased belly-hold capacity from passenger aircraft and reduced demand for air cargo has contributed to the decline in load factors. However, the slowing demand for goods movement has also brought some relief to supply chains and transportation networks.

Inflation continued to ease in major economies

The tightened monetary policies by central banks and the recent declines in both food and non-food commodity prices have driven the inflation rate to decelerate in major economies. As of May, headline Consumer Price Index (CPI) recorded rates of 4.1% in the US, 0.3% in China, 3.2% in Japan, and 7.1% in the EU 27 countries (Chart 7). While the May headline CPIs in the US and the EU 27 decreased by 0.9 pts and 1.0 pts, respectively, compared to the previous month, price levels remain relatively high.

The Producer Price Index (PPI), which measures changes in producer prices, stood at 1.2% in the US, 5.1% in Japan, and -10.3% in China (May PPI data for EU 27 countries has not been released yet; it was 2.3% in April and 6.7% in March). PPI in Europe has significantly declined from its peak in September 2022. The main factor driving the cooling in these price indexes is the recent fall in global oil prices.

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



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

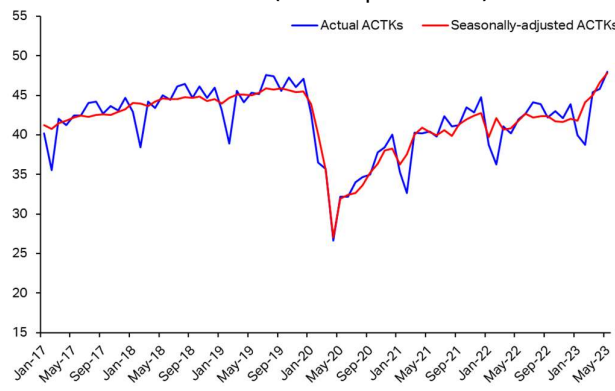
Air cargo capacity continued to expand in May

Industry-wide capacity measured by available cargo tonne-kilometers (ACTKs) have increased

consistently over past five months. In May, ACTKs grew 14.5% YoY, after surpassing their pre-covid level for the first time in three years last month (Chart 8). Global ACTKs in May were 5.9% higher than the same month in 2019, raising YTD capacity to comparable levels with 2019.

The strong increase in ACTKs is driven by the restoration of belly-hold cargo capacity from passenger aircraft. International passenger belly capacity grew by 40.5% YoY in May, compared to a 1.6% capacity growth by dedicated freighters. Consequently, international ACTKs provided by belly-hold capacity exceeded dedicated freighters by 4.6%. In comparison, in May 2022, international cargo capacity provided by passenger aircraft was 41.1% lower than the capacity on dedicated freighters. Overall, international cargo capacity across passenger and dedicated freighters increased by 11.2% YoY in May.

Chart 8 – Global ACTKs (billions per month)



Asia Pacific airlines drove the recent growth in passenger belly capacity, following China's reopening to international air travel in January. In May, international ACTK provided by Asia Pacific airlines increased by 23.7% YoY, following a 19.7% growth in the previous month. Airlines in Latin America and the Middle East also expanded their international capacity significantly, by 19.0% and 15.7% YoY, respectively.

The belly-hold capacity brought by passenger aircraft put further downward pressure on industry-wide cargo load factors, amid softening air cargo demand. Industry cargo load factors dropped to 41.5% in May, 8.6 pts lower than the previous year.

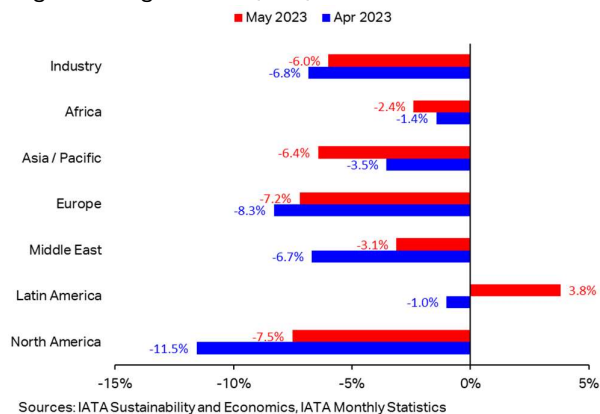
Latin America airlines grew their international CTKs, amid falling demand in other regions

Globally, international CTKs witnessed an annual decline of 6.0% in May, slightly lower than the industry-wide demand contraction of 5.2%. Among the different regions, Latin America airlines achieved the only YoY growth in international CTK (3.8% in May), while Middle East carriers witnessed an improvement in the annual

decline of their CTKs, from 6.7% in April to 3.1% in May (**Chart 9**). Airlines in **North America** and **Europe** stabilized their YoY declines in May compared to the previous month. However, they still recorded the biggest annual decrease among the regions. **North American** airlines saw a 7.5% annual drop in their international CTKs, while **European** airlines experienced a comparable decline at 7.2%.

The performance of international cargo demand for **Asia Pacific** and **Africa** airlines worsened in May. Specifically, international CTKs by **Asia Pacific** carriers softened by 6.4% YoY in May, compared to the 3.5% annual decline in April. International CTKs for **African** airlines also declined further, from -1.4% YoY in April to -2.4% in May (**Chart 9**).

Chart 9 – Growth in international CTKs by airline region of registration (YoY)



Air cargo performance varied across trade lanes

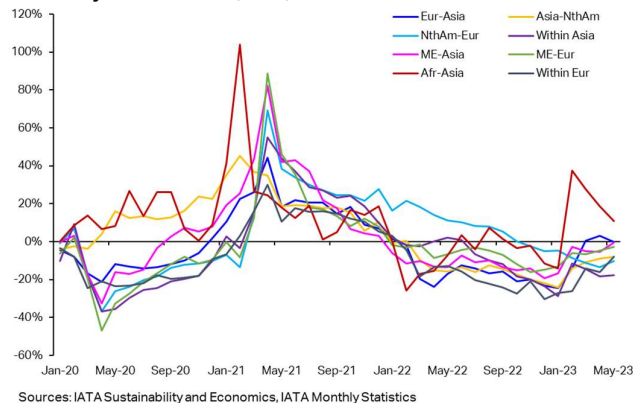
The changes in international air cargo demand among different regions can be explained by the performance of key trade lanes (**Chart 10**). The **North America-Europe** trade lane continued its double-digit contractions in May, falling by 10.3% in its seasonally-adjusted international CTKs, while the international demand on **North America-Asia** trade lane also declined by 8.1%. As a result, North American airlines saw a 7.5% YoY contraction in international CTKs in May.

The performance of the **North America-Europe** trade lane also affected **European** airlines, which faced a 7.8% YoY drop in seasonally-adjusted air cargo demand **within Europe**. Similarly, on top of the 8.1% decline in the **North America-Asia** trade lane, Asia Pacific airlines also faced a 17.7% contraction in seasonally-adjusted international cargo demand **within Asia**, leading to the 3.3% YoY decline for the **Asia Pacific** region's airlines.

Although CTK's on the **Africa-Asia** trade lane increased in May, their growth slowed significantly from 18.5% in April to 11.0% YoY in May, possibly

due to the impact of the conflict in Sudan since April. Combined with the weakened air cargo demand with other regions, international CTKs for **African** airlines contracted by 2.4% this month.

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



Air cargo market in detail - May 2023

	World share ¹	May 2023 (% year-on-year)				May 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%	-5.2%	14.5%	-8.6%	41.5%	-7.0%	5.9%	-5.7%	41.5%
Africa	2.0%	-2.4%	9.2%	-5.3%	44.8%	2.8%	-8.2%	4.8%	44.8%
Asia Pacific	32.4%	-3.3%	38.3%	-18.2%	42.2%	-11.7%	11.0%	-10.9%	42.2%
Europe	21.8%	-6.7%	5.6%	-6.4%	48.9%	-16.7%	-12.3%	-2.6%	48.9%
Latin America	2.7%	3.6%	14.7%	-3.6%	33.3%	-1.0%	12.7%	-4.6%	33.3%
Middle East	13.0%	-3.1%	15.6%	-7.9%	41.0%	-2.6%	13.6%	-6.8%	41.0%
North America	28.1%	-8.1%	1.2%	-3.8%	37.3%	5.3%	10.9%	-2.0%	37.3%
International	86.9%	-6.0%	11.2%	-8.8%	47.8%	-7.1%	1.6%	-4.5%	47.8%
Africa	2.0%	-2.4%	9.0%	-5.3%	45.8%	3.9%	-7.6%	5.1%	45.8%
Asia Pacific	29.7%	-6.4%	19.7%	-14.8%	53.1%	-10.2%	0.4%	-6.3%	53.1%
Europe	21.5%	-7.2%	5.3%	-6.8%	50.9%	-17.3%	-13.4%	-2.4%	50.9%
Latin America	2.3%	3.8%	19.0%	-5.5%	37.8%	2.7%	23.8%	-7.8%	37.8%
Middle East	13.0%	-3.1%	15.7%	-8.0%	41.3%	-2.4%	15.4%	-7.5%	41.3%
North America	18.4%	-7.5%	3.4%	-5.3%	44.8%	7.4%	10.2%	-1.2%	44.8%

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.

IATA Sustainability & Economics

economics@iata.org

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