



Air Cargo Market Analysis

December 2023

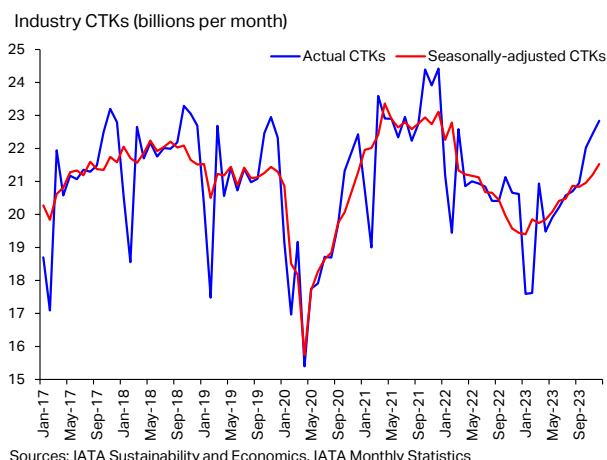
Air cargo closing the year with strong momentum

- In December, global air cargo traffic saw a notable year-on-year increase of 10.8%, marking the most substantial annual growth in air cargo tonne-kilometers (CTKs) over the past two years. This surge brought the annual average 2023 figures to within 1.9% of the traffic seen in 2022.
- Global International Cargo Tonne Kilometres (CTKs) increased year-over-year by 11.5% in December, with growth in all major trade lanes. This resulted in the year 2023 concluding just 2.2% below the international traffic level reached in 2022.
- December saw new highs in Available Cargo Tonne-Kilometers (ACTKs), a metric for global air cargo capacity. This increase, largely due to the expansion of international passenger belly capacity, resulted in a 13.6% year-on-year (YoY) rise in December's ACTK. Consequently, 2023 concluded with an 11.3% increase in total air cargo capacity compared to 2022.
- The expansion in global air cargo capacity also resulted in a small drop in cargo load factors (month-on-month), closing the year at 44.0% on average.

December continues strong growth in air cargo traffic

Global air cargo demand reached 22.8 billion CTks in December, the highest traffic in two years, representing a 10.8% increase year-on-year (YoY) – the most significant annual growth since October 2021. While this performance is partly due to a base effect (the decline in CTks for most of 2022), it also reflects strong, continuous YoY demand growth over the past four months and robust month-on-month growth since April. This narrows the gap between 2023 and the previous year to 1.9% yet remains 3.6% below the total air cargo traffic achieved in 2019. **(Chart 1).**

Chart 1 – Global CTks (billions per month)



Seasonally Adjusted (SA) Cargo Tonne Kilometres (CTKs) maintained their upward trajectory, increasing by 10.7% year-on-year (YoY) this month. The continued annual growth in SA CTks, evident since August, markedly strong reverting from the declining trend observed throughout 2022. This underscores the progressive recovery of the global air cargo market, concluding 2023 on a robust note with strong momentum moving forward.

Cargo capacity sustained double-digit growth throughout 2023

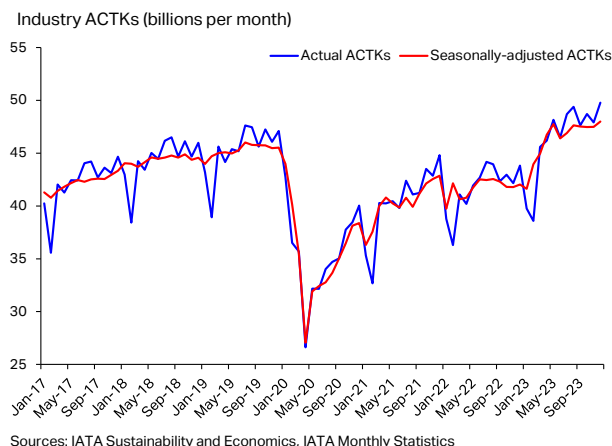
In December, air cargo capacity, measured in Available Cargo Tonne Kilometres (ACTKs), reached 49.8 billion. This figure exceeds the levels of 2022 and 2019 by 13.6% and 5.7%, respectively. Annually, 2023's air cargo capacity was over 10% higher than that of 2022. This growth was largely attributed to Asia Pacific carriers, who recorded a 28.5% increase from 2022 and surpassed their 2019 capacity by 6.7% **(Chart 2).**

Air cargo market in detail - December 2023

	World share ¹	December 2023 (% year-on-year)			December 2023 (% ch vs the same month in 2019)			
		CTK	ACTK	CLF (%-pt)	CTK	ACTK	CLF (%-pt)	CLF
TOTAL MARKET	100.0%	10.8%	13.6%	-1.2%	2.3%	5.7%	-1.5%	45.9%
International	86.9%	11.5%	14.1%	-1.2%	2.5%	6.3%	-1.9%	51.2%

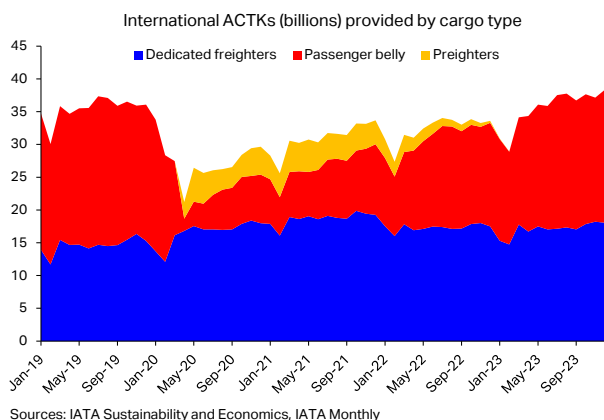
Note 1: % of industry CTks in 2022

Chart 2 – Global ACTKs (billions per month)



The industry's Available Cargo Tonne Kilometers (ACTKs) consistently exhibited double-digit growth year-on-year during the second half of the 2023. The year concluded with an 11.3% enhancement compared to 2022 and a 2.5% increase over pre-pandemic levels. Within this upward trend, international air cargo capacity registered a 9.6% rise from the previous year. Significantly, capacities carried by international passenger bellies attained 220 billion ACTKs in 2023, reflecting a notable 36% growth from the preceding year. Conversely, global dedicated freighters maintained stability, carrying 205 billion ACTKs of international air cargo traffic during the year, marginally lower than the 2022 figure (refer to **Chart 3**).

Chart 3 – International ACTKs by cargo type (billions per month)

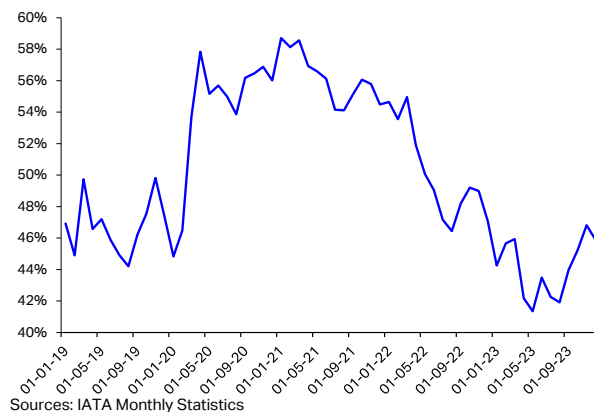


Cargo load factor reached pre-pandemic levels

Cargo Load Factors (CLF) are a crucial metric, indicating the industry's demand and supply balance. Rising CLFs benefit airlines by boosting revenue and profitability for a given capacity. Attributable to continuously expanded capacity in December, the industry CLF slightly decreased from the previous month to 45.9%, marginally below the load factors in 2022 and 2019. Concluding 2023, the air cargo sector reported an average CLF of 44%. Notably, the load

factor on international routes reached 49.9%, surpassing 2019 levels by 0.8%. (**Chart 4**).

Chart 4 – Industry cargo load factor (percent)

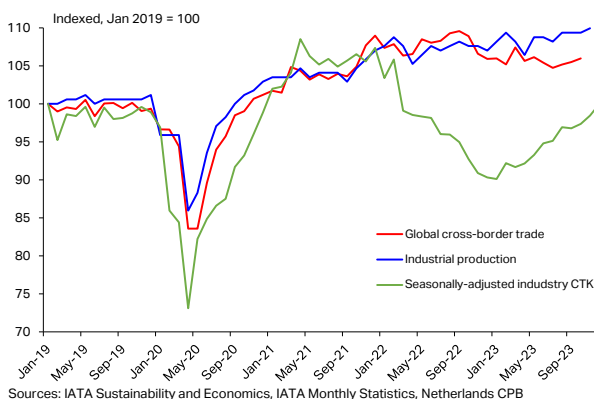


Sustained air cargo recovery in line with positive trade and production globally

While the November data remains pending, global cross-border trade experienced growth for the third consecutive month in October. This reverses the downward trend observed during the summer. This upturn signifies a stabilization in global cross-border trade towards the end of 2023, which stood approximately 5% above the 2019 level, based on an average of the first 10 months' data currently available. Importantly, both global cross-border trade and industrial production surpassed pre-pandemic levels in late 2020, and exceed these by 6.0% and 9.9%, respectively, as per the latest available data.

Buoyed by the upward trends in both production and cross-border trade, the global air cargo recovery sustained its momentum, registering positive growth for the fifth consecutive month. Seasonally Adjusted (SA) Cargo Tonne-Kilometers (CTKs) demonstrated a robust upward trend, finishing the year 2023 only 4% below the 2019 level (see **Chart 5**).

Chart 5 – Global goods trade and CTKs

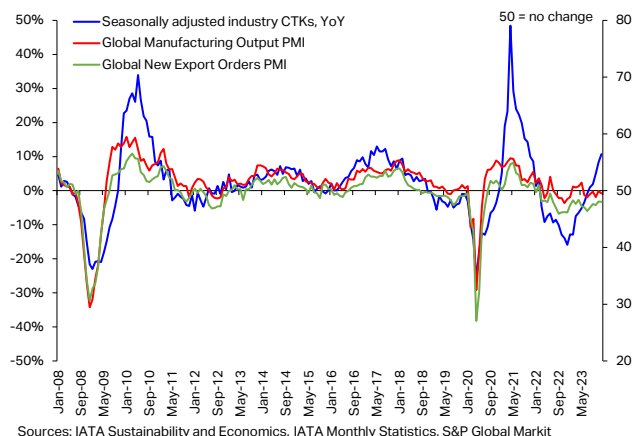


Manufacturing output and new export orders exhibit a continued marginally contracting trend across board

The Purchasing Managers' Index (PMI) gauges economic trends in manufacturing and services. A PMI

above 50 suggests that purchasing managers anticipate market expansion compared to the previous month, while a figure below 50 indicates contraction. The degree of change is more significant as the value deviates further from 50, with 50 denoting no change. Reflecting the current tight financial conditions and the broader global economic downturn, this month continued to see slight Month-on-Month (MoM) contractions in manufacturing output and new export order PMIs – key indicators of global air cargo demand. Reviewing 2023, global manufacturing experienced back-to-back contractions in the second half of the year, while global new export orders contracted throughout, mirroring a global economic climate increasingly less conducive to cross-border trade. This trend poses downward risks for air cargo demand (**Chart 6**).

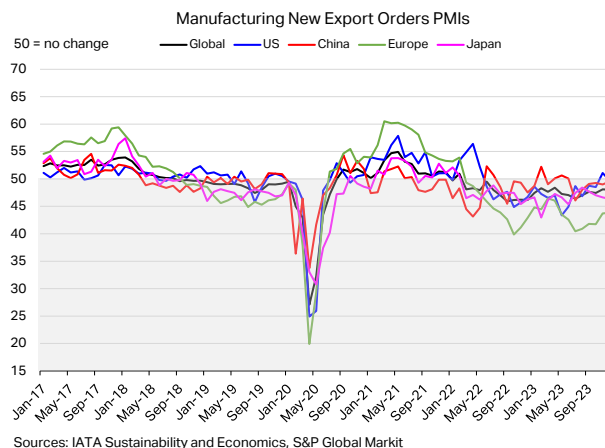
Chart 6 – SA CTK growth, global manufacturing output and global new export orders PMIs (50 = no change)



The PMIs for new export orders were seen below the 50 critical line across the board in December, this includes US, China, Europe, Japan, and globally on average.

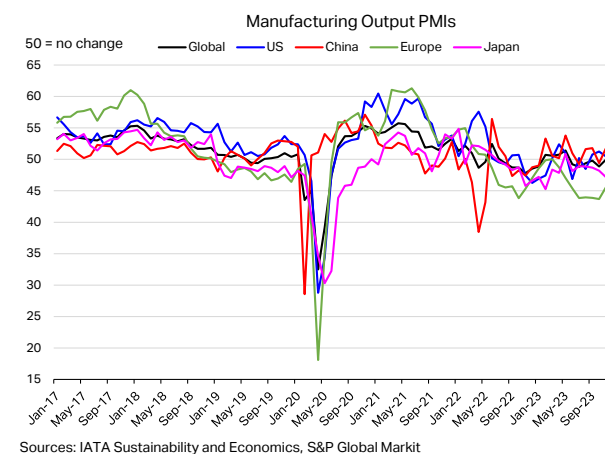
In the United States, the PMIs for new export orders dipped below the 50-point threshold again in December, following the sole expansion observed in November 2023. In China, despite a brief expansion in the first half of the year, PMIs remained below the 50-point mark for the second half of 2023. Meanwhile, in Europe and Japan, PMIs consistently stayed below the 50-point threshold throughout the year, indicating continuous monthly contractions, as depicted in **Chart 7**. The situation is particularly concerning in Europe, where the PMI for new export orders not only remained below 50 but also fell below 45 for most months in 2023. This decline was primarily due to heightened geopolitical conflicts and the global economic slowdown.

Chart 7 – New export orders PMI in major economies (50 = no change)



Per its PMI, global manufacturing output has been contracting since June 2023. Among major economies, Europe has faced continuous contractions for nine consecutive months, lagging behind other key economies. Japan has also encountered consistent contractions since June. In the United States, the PMI dipped below the 50-point threshold in December, following a three-month period of expansion. In contrast, China, often referred to as the 'world's factory' due to its significant manufacturing capacity, was the sole major economy exhibiting expansion in December (**Chart 8**).

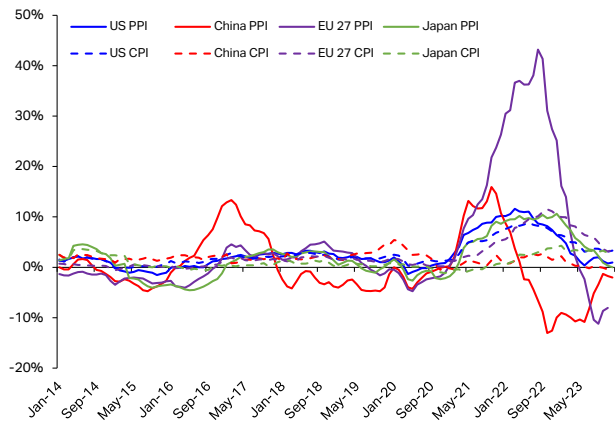
Chart 8 – Manufacturing output PMI in major economies (50 = no change)



Soft Inflation observed in major Economies

Despite a minor increase in December, the inflation of consumer prices, as gauged by the annual change in the Consumer Price Index (CPI), stayed below 3.5% in both the US and Europe. In Japan, inflation further declined to 2.6% in December. Concurrently, China recorded negative annual growth in its CPI for the third consecutive month, marking the fourth occurrence of deflation this year. This trend heightens concerns over an impending economic slowdown (**Chart 9**).

Chart 9 – Headline CPI and PPI inflation (YoY) in major economies



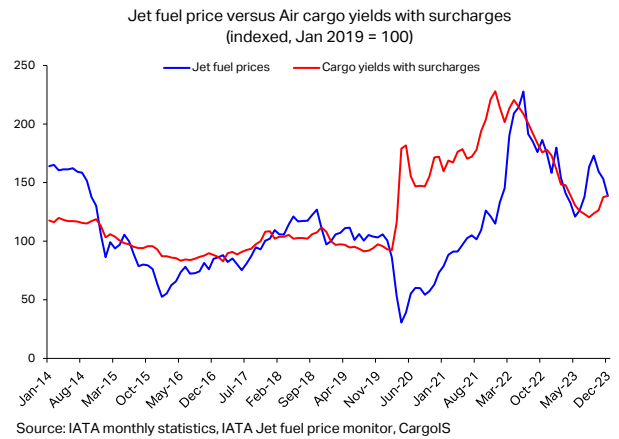
Sources: IATA Sustainability and Economics, Macrobond

On the other hand, the Producer Price Index (PPI), which monitors changes in the selling prices received by domestic producers for their output, demonstrated regional variations in December. Data indicates a modest rise in the US, while inflation on the producer side remained below 1%. Concurrently, China has been experiencing deflation since mid-2022, mirroring the concerns noted on the consumer front. The December PPI data for the EU 27 countries and Japan are still pending. However, November recorded the seventh consecutive month of deflation in the EU 27 countries, and a continual softening of inflation in Japan throughout 2023 up to November (**Chart 9**).

The global price of oil significantly impacts consumer prices. Likewise, the global jet fuel price is a key determinant of airline operating costs. The IATA jet fuel monitor keeps track of the latest trends in jet fuel prices. Jet fuel prices saw a decrease of 20% from their September peak, concluding the year at USD 104.4 per barrel (refer to **Chart 10**). On average, the jet fuel price in 2023 was 19% lower than its 2022 average, yet it remained 41% higher than the 2019 level.

Owing to the relatively high jet fuel prices and air cargo load factors, air cargo yields, including surcharges, saw a modest month-on-month increase of 0.8% in December on top of the significant rise observed in November. The conflict in the Middle East and subsequent supply chain disruptions in container shipping added further upward pressure on air cargo yields. On an annual basis, cargo yields in 2023 decreased by 32% from the historic highs of 2022, yet remained 42% higher than the pre-pandemic levels.

Chart 10: Jet fuel price and air cargo yields including surcharges (indexed, Jan 2019 = 100)



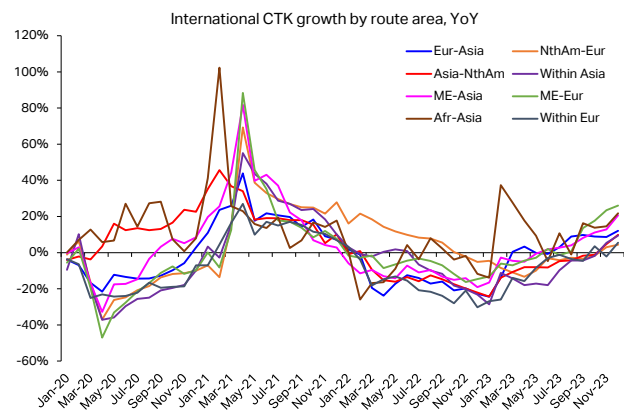
Source: IATA monthly statistics, IATA Jet fuel price monitor, CargoIS

Strong CTK growth in Middle Eastern and Asian trade lanes in December, positive annual growth across the board

In December, all major trade lanes reported positive YoY growth, reflecting strong momentum. Reviewing 2023, the **Africa-Asia** market demonstrated the most notable growth, exceeded that of the previous year by double digits on average. This market achieved positive YoY growth for the majority of the year, including a significant 37% increase in February following China's reopening. In the latter half of 2023, the **Europe-Asia**, **Europe-Middle East** and **Middle East-Asia** trade lanes also registered substantial growth, outpacing other lanes towards the year's end. This increase is partly attributed to regional conflicts, particularly in the Red Sea. These conflicts led to major disruptions in conventional sea freight routes. As a result, manufacturers and shippers increasingly opted for air cargo as an alternative method for transporting their goods (**Chart 11**).

Trade lanes involving North America, specifically **North America-Europe** and **North America-Asia**, both recorded their second consecutive month of positive growth in international CTKs in December. However, air cargo traffic for the year 2023 fell below the levels of 2022. **Within-Asia** and **Within-Europe** air cargo traffic also experienced an annual decline. Despite these challenges, an upward trend across all trade lanes is a positive indication.

Chart 11 – International CTK growth (YoY) by route area



Sources: IATA Sustainability and Economics, IATA Monthly Statistics

Air cargo market in detail - December 2023

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		CTK	ACTK	CLF (%-pt)	CTK	ACTK	CLF (%-pt)	CLF
TOTAL MARKET	100.0%	10.8%	13.6%	-1.2%	2.3%	5.7%	-1.5%	45.9%
Africa	2.0%	-1.2%	7.4%	-3.6%	-3.4%	-12.2%	3.7%	41.0%
Asia Pacific	32.4%	18.5%	31.1%	-5.1%	0.6%	11.0%	-5.0%	47.9%
Europe	21.8%	8.6%	7.4%	0.6%	-7.3%	-8.6%	0.8%	56.2%
Latin America	2.7%	6.4%	3.5%	0.9%	3.9%	1.8%	0.6%	31.6%
Middle East	13.0%	18.3%	17.7%	0.2%	4.9%	10.2%	-2.3%	45.5%
North America	28.1%	2.0%	2.4%	-0.2%	12.8%	9.7%	1.1%	40.3%
International	86.9%	11.5%	14.1%	-1.2%	2.5%	6.3%	-1.9%	51.2%
Africa	2.0%	-1.4%	6.8%	-3.5%	-2.8%	-11.9%	3.9%	42.1%
Asia Pacific	29.7%	15.4%	22.9%	-3.5%	2.0%	11.1%	-4.8%	54.1%
Europe	21.5%	8.7%	7.5%	0.6%	-7.8%	-9.3%	0.9%	57.8%
Latin America	2.3%	6.3%	4.2%	0.7%	5.8%	11.3%	-1.9%	35.8%
Middle East	13.0%	18.3%	17.8%	0.2%	4.9%	10.3%	-2.4%	45.8%
North America	18.4%	5.9%	8.5%	-1.2%	17.0%	16.6%	0.2%	48.4%

Note 1: % of industry CTks in 2022

Note 2: 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.

Air cargo market in detail - 2023

	World share ¹	Year-on-year %			Year-on-year % vs 2019			
		CTK	ACTK	CLF (%-pt)	CTK	ACTK	CLF (%-pt)	CLF (level)
TOTAL MARKET	100.0%	-1.9%	11.3%	-5.9%	-3.6%	2.5%	-2.7%	44.0%
Africa	2.0%	-1.8%	5.6%	-3.3%	6.7%	-10.7%	7.1%	43.3%
Asia Pacific	32.4%	0.9%	28.5%	-12.5%	-6.9%	6.7%	-6.7%	45.7%
Europe	21.8%	-3.9%	4.5%	-4.5%	-12.6%	-12.9%	0.2%	52.0%
Latin America	2.7%	2.0%	13.2%	-3.7%	-1.7%	1.8%	-1.2%	33.9%
Middle East	13.0%	1.6%	13.5%	-5.1%	-0.1%	6.4%	-2.8%	43.8%
North America	28.1%	-5.7%	0.3%	-2.5%	7.1%	8.7%	-0.6%	39.0%
International	86.9%	-2.2%	9.6%	-6.0%	-3.8%	0.0%	0.8%	49.9%
Africa	2.0%	-2.0%	5.0%	-3.2%	7.7%	-10.0%	0.5%	44.3%
Asia Pacific	29.7%	-1.4%	16.6%	-9.9%	-5.3%	2.4%	2.2%	54.5%
Europe	21.5%	-4.1%	4.5%	-4.9%	-13.1%	-13.8%	-1.8%	54.1%
Latin America	2.3%	1.9%	16.9%	-5.7%	0.2%	11.7%	1.9%	38.7%
Middle East	13.0%	1.6%	13.6%	-5.2%	-0.1%	6.7%	3.8%	44.1%
North America	18.4%	-4.3%	2.7%	-3.4%	7.8%	8.1%	0.6%	46.5%

Note 1: % of industry CTks in 2022

Note 2: 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.

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