Air Cargo Monthly Analysis

– July 2023

Air cargo maintains recovery momentum despite headwinds

- Industry air cargo demand decreased by 0.8% year-on-year in July, reflecting the sustained improvement in cargo tonne-kilometers (CTKs) and the low base of CTKs in 2022.
- Air cargo capacity, measured in available cargo tonne-kilometers (ACTKs), increased by 11.2%, primarily due to the continued restoration of belly cargo capacity during the summer season.
- Global trade contracted for the third consecutive month, with manufacturing output and new export orders deteriorating. China’s weak performance in production and exports is a concerning development for the global economy.
- Inflation showed a mixed picture in July. The increase in US consumer prices picked up pace for the first time in 13 months, while both consumer and producer prices in China fell, suggesting a possible deflationary trend in the Chinese economy.
- Asia Pacific airlines experienced their first year-on-year growth in cargo traffic since March 2022, driven by increased trade with other regions and significant market improvements within Asia.

Global CTKs continued to improve in July

The global air cargo industry registered 20.7 billion cargo tonne-kilometers (CTKs) in July, extending its steady improvement since February. Year-on-year (YoY) industry CTKs narrowed the gap, now standing at 0.8% below July 2022 levels, while remaining 3.3% lower than their pre-pandemic level in 2019 (Chart 1). The improved annual growth rate in global CTKs is also a result of growth stemming from a lower 2022 baseline.

Chart 1 – Global CTKs (billions per month)

Seasonally adjusted (SA) CTKs in July recorded a 0.7% YoY decline, marking a notable improvement of 2.7 percentage points (ppts) compared to the previous month (Chart 2). Due to the month-on-month (MoM) decline in SA CTKs throughout 2022, the July 2023 CTKs closely resembled the levels seen in July 2022. Conversely, SA CTks have been consistently rising since March 2023, with July posting a 0.2% increase over the previous month’s levels.

Air cargo capacity growth picked up pace

Air cargo capacity, measured by available cargo tonne-kilometers (ACTKs), stood at 49.1 billion in July (Chart 3). This is a 11.2% increase compared to the 2022 level and a 3.2% increase over the same month in 2019. Compared with the ACTK growth in June, the annual growth of ACTKs was 1.6 ppts higher, largely due to the growth of belly cargo capacity in the summer season (29.3% YoY). On the other hand, international capacity

<table>
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<tbody>
<tr>
<td>TOTAL MARKET</td>
<td>100.0%</td>
<td>42.1%</td>
</tr>
<tr>
<td>International</td>
<td>86.9%</td>
<td>47.7%</td>
</tr>
</tbody>
</table>

Sources: IATA Sustainability and Economics, IATA Monthly Statistics

Air cargo market overview - July 2023

Air Cargo Monthly Analysis – July 2023
growth for dedicated freighters remained weak in July at only 2.1% YoY.

**Chart 3 – Global ACTKs (billions per month)**

Year-to-date (YTD) industry CTKs reached 136.5 billion in July, steadily approaching 2022 levels. The annual contraction rate decreased from 8.1% in June to 7.1% this month. Meanwhile, YTD industry ACTKs totaled 313.8 billion, a substantial 10.0% increase above 2022 levels (Chart 4). With the current softening of air cargo demand, it is anticipated that the growth of YTD air cargo capacity will slow down in the upcoming months.

**Chart 4 – Year-to-date CTKs and ACTKs, year-on-year % change**

Global goods trade remained sluggish

In June, Global goods trade sustained its annual decline, falling by 2.5% compared with 2022 levels. The weak activity in global trade reflects the cooling demand environment. The performance of air cargo relative to global trade, as measured by the difference between the growth rates of global goods trade and industry CTKs, shrank to -0.8 pts in June, the smallest gap since January 2022. However, this difference highlights that the slowdown in global trade continues to impact air cargo more significantly than container cargo.

The weaker performance in global air cargo demand compared to maritime shipping in part reflects the pricing dynamics between the two transportation modes. Container yields in June declined by 81.3% YoY, reaching levels equivalent to those seen in 2019. In contrast, air cargo yields remained 35.4% higher than their 2019 levels. Consequently, the ratio of air cargo yields to container cargo yields is approaching its pre-pandemic maximum, implying a relative pricing advantage in favor of maritime shipping (Chart 5).

**Chart 5 – Ratio of chargeable weight rates (USD per kg) for air cargo and container shipping**

The manufacturing output and new export orders continued to decline in July

The manufacturing output and new export order Purchasing Managers Indexes (PMIs) have historically served as leading indicators of global air cargo demand. Therefore, we closely monitor developments in these PMIs at a global level (Chart 6) and for major economies (Chart 7).

In July, both manufacturing output PMI (49.0) and new export orders PMI (46.4) were below the critical threshold represented by the 50-mark, indicating a decline in global manufacturing production and exports (Chart 6). In contrast, air cargo performance maintained its recovery trend in July.

**Chart 6 – CTK (SA) growth, global manufacturing output and global new export orders PMIs (50 = no change)**
The decline in global new export orders PMI reflects the widespread softening of global goods trade. The downward trends in export orders were observed in major economies (Chart 7). In July, all the major economies we track recorded new export order PMIs below the 50-mark. The new export PMI in the US was 48.7, despite a 3.7 ppt improvement compared with June. China’s new export PMI dropped below 50 to 46.1 in July after staying slightly above 50 over the second quarter of 2023. Europe registered the lowest export order PMI at 40.5 in July, while Japan’s PMI improved by 2 ppts to 47.4 from the June level.

The significant decline in China's new export orders PMIs mirrors the deceleration of the country's economy, which has heavily relied on exports for the past decade. Notably, China's housing sector has exhibited weakness, with property sales experiencing a decline of 4.7% YoY over the first seven months of this year. China's weakening economic performance is a concerning development that could impact both the global economy and air cargo industry.

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

![Chart 7](chart7.png)

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

**Supplier delivery times improved amid the soft demand environment**

The suppliers’ delivery time PMIs provide more insights into the recovery of the global supply chain (Chart 8). In July, the global supplier delivery time PMI stood at 51.9, indicating fewer delays were experienced in the global supply chains under the weak export demand environment. Similarly, all major economies we track had PMIs above the 50-mark in July, with the exception of China (49.6). The US recorded a supplier delivery time PMI of 54.2, with Europe and Japan PMIs at 57.7 and 50.4, respectively.

**Chart 8 – Supplier delivery times PMI (50 = no change)**

![Chart 8](chart8.png)

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

**Mixed picture of inflation in major economies**

After 13 months of slowdown, the annual growth of the US headline Consumer Price Index (CPI) increased for the first time in July, from 3.1% in June to 3.3% in July. In comparison, the YoY growth of CPI in the EU 27 countries continued to decrease to 6.1% in July (declined by 0.3 ppt compared to June), while Japan’s CPI annual growth was unchanged at 3.3% compared to the previous month. China’s CPI experienced an annual contraction of 0.2% in July, marking the first time that the country saw an annual decline in CPI since February 2021 (Chart 9).

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

![Chart 9](chart9.png)

*Sources: IATA Sustainability and Economics, Macrobond*

Changes in producer prices in July, as measured by the Producer Price Index (PPI), were also mixed. The US saw an expansion of the annual growth in PPI from 0.3% in June to 0.8% in July, while Japan recorded a 3.6% YoY growth this month. China’s PPI contracted 8.3% YoY in July. July PPI data for EU 27 countries has not been released yet, but it had declined by 2.4% YoY in June (Chart 9).

As both the CPI and PPI in China show negative annual growth, the country is encountering growing deflationary pressures within its economy. A broader
pattern of falling prices across various sectors of China’s economy poses challenges for stimulating consumer and business spending, as well as investment. This, in turn, is expected to have an adverse impact on air cargo demand in China.

Three major trade lanes recorded growth, while demand also improved within Asia

International CTKs on the major trade lanes continued to show positive trends in July (Chart 10). Notably, the Europe – Asia trade lane registered a 3.2% YoY growth this month, putting an end to the annual contractions seen over the second quarter. The Middle East – Asia market expanded its YoY growth from 1.8% in June to 6.6% in July. Meanwhile, the Africa – Asia trade lane saw the greatest improvement in its international CTKs in July, rebounding to double-digit growth of 10.3% YoY, following an annual contraction in June.

International air cargo demand within Asia slowed its annual decline by almost 10 ppts, from -17.2% in June to -7.5% in July. Despite remaining the worst performing market in July, the within Asia trade lane saw the smallest YoY contraction since August 2022.

The North America – Europe market recorded a 4.3% annual decline in July, which was slightly worse compared with the previous month. Similarly, the within Europe market contracted by 5.1% in July. In contrast, international CTKs on the Asia – North America trade lane declined by 3.5% in July, representing an improvement from their 7.7% annual contraction in June.

Chart 10 – International CTK growth (YoY) by route area

Asia Pacific airlines registered their first annual growth in international CTKs since March 2022

International CTKs narrowed their annual contractions from 3.8% in June to only 0.4% in July. The positive development in international air cargo demand was driven by the YoY growth achieved by airlines in Asia Pacific (0.9%), Middle East (1.5%), and Africa (2.8%) (Chart 11). Particularly, it was the first annual growth seen by carriers registered in the Asia Pacific region since March 2022.

The growth of international CTKs by Asia Pacific airlines is a result of improvements of air cargo traffic on the Europe – Asia, Middle East – Asia, Africa – Asia, and the within Asia trade lanes (Chart 10). African and Middle East airlines also benefited from this trend, seeing 1.5% and 2.8% annual growth in July, respectively.

On the other hand, airlines in Latin America faced an annual decline of 0.2% in their international CTKs in July, after growing 1.9% YoY in the previous month. North American and European airlines also registered YoY contractions of 1.8% and 1.5% this month, respectively. Nonetheless, these figures represent an improvement from their performances in June (Chart 11).

Chart 11 – Growth in international CTKs by airline region of registration (YoY)
### Air cargo market in detail - July 2023

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<td>ACTK</td>
</tr>
<tr>
<td>TOTAL MARKET</td>
<td>100.0%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Africa</td>
<td>2.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>32.4%</td>
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<tr>
<td>Europe</td>
<td>21.8%</td>
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<tr>
<td>Latin America</td>
<td>2.7%</td>
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</tr>
<tr>
<td>Middle East</td>
<td>13.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>North America</td>
<td>28.1%</td>
<td>-5.2%</td>
</tr>
</tbody>
</table>

| International | 86.9% | -0.4% | 10.8% | -5.4% | 47.7% | -3.4% | 0.9% | -2.1% | 47.7% |
|-------------|----------------------------|------------------------------------------|
| Africa      | 2.0% | 2.8% | 10.8% | -3.3% | 42.5% | 4.0% | -17.6% | 8.8% | 42.5% |
| Asia Pacific | 29.7% | 0.9% | 18.4% | -9.4% | 54.1% | -3.4% | 5.1% | -4.8% | 54.1% |
| Europe      | 21.5% | -1.5% | 6.0% | -3.8% | 49.6% | -14.5% | -13.4% | -0.6% | 49.6% |
| Latin America | 2.3% | -0.2% | 13.8% | -5.1% | 36.5% | 1.7% | 20.0% | -6.6% | 36.5% |
| Middle East  | 13.0% | 1.5% | 17.3% | -6.4% | 41.4% | 1.7% | 12.1% | -4.2% | 41.4% |
| North America | 18.4% | -1.8% | 2.0% | -1.7% | 44.8% | 8.6% | 4.8% | 1.5% | 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.