Air Cargo Market Analysis

Air cargo demand started the year on a weak note

- Industry-wide cargo tonne-kilometers (CTKs) continued to decline in January, falling 14.9% year-on-year (YoY) and marking the 11th month of consecutive annual declines. Compared with pre-pandemic levels, air cargo demand was also down 11%.
- Cargo capacity – measured by available cargo tonne-kilometers (ACTKs) – picked up 3.9% YoY in January, reflecting the strong recovery of belly cargo capacity in passenger airline markets. Cargo load factors stood at 44.8%, after falling 9.9 percentage points below load factors in January 2022.
- The economic outlook for the air cargo industry in 2023 is expected to be a challenging one. Multiple macroeconomic headwinds stemming from the global pandemic persist and the ongoing war in Ukraine has disrupted important trade flows and economic activity across various regions.

Air cargo demand contracted further in January

Industry-wide cargo tonne-kilometers (CTKs) fell 14.9% YoY in January, marking the 11th month of consecutive annual declines in global air cargo demand (Chart 1). Compared with January 2019 cargo traffic, industry CTKs also contracted by 11%.

Seasonally adjusted (SA) air cargo traffic decreased by 10.9% YoY, albeit with a 2% increase from December 2022 levels.

Chart 1 Global Industry CTKs (billions per month)

High inflation will continue curtailing purchasing power, dampening consumption and global trade. These impacts are worsened by currency depreciations relative to the US dollar, which increase the local currency price of commodities invoiced in US dollars. Oil price volatility will likely remain in 2023, owing to the EU ban on maritime transportation of Russian crude oil and petroleum products. Finally, the ongoing war in Ukraine remains the greatest geopolitical risk to the global economy.

Global goods trade continued to decline while relative air cargo performance stabilized

Global trade decreased by 3.0% YoY in December, the second monthly decline in a row (Chart 2).

Chart 2 Growth in global goods trade and CTKs (YoY)

Although trade continued to benefit maritime transportation more than air cargo, the relative growth

Air cargo market overview - January 2023

<table>
<thead>
<tr>
<th>World share</th>
<th>January 2023 (% year-on-year)</th>
<th>January 2023 (% ch vs the same month in 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL MARKET</td>
<td>CTK</td>
<td>ACTK</td>
</tr>
<tr>
<td>International</td>
<td>88.8%</td>
<td>-16.2%</td>
</tr>
</tbody>
</table>

Sources: IATA Statistics, Netherlands CPB

Notes:
1. % of industry CTKs in 2022
2. Change in load factor
3. Load factor level
performance of air cargo stabilized at -12.8% in December.

Global new export orders in the manufacturing Purchasing Managers’ Index (PMI) – historically a leading indicator for air cargo demand – slightly increased across all major economies in January, despite still being below the critical 50 (no-change) line (Chart 3).

Germany continued to catch up with other major economies since its first uptick in export orders in November 2022. China and the US approached the critical 50 line, a promising sign that demand for manufactured goods from the world’s two largest economies is stabilizing. South Korea saw a strong rebound from its weak performance in December, and Japan also had a slight increase in its new export order PMIs. As a result, the global new export orders index increased, month-on-month, for the first time since October 2022.

**Chart 3** Global new export orders, component of the manufacturing PMI (50 = no change, SA)

Owing to the historical relationship between global manufacturing PMIs and industry-wide CTKs, the recent increase in new export orders could also point to growth in air cargo demand going forward (Chart 5).

Inflation continued to slow in January

Year-on-year inflation – as measured by the headline Consumer Price Index (CPI) for the G7 countries – was down to 6.7% in January from its peak of 7.9% in June 2022. Producer (input) prices, as measured by the Producer Price Index (PPI), also continued to retreat by 2.2 percentage points (ppts) from the previous month to 9.6% in December (Chart 6 Chart 6).

The slowing pace of increase in the cost of goods and services points to possible improvements in the purchasing power of consumers and in air cargo demand. However, although the annual rate of inflation is expected to cool further in 2023, the general price level has already increased, and continues to climb on a monthly basis. Thus, price inflation, even after stripping out volatile food and energy prices, will remain a challenge for global air cargo demand in the year ahead.

Although global oil prices have been declining since June 2022, they increased slightly in January. The average Brent crude oil price climbed to USD 83.9 per barrel (bbl) from USD 82.1 per bbl in December. Additionally, the jet crack spread expanded to USD 51.4

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per bbl on average in January, which is an USD 13.2 per bbl increase from the December spread. The elevated crack spread in the start of the year is an expected feature of the market in 2023 due to strong demand amidst limited global refining capacity.

**Cargo capacity increased despite demand slowdown**

Global air cargo capacity, measured by available cargo tonne-kilometers (ACTKs), picked up by 3.9% YoY. This was also the first YoY growth in ACTKs since October 2022 (Chart 7).

**Chart 7 Global ACTKs (billions per month)**

The increase in industry ACTKs was driven by the strong recovery of belly cargo capacity in international passenger airline markets, which accounted for 77.5% of the industry total ACTKS in 2022. In January 2023, international ACTKs for belly cargo grew 50% over 2022 capacity and reached 71% of their 2019 level. In contrast, dedicated cargo international capacity declined by 11% YoY. With increased total capacity, industry cargo load factors stood at 44.8% in January, 9.9 ppts below load factors from the previous year.

**International CTKs declined across all regions except in Latin America**

International CTKs accounted for 87% of the global air cargo market demand in 2022. They contracted by 16.2% YoY in January, declining across all regions except in Latin America. Compared with January 2019 levels, international air cargo demand decreased by 11.4% YoY. Carriers in North America, Latin America, and Africa, however, have managed to keep international CTKs above 2019 levels (Chart 8).

Airlines in North America and Latin America regions grew their CTKs over 2019 levels by 1.2% and 4.2%, respectively. Latin American carriers had the strongest traffic growth compared with other regions in January, and a significant improvement in performance compared to the previous month.

Airlines registered in the Asia Pacific region, which account for the largest share of international CTKs globally, continued to endure disruptions to trade, manufacturing, and supply chains due to the residual effects of restrictions imposed in China. Additionally, the Lunar New Year national holiday in China, which has traditionally led to lower cargo activities in China and within the APAC region, was in January this year, compared to February in 2019 and in 2022. As a result, International CTKs for the region’s airlines declined 20.0% YoY in January and were 16.3% below 2019 levels. China’s recent reopening of international markets, however, is expected to gradually benefit global trade and the growth of air cargo demand in the region as capacity picks up.

**Chart 8 YoY growth in international CTKs by region**

International air cargo demand in Europe and the Middle East also contracted significantly from 2022 and 2019 levels (-21.1% and -16.8%, respectively). For Europe’s cargo markets, the war in Ukraine has distorted important trade corridors and supply chains. African carriers saw their international CTKs drop 9.5% compared to 2022 traffic, but demand for the region’s airlines remained 9.7% higher than pre-pandemic levels.

Air cargo demand between region areas maintained similar trends compared with previous months (Error! Reference source not found.).

**Chart 9 Seasonally adjusted CTKs by route area**

Despite slight declines from December, Asia-North America and North America-Europe remained the only two route areas that kept CTKs above their pre-
Air cargo market in detail - January 2023

<table>
<thead>
<tr>
<th>World share</th>
<th>January 2023 (% year-on-year)</th>
<th>January 2023 (% ch vs the same month in 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTK ACTK CLF (%-pt)</td>
<td>CTK ACTK CLF (level)</td>
<td>CTK ACTK CLF (%-pt)</td>
</tr>
<tr>
<td>TOTAL MARKET</td>
<td>100.0%</td>
<td>-14.9%</td>
</tr>
<tr>
<td>Africa</td>
<td>2.0%</td>
<td>-9.5%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>32.4%</td>
<td>-19.0%</td>
</tr>
<tr>
<td>Europe</td>
<td>21.6%</td>
<td>-20.4%</td>
</tr>
<tr>
<td>Latin America</td>
<td>2.7%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Middle East</td>
<td>13.0%</td>
<td>-11.6%</td>
</tr>
<tr>
<td>North America</td>
<td>28.1%</td>
<td>-8.7%</td>
</tr>
</tbody>
</table>

| International | 86.8% | -16.2% | 1.4% | -10.4% | 49.4% | -11.4% | -10.1% | -0.7% | 49.4% |
| Africa | 2.0% | -9.5% | -2.7% | -3.4% | 45.3% | 9.7% | -11.9% | 8.9% | 45.3% |
| Asia Pacific | 29.7% | -20.0% | 2.0% | -14.8% | 53.9% | -16.3% | -13.4% | -1.9% | 53.9% |
| Europe | 21.4% | -21.1% | -10.6% | -7.5% | 56.1% | -16.8% | -22.8% | 4.0% | 56.1% |
| Latin America | 2.3% | 4.2% | 42.3% | -13.7% | 37.3% | 4.2% | 2.8% | -1.9% | 37.3% |
| Middle East | 13.0% | -11.7% | 9.8% | -10.1% | 41.3% | -10.6% | -3.4% | -3.3% | 41.3% |
| North America | 18.4% | -9.6% | 2.5% | -6.2% | 46.2% | 1.2% | 3.5% | -1.0% | 46.2% |

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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