Air Cargo Market Analysis

March 2023

Air cargo decline continues to moderate

- Global air cargo demand decreased in March, but at a slower rate than in February and January, with cargo tonne-kilometers (CTKs) falling by 7.7% year-on-year (YoY). This reflects a continued trend of improvement compared to the steep annual decline of -16.8% observed in January and double-digit decreases in earlier months.
- Air cargo capacity grew 9.9% YoY, primarily due to the increasing belly-hold capacity from passenger aircraft. As a result, cargo load factors fell to 46.2%, 8.8 percentage points (pPTS) lower than last year's load factors.
- The diminished strength of fundamental air cargo drivers, such as trade and manufacturing exports, continued to dampen potential gains in air cargo traffic, as global new export orders remained weak for a full year.
- While China's reopening has helped its economic outlook and cargo traffic on Asia Pacific trade lanes, its new export orders retreated in March after a slight improvement in February. Other major economies we track also saw contractions in their new export orders in March compared to February.

Air cargo demand remained weak in March

Industry-wide cargo tonne-kilometers (CTKs) continued to slow their annual decline in March. The year-on-year (YoY) contraction of CTKs narrowed further from -9.4% in February to -7.7% in March, which is a substantial improvement from the -16.8% fall in January (Chart 1). Compared with the pre-pandemic period, industry CTKs decreased by 8.1% over March 2019 levels. Although monthly CTKs were higher in March compared to the previous month, seasonally adjusted (SA) CTKs declined by 1.1% month-over-month (MoM) from the February level.

Chart 1 Global Industry CTKs (billions per month)

Global cargo traffic trends are primarily determined by international cargo tonne-kilometers (CTKs), which make up over 85% of the industry's total cargo demand. Although there was an 8.1% decline in international CTKs in March, the industry-wide CTKs only decreased by 7.7%, indicating strong performance from domestic CTKs during the month.

Consistent with last month's results, annual contractions of cargo demand were exhibited by carriers registered in all regions (Chart 2). The decline in CTKs for Asia Pacific airlines, however, expanded in March, while carriers registered in Europe and other regions improved their performance.

Chart 2 Regional contributions to YoY CTK growth

Global trade conditions continued to underperform

The air cargo industry has experienced volatility in recent months, which can be attributed to different economic and operational challenges that have hindered global trade. Even with record low unemployment rates, the global economy continues to
decelerate due to a combination of factors such as tightening global financial conditions, high levels of global debt, and supply chain problems including those linked to the war in Ukraine.

As of March, industry-wide air cargo CTKs have maintained their annual decline for 13 consecutive months. Global trade has also continued to fall since November 2022, providing diminished support for the air cargo industry (Chart 3). On a positive note, the pace of the annual decline in air cargo CTKs has moderated over the past two months, suggesting some level of stabilization. This development is reinforced by the fact that global goods trade has been holding steady just below the level attained a year ago.

**Chart 3 Growth in global goods trade and CTKs (YoY)**
Growth in goods trade and CTKs (% year-on-year)

Manufacturing, supply chains gave mixed signals

The new export order manufacturing Purchasing Managers Index (PMI) moves in step with global air cargo demand (Chart 4). Historical data for this PMI have shown strong correlation with the growth rate of global air cargo demand. Therefore, we have been closely monitoring manufacturing PMI at a global level and for major economies.

**Chart 4 CTK growth, global new export orders (YoY)**
CTK growth versus global new export orders (year-on-year)

In line with the weakening global trade, the PMIs for new export orders at the global level remained below the 50-critical line for a full year as of March. China’s PMI retreated to below the 50-mark in March, following a slight improvement observed in February. Other major economies, including Germany, Japan, US, and Korea, all registered contraction in March from February. It is worth noting, however, the slight upticks in the PMIs of Germany and Japan, which suggests a slowdown in the speed of their contractions (Chart 5).

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

Meanwhile, supplier delivery times continued to shorten, particularly in the US and Germany, pushing the global supplier delivery times PMI to 53 in March, up from its historic low of 35 observed in October 2021 (Chart 6). The key 50-mark for this indicator implies there are no changes in supplier delivery times, while a higher PMI signals a higher share of shorter delivery times, compared to the previous month. A continuous increase in the PMI indicates an accelerated pace of shortening delivery times.

With the upwards move to shorter delivery times in less than a year, air cargo load factors also fell to 46.2% in March. The decline in air cargo load factors can be attributed to the increase in belly-hold capacity from passenger flights and weakening demand for air cargo. This contraction in global demand during recent months has also relieved some pressure from supply chains.

**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 Markit
As displayed in Chart 6, there is a strong interdependence between global trade and the air cargo industry, as both sectors continue to grapple with supply chain challenges in the current economic climate. During periods of relative stability, the trajectories of these two indicators converge more closely.

Headline inflation slowed further in March

The G7 countries have experienced relief from the downward trend of the global oil price, resulting in a decrease in annual inflation rates. The headline Consumer Price Index (CPI) is a clear indicator of this, as it has dropped from its peak of 7.8% in June 2022 to 5.4% in March. Based on our latest data, the Producer Price Index (PPI), which measures changes in producer prices and serves as a leading indicator of CPI, had come down from its June 2022 peak and was recorded at 9.6% in December (Chart 7).

Chart 7 G7 headline CPI and PPI inflation (YoY)

Inflation in G7 countries (year-on-year)

Source: Refinitiv Eikon

Stripping out food and energy prices, the core inflation for Japan and Euro area continued to trend upwards in March, reaching 3.8% and 7.5%, respectively. Inflation rates stabilized in the US and UK, slightly coming down from their peak rates in September.

Following refinery capacity adjustments and shifts in demand, the jet fuel crack prices continued to ease from USD 33 per bbl in February to USD 28 per bbl in March, with the downward trend persisting. As a result, jet fuel prices averaged USD 107 per bbl in March.

Growth in capacity persisted, despite fall in CTKs

Industry air cargo capacity – measured by available cargo tonne-kilometers (ACTKs) – continued to grow by 9.9% YoY in March (Chart 8), driven by the return of belly-hold cargo capacity of passenger carriers. The annual increase in international capacity was 8.3%, slightly lower than the growth of industry-wide capacity. With the broad-based fall in CTKs, the growth in ACTKs from the passenger segment of the industry led to a decline in cargo load factors to 46.2% in March, which was 8.8 ppts lower than the previous year. Still, the load factor increased 0.6 ppts higher than the February level.

Chart 8 Global ACTKs (billions per month)

Sources: IATA Economics, IATA Monthly Statistics

Declines in international CTKs moderated across all regions except Latin America and Asia Pacific

International cargo demand has experienced volatility in recent months and CTKs have remained lower than last year’s levels across all regions through March. Still, most carriers have managed to improve their international cargo performance compared with the previous month’s levels and YoY growth. Consistent with trends in the global air cargo market, international CTKs contracted by 8.1% from a year before and slightly improved from their annual decline of 10.1% recorded in February. This performance improvement was achieved by carriers registered in all regions except in Latin America and Asia Pacific (Chart 9).

Chart 9 Growth in international CTKs by region (YoY)

Sources: IATA Economics, IATA Monthly Statistics

Compared to February, several regions have shown signs of resilience. Europe’s airlines saw the most substantial improvement in their demand from February to March 2023, slowing the annual rate of decline in their international CTKs from -16.6% to -8.4%. Carriers registered in North America, Africa and the Middle East
also moderated the downward trend in their cargo traffic in March.

The deterioration in the annual CTK growth for Asia Pacific carriers suggests air cargo traffic in this region has not stabilized yet, following China’s reopening in January. The impacts of production moving out of China and the associated changes to the supply chain are also possible factors behind this contraction.

International CTKs for Latin America carriers have been trending downward since April 2022, and for the second consecutive month they are below the previous year’s levels. Despite the recent decline in air cargo traffic, the region’s overall performance has not been significantly impacted.

Asia trade lanes continued to buck the trend

The annual growth of international air cargo slowed down gradually on various trade lanes in the second half of 2021. Cargo traffic then declined YoY across most route areas in 2022, while routes connecting North America and Europe sustained growth for most of the year.

In 2023, among all major routes, Africa-Asia was the only route area that registered positive growth in air cargo traffic compared to a year before, while other routes continued to perform weaker on a YoY basis.

Despite its robust performance in 2022, the Trans-Atlantic route between North America and Europe has seen declining traffic on an accelerated pace through March. In contrast, for Middle East-Europe routes, the annual growth rate has been trending upward in recent months. In March, as observed last month, most routes areas connecting Asia to other regions continued to exhibit improvement in their growth trends. The main driver behind this trend is the reopening of China, which has stimulated economic activity and trade in the region. (Chart 10).

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

Air cargo market in detail - March 2023

<table>
<thead>
<tr>
<th>World share</th>
<th>March 2023 (% year-on-year)</th>
<th>March 2023 (% ch vs the same month in 2019)</th>
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<tbody>
<tr>
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<td>CTK</td>
<td>ACTK</td>
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<tr>
<td>TOTAL MARKET</td>
<td>100.0%</td>
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<td>Africa</td>
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<td>-8.1%</td>
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</tbody>
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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.