Quarterly Air Transport Chartbook

IATA Sustainability & Economics

Q1 2023

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Note to readers: *The Airline Financial Performance section will only be included in the Quarterly Air Transport Chartbook for Q2 and Q4 of each year. It will be excluded from the Q1 and Q3 reports as the latest airline financial performance review and forecast will be published in the concurrent releases of the June and December Global Outlook reports, respectively.*

Glossary

ACTKs – Available Cargo Tonne-Kilometers

ASKs – Available Seat-Kilometers

ASPAC – Asia Pacific

ATKs – Available Tonne-Kilometers

BLF – Breakeven Load Factor

CLF – Cargo Load Factor

CTKs – Cargo Tonne-Kilometers

FRT – Freight Tonnes

GDP – Gross Domestic Product

LF – Load Factor

MoM – Month-on-month

OPEC – Organization of the Petroleum Exporting Countries

Passenger Traffic O-D – Passenger Traffic Origin-Destination

PAX – Revenue Passengers

PLF – Passenger Load Factor

RPKs – Revenue Passenger-Kilometers

RTKs – Revenue Tonne-Kilometers

SA – Seasonally adjusted

SAF – Sustainable Aviation Fuel

USD – United States Dollar

WLF – Weight Load Factor

YoY – Year-on-year

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I. The Business Cycle

- The global economy is likely to grow in the vicinity of 3% in 2023, down from 3.4% in 2022, and 6.3% in 2021. Despite the recent slowdown, this growth rate aligns with the historical average since the 1970s. According to WTO, growth in world merchandise trade is expected to decelerate to 1.7% this year, from 2.7% in 2022. Trade volumes nevertheless set a new record in 2022, following the contraction seen in 2020 and are now exceeding 2019 levels (Chart 1, Chart 2).

- The current business cycle is characterized by tight labor markets globally, especially in advanced economies. In April 2023, the US unemployment rate stood at 3.4%, which is historically low compared to the average rate of 5.7% from 1948 to 2023. It reached an all-time low in May 1953 at 2.5%. Hence, it remains remarkably low amid a slowing business cycle when it would otherwise have been expected to climb. In the OECD countries, the average unemployment rate was 4.8% in March 2023, the third month at this record low since 2001 (Chart 3). In the European Union, the unemployment rate was 6.0% in March 2023, also a historic low, and that of the euro area fell to 6.5% in the same month. While we would expect unemployment rates to rise again in the latter part of this year, it is difficult to anticipate a recession at the current junction given that record numbers of workers are earning a regular income.

- Inflation has risen dramatically since 2021, particularly due to Russia's invasion of Ukraine in 2022, interrupting the general disinflation trend that had been in place since the 1980s. Global inflation rose to 8.7% in 2022 and is likely to pull back to 7% in 2023 (Chart 4). Despite some significant monetary policy tightening, inflation remains somewhat stubborn, impacting the real interest rates and affecting debt holders. At its latest meeting in May, the US Federal Reserve lifted its policy rate to 5.0-5.25%, the 10th hike in just over a year, but hinted at a less aggressive stance going forward Consumer price inflation stood at 5.5% year-on-year in April, meaning that the real rate of interest is still just negative, as it mostly has been since the Global Financial Crisis 2008-2009. Nevertheless, the price of money is going up (although it is still low), and this will impact all debt holders.

- The rise in interest rates has also impacted all significant bond holders (the price of which falls when interest rates rise) and this played a part in the recent bank failures in the US. While any major contagion looks unlikely, the events still reveal vulnerabilities in the financial sector and will curtail growth in credit.

- According to Institute of International Finance (IIF) Global Debt Monitor, global debt levels remained high at 338% of GDP in 2022, albeit down by 12 percentage points from 2021. Most of the declines came from advanced economies, while the debt-to-GDP ratio for emerging markets rose by 2 percentage points (Chart 5). Over the past few years, the number of vulnerable economies has risen. Among the 73 countries included in the Debt Service Suspension Initiative (DSSI), nearly 60% of them were either at high risk of or already in debt stress in 2022, which is double the number compared to 2015.[1] As the cost of servicing this debt has risen, governments worldwide will have limited space for fiscal stimulus and may resort to raising taxes.

- Climate change and the transition to a sustainable economy is already taxing growth and lifting the need for both public and private investments. Achieving this amidst diminishing multilateral collaboration and the return of war to Europe presents additional challenges.

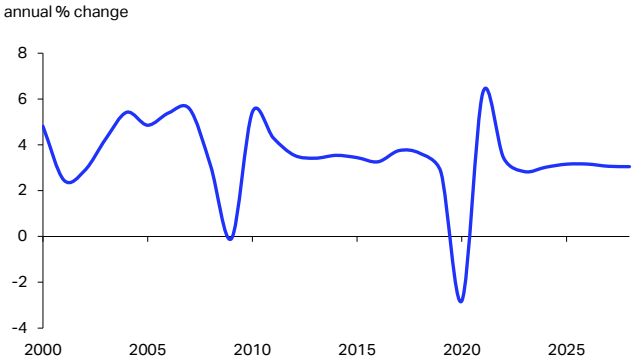
- The recent depreciation of the US dollar provides some near-term relief, as it lowers the price of all goods and debt denominated in US dollars and tends to be growth-supporting in all regions except for Europe.

[1] For eligible countries, Debt Service Suspension Initiative (DSSI) allows bilateral official creditors to grant suspension of debt service payments as requested. This was initiated and agreed upon by G20 leaders during the pandemic to address immediate liquidity needs from the poorest countries.

Measured by an index against its main trading partners, it has come off the local high set in October 2022 of 113 to 102 in mid-May 2023. However, on this basis, it remains nearly 14% stronger than it was in September 2020 (Chart 6).

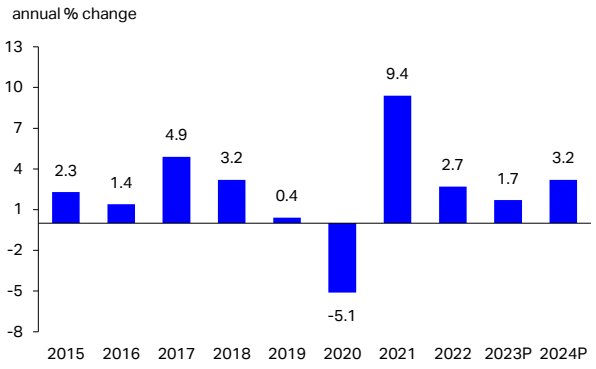
- Taken together, we understand that the world is facing high levels of uncertainty on multiple fronts, skewing the risks to the overall outlook decidedly to the downside. Upside surprises could come in the form of China's economy rebounding more strongly than expected, and if the war in Ukraine were to end. Despite these dynamics, it is crucial for the industry to remain vigilant and adaptive to navigate the uncertain global landscape effectively (Chart 7, Chart 8).

Chart 1: Global gross domestic product (constant USD), annual % change



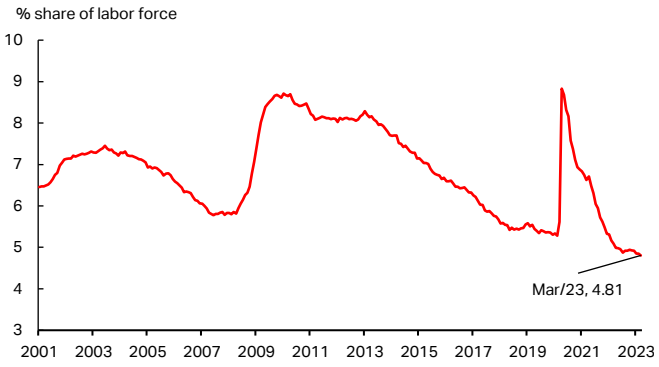
Source: International Monetary Fund (IMF), April 2023 update

Chart 2: Volume of world merchandise trade, annual % change



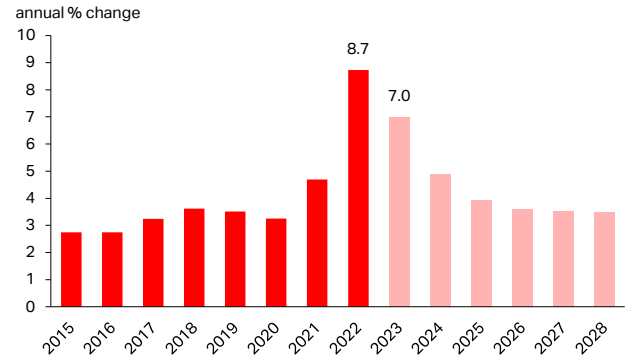
Source: World Trade Organization

Chart 3: Unemployment rate in OECD, % share of labor force



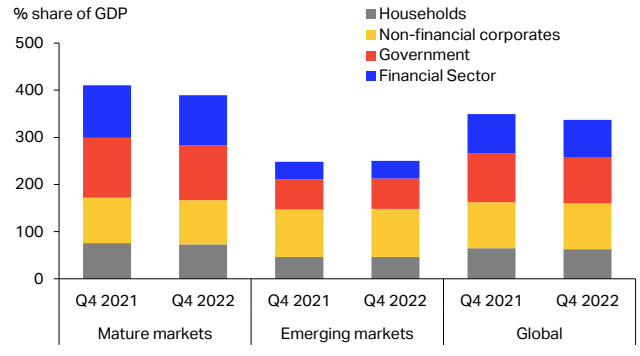
Source: OECD Stat

Chart 4: Global inflation as Consumer Price Index (CPI), annual % change



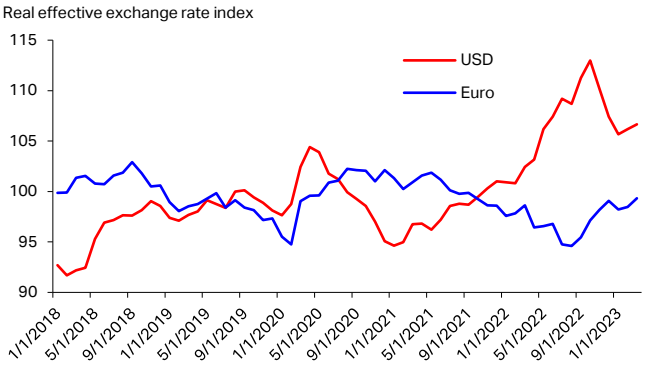
Source: IMF, World Economic Outlook April 2023

Chart 5: Global debt as share of GDP (%)



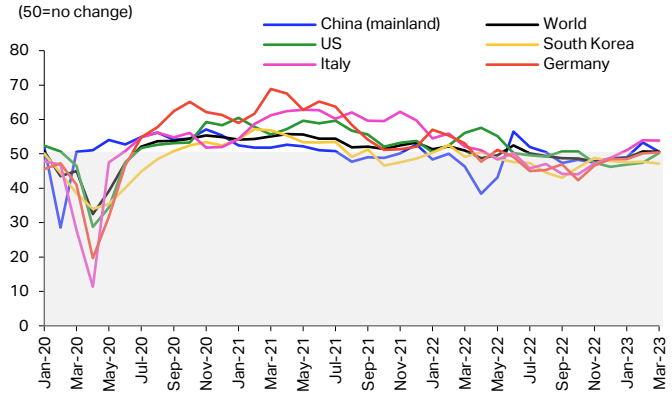
Source: Institute of International Finance (IIF)

Chart 6: Foreign Exchange Rates



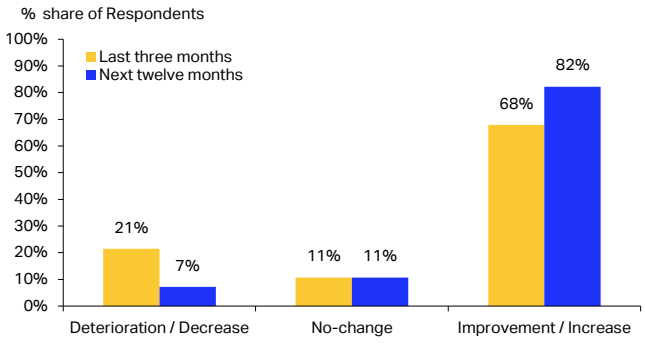
Source: Bank for International Settlements (BIS)

Chart 7: Manufacturing output Purchasing Managers Index (PMI)



Source: Markit

Chart 8: Business Survey Results: How does your profitability performance in the last 3 and the next 12 months compare with the same period last year?



Source: IATA Business Confidence Survey (January 2023)

II. Sustainability and Energy Transition

- As the world aims to achieve ambitious climate targets, Sustainable Aviation Fuel (SAF) has emerged as a key feature within the aviation industry. SAF represents a broad category of fuels derived from non-fossil sources, including advanced biofuels and e-fuels, offering a sustainable alternative to conventional jet fuel. IATA estimates that SAF could contribute approximately 65% of the emissions abatement necessary for aviation to achieve its goal of reaching net zero CO2 emissions by 2050.[2]

Sustainable Aviation Fuel (SAF)

- Since 2022, there have been 34 publicly announced SAF offtake agreements and 17 non-binding agreements, including both memorandums of understandings (MoUs) and letters of intent (Chart 9). Collectively, these agreements represent a total blended SAF volume of around 25 million metric tonnes. The total volume of neat SAF included in these offtake agreements is estimated to be around 8-10 million tonnes, based on the current blending ratio of 30-40% SAF and 60-70% conventional jet fuel.

- Among the 51 offtake agreements, there are five SAF production pathways represented in Chart 10, namely Hydro-processed Esters and Fatty Acids (HEFA), HEFA Co-Processing, Syngas Fischer-Tropsch (Syngas-FT), Alcohol to Jet (AtJ), and Power-to-Liquid (PtL). 44 agreements are based on Biofuel SAFs, while the remaining seven are associated with E-Fuel SAF, derived from various PtL projects.

- As the most mature biofuel technology for SAF production, the HEFA pathway has consistently been the most common for offtake agreements, followed by Syngas-FT (Chart 10). However, in terms of the estimated volume, SAF produced via the AtJ pathway accounts for around half of the total estimated neat SAF offtake volume, resulting in an amount greater than the combined volume of HEFA and Syngas-FT SAF (Chart 10). This higher AtJ SAF offtake volume is due to two larger offtake agreements.

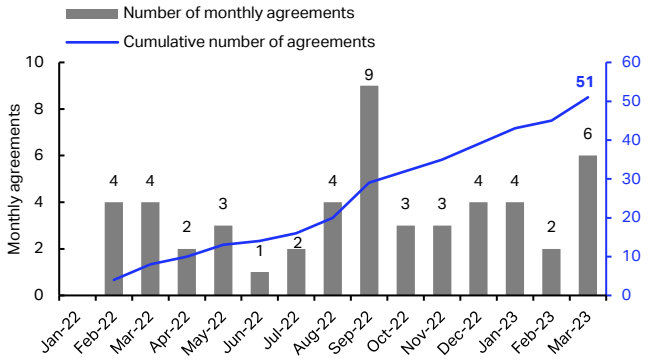
- Based on IATA's data sources, over 130 renewable fuel projects have been announced publicly by more than 85 producers across 30 countries. Each of these projects has identified commitments to producing SAF in their product slate. Currently, these projects represent an estimated overall renewable fuel capacity of 55 million tonnes by 2029 (Chart 11). It is important to note that there is typically a 3 to 6-year lag between project announcement and commercialisation and that further capacity announcements for 2026 and beyond can be expected.

- The total renewable fuel capacity will produce SAF as well as other outputs, such as renewable diesel. With that in mind, and assuming an average SAF share of around 30%, it would require 80 million tonnes of global renewable fuel capacity by 2030 to achieve the 24 million tonne SAF output , which is a potential interim target (Chart 11).

- According to current data, 85% of global capacity is attributed to the HEFA pathway, followed by 6% of AtJ and 5% of Syngas-FT (Chart 12). The Catalytic Hydrothermolysis Jet fuel (CHJ) pathway represents just 1% of the total capacity, while e-fuel SAF, through the PtL process, accounts for less than 1% of the cumulative renewable capacity – all of which showing how very early we are in the transition towards net zero.

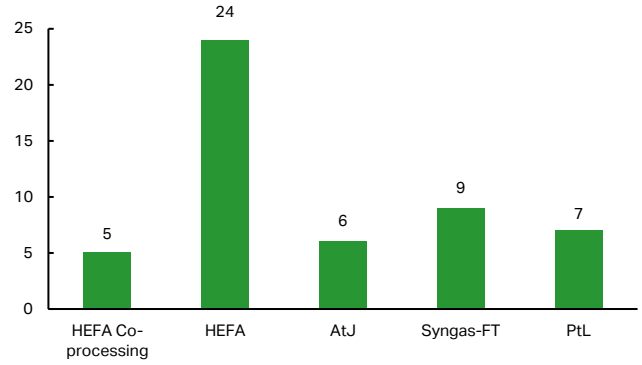
[2] Read more on our SAF policy approach: https://www.iata.org/contentassets/d13875e9ed784f75bac90f000760e998/saf-policy-2023.pdf

Chart 9: Total number of SAF offtake agreements



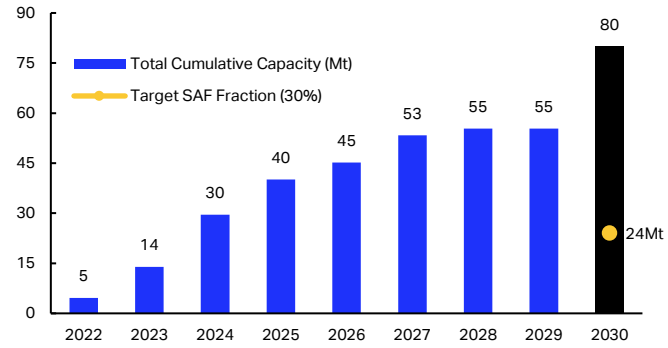
Source: IATA

Chart 10: Total number of SAF offtake agreements per pathway (as of March 2023)



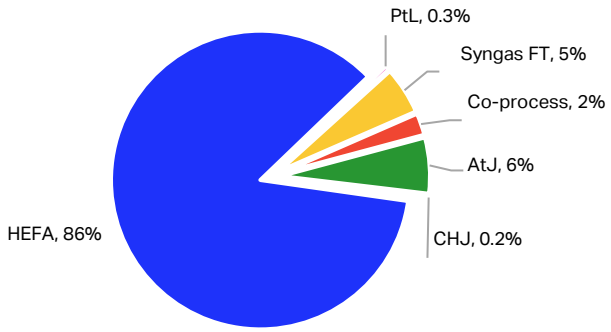
Source: IATA

Chart 11: Cumulative renewable fuel capacity vs. target SAF fraction (Mt)



Source: IATA

Chart 12: Total renewable fuel capacity, % share by pathway



Source: IATA

III. Passenger and Cargo Traffic

Passenger Traffic

- Despite economic headwinds affecting consumer purchasing power and airline operating costs, the recovery in air travel demand has remained resilient this quarter. In March 2023, global air passenger traffic, measured in revenue passenger-kilometers (RPKs), was only 12.0% below pre-pandemic levels (Chart 13, Chart 14). Industry-wide RPKs in the first quarter of 2023 rebounded to 85.9% of Q1 2019 levels, showing a significant improvement from the 68.5% RPK recovery achieved for the full year in 2022.

- The recovery trend in international RPKs observed in 2022 has continued globally in the beginning of this year. Global international RPKs were 18.4% below 2019 levels in March, and for the quarter, they were 21.1% short of that level. International passenger traffic routes between Europe and the Americas continued to lead in terms of recovery to pre-covid levels, with Europe-North America surpassing pre-pandemic levels by 4.5% and Europe-Central America only 2.0% below in March (Chart 15).

- Routes between Asia Pacific and the rest of the world have experienced significant growth in international traffic, with RPKs within Asia growing by a staggering 703.8% compared to Q1 2022, and Asia–North America by 251.3% (Chart 15). Asia Pacific carriers, operating the largest share of traffic originating from the region, have seen substantial growth in international RPKs, with a 339.2% increase compared to the previous year, reflecting the strong pent-up demand resulting from the broad lifting of remaining travel restrictions, as well as the low level from which traffic has risen (Chart 16).

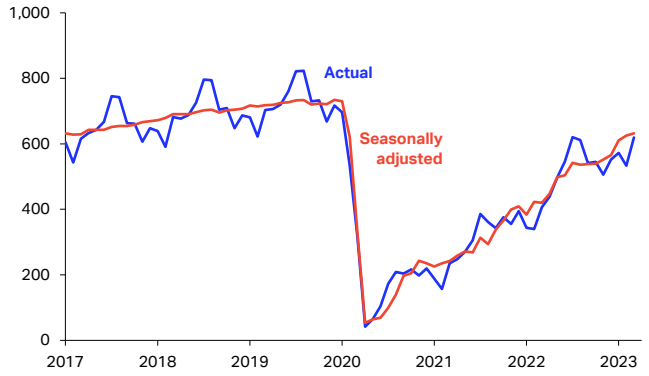
- While the long-term impact of the pandemic on consumer preferences remains uncertain, industry-wide international premium RPKs have been recovering ahead of the economy since the second half of 2022. This positive development continued in Q1 2023, with premium international RPKs reaching 85.0% of Q1 2019 levels, while economy class RPKs reached 78.4% (Chart 17).

- Domestic RPKs have continued to recover more rapidly than international RPKs and have accelerated due to the resumption of air travel in China's domestic market. In the first quarter, the share of recovered total domestic RPKs increased by 23.2 percentage points (ppts) compared to the previous year, reaching 98.0% of Q1 2019 levels. China's domestic RPKs reached 91.6% of 2019 levels. Other domestic markets, including the US and India, have also shown sustained positive results, exceeding the 2019 threshold by 4.9% and 1.2%, respectively, in the first quarter (Chart 18).

- Available seat capacity, measured in available seat-kilometers (ASKs), continued to ramp up in line with demand for air traffic, rising to 89.5% of 2019 levels in March and 79.8% over the quarter (Chart 19). Passenger load factors, which indicate the level of demand expressed by consumers relative to capacity, were close to the 2019 levels for all regions. Africa and Middle East carriers outperformed their pre-pandemic load factors by 3.3 and 5.8 ppt, reaching 74.5% and 79.4% respectively. These figures demonstrate the strong demand for air travel worldwide (Chart 20).

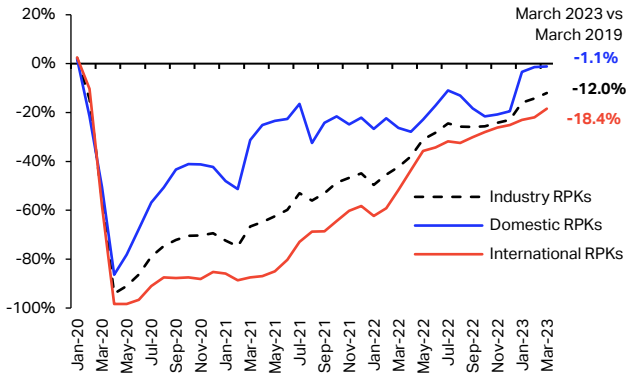
- It is important to bear in mind though, that while we are well pleased to see the industry closing in on and even exceeding the 2019 levels of activity, it remains well below where it likely would have been if the Covid crisis had not happened.

Chart 13: Industry monthly RPKs in billions



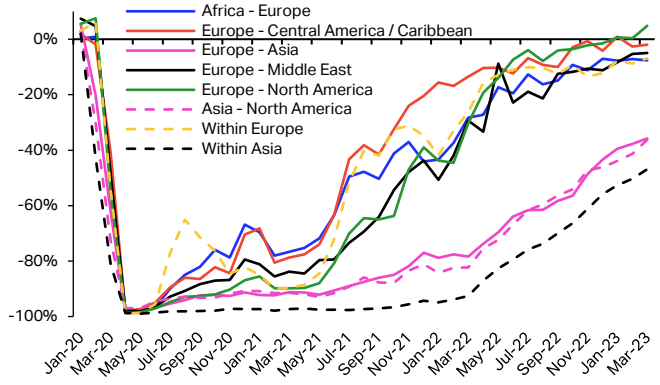
Source: IATA Monthly Statistics

Chart 14: Global RPKs from Jan 2020 to Mar 2023, YoY% change vs 2019



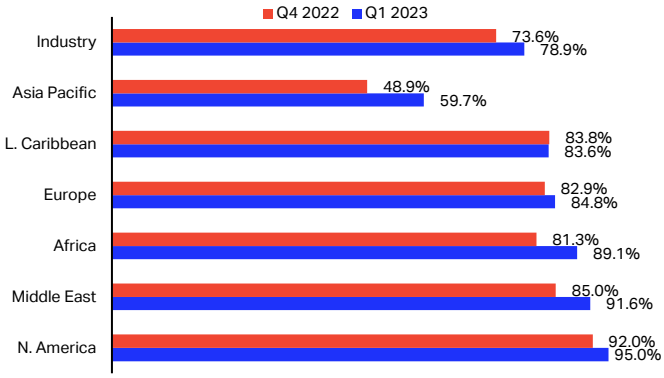
Source: IATA Monthly Statistics

Chart 15: International RPKs, YoY% change versus 2019 – Top 10 route areas in 2019



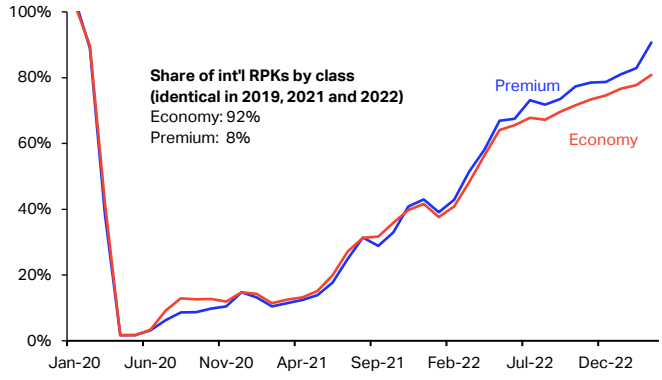
Source: IATA Monthly Statistics

Chart 16: International RPKs by airline region of registration, % share of Q1 2019



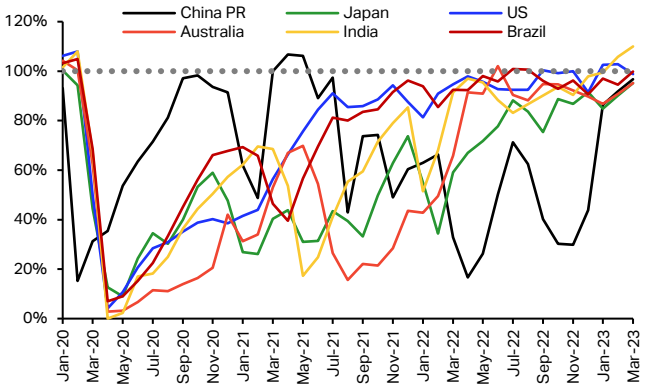
Source: IATA Monthly Statistics

Chart 17: International RPKs by cabin class, % share of the same month in 2019



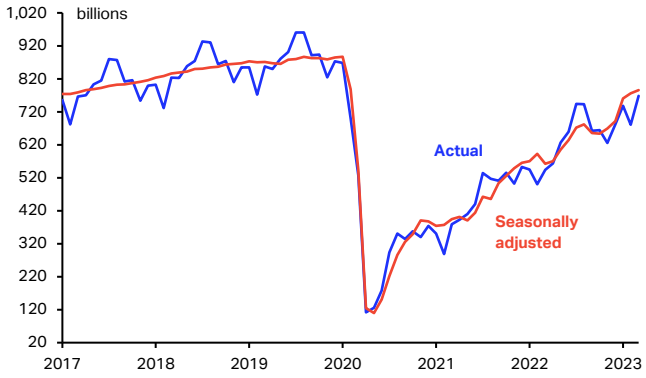
Source: IATA Monthly Statistics

Chart 18: Domestic RPKs by country market, % share of the same month in 2019



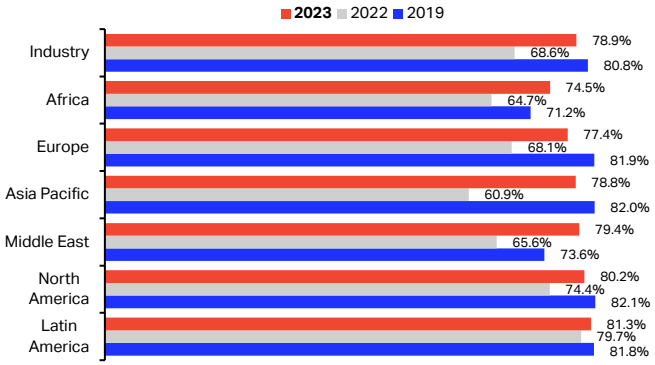
Source: IATA Monthly Statistics

Chart 19: Industry monthly ASKs in billions



Sources: IATA Monthly Statistics

Chart 20: Passenger Load Factor (% share of available seat kms, Q1)



Sources: IATA Monthly Statistics

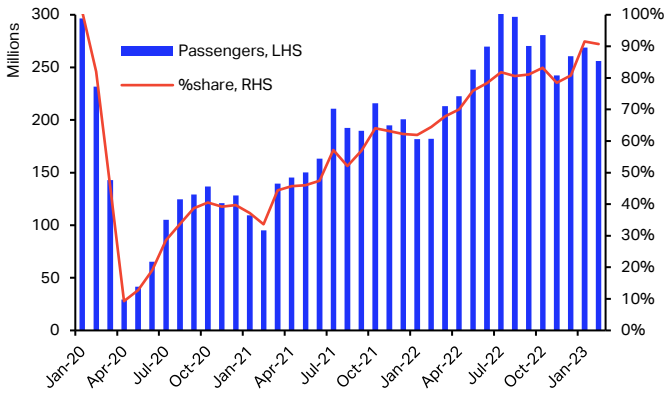
- Over the course of 2022, global passenger numbers gained ground towards full recovery (Chart 21). The reopening of China enabled further growth in origin–destination (O-D) passenger traffic in January and February 2023, surpassing 90% of pre-pandemic traffic levels. Coupled with the Lunar New Year, China's reopening significantly boosted domestic ticket sales, exceeding the number of ticketed passengers in February and March 2019.

- International ticket sales also made modest progress in their recovery, but remained above 80% of 2019 levels, which is a positive development considering the headwinds of global inflation and high fuel prices. Both domestic and international ticket sales continued to indicate an optimistic outlook and a sustained recovery, with ticket sales growing across all regions compared to the previous year (Chart 22, Chart 23).

- Looking ahead, air passenger traffic (O-D) is still expected to grow at an average annual rate of 3.2% through 2040, resulting in a doubling of air travel demand by the end of the forecast horizon. In the near-term, our outlook is buoyed by the latest developments in China and the Asia Pacific region, but remains largely unchanged, with worldwide passenger traffic expected to fully recover to 2019 levels by 2024 (Chart 24, Chart 25). Crosscurrents including high energy and consumer prices, increasing airline input costs, and capacity constraints, as well as a slowing global economy continue to drag our balance of risks to the downside.

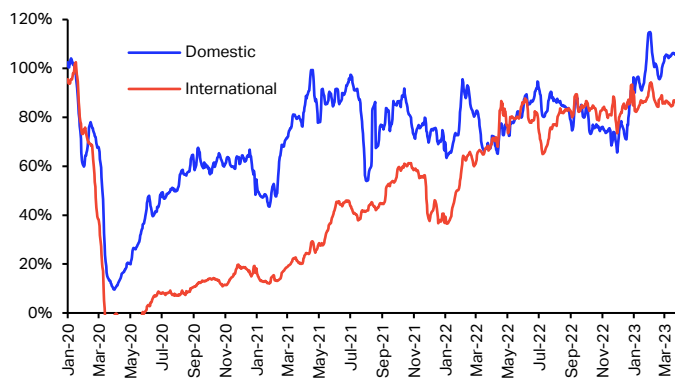
- Our expectation for North America's passenger traffic continues to be full recovery this year. Based on the positive developments observed in specific regions, Asia Pacific is now anticipated to reach its pre-pandemic traffic levels by 2024, primarily due to the earlier-than-anticipated reopening of China. Latin America & the Caribbean are now expected to fully recover this year, given the sustained strong results in domestic and international travel to and from the region. Africa is projected to return to pre-Covid passenger levels in 2024, supported by the region's strong year-to-date performance.

Chart 21: Passenger Traffic (O-D) and % share of 2019



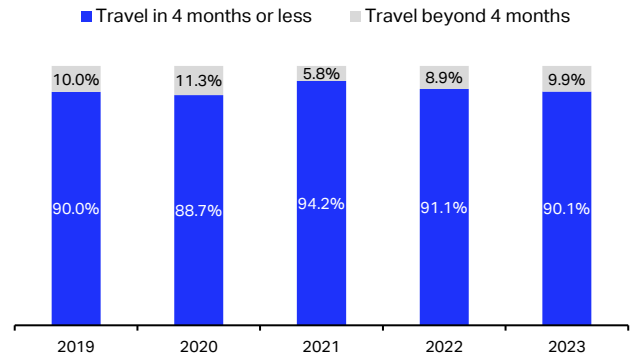
Sources: IATA Economics, DDS

Chart 22: Passenger ticket sales, 7-day moving average, % share of the same day in 2019



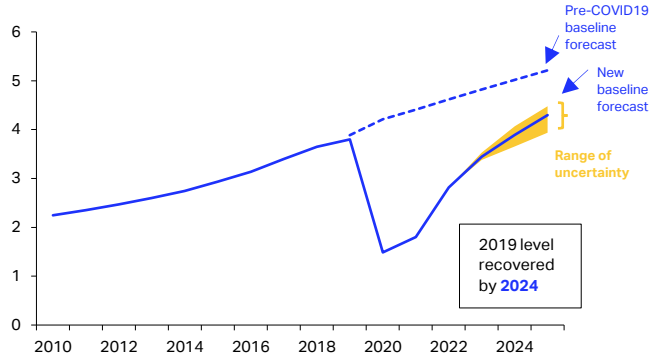
Source: IATA Economics, DDS ticketing data

Chart 23: Ticket sales in Q1, 2019-2023 for forward travel (% share of total)



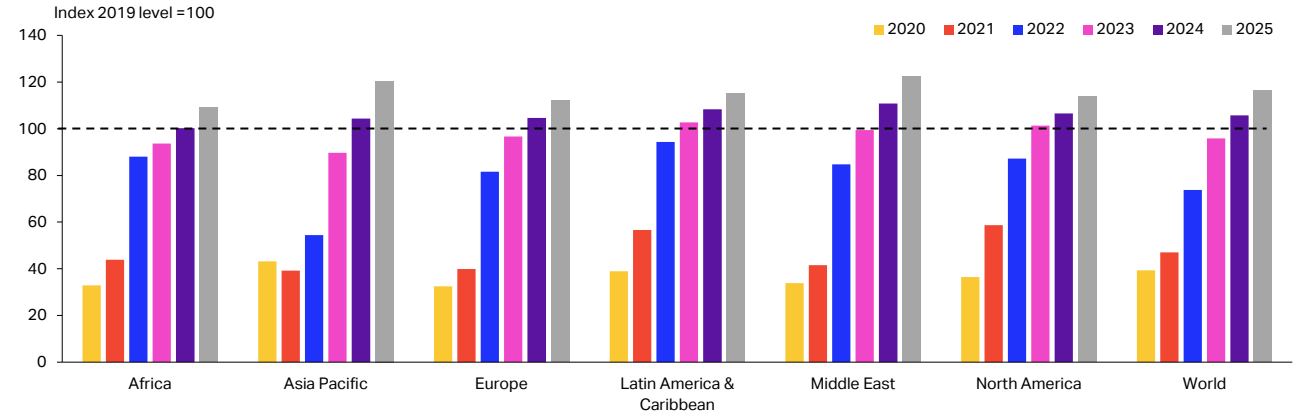
Source: IATA Economics, DDS ticketing data

Chart 24: Global passengers in billions



Source: IATA/Tourism Economics

Chart 25: Passenger traffic forecast and estimated year of recovery to 2019 levels



Source: IATA/Tourism Economics

Estimated year of recovery to 2019 passenger traffic levels

Africa	Asia Pacific	Europe	Latin America & Caribbean	Middle East	North America	World
2024	2024	2024	2023	2024	2023	2024

Global Air Connectivity

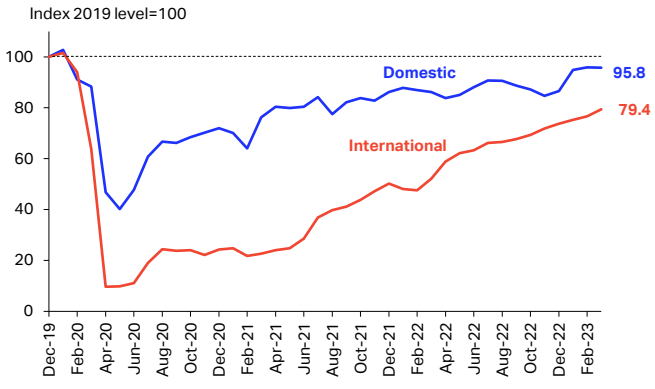
- Air transport is vital for the modern economy. It provides the city-pair connections that serve as virtual bridges supporting the flows of goods and people between markets. As the only rapid global transportation network, air transport facilitates links between businesses, governments, and people – enabling world trade, investment, tourism and travel, among other key economic activities. Increased connectivity drives improved economic outcomes for countries and communities.

- By March 2023, IATA's Global Air Connectivity Index which measures connectivity as scheduled passenger capacity weighed by the relative economic scale of destinations served, had recovered to 79.4% of pre-pandemic levels for international connectivity and 95.8% for domestic connectivity (Chart 26). International air connectivity has recovered more rapidly than domestic over the past year, growing by 27ppts compared with 10 ppts for the latter. This increase primarily reflects the relatively low level of international connectivity in early 2022 and the surge of international travel demand driven by the reopening of international travel markets, which gained momentum through the year. See Table A in the Appendix for the rankings of the top-100 countries based on the 2022 international connectivity index.

- The number of domestic airport pairs served has returned to pre-pandemic levels and has exceeded the 2019 levels by 4.5%. Similarly, international airport pairs are being restored and are at 90% of pre-Covid levels (Chart 27). However, the recovery in international flight frequency, which is particularly important for business travelers, is still behind at 81% of pre-pandemic levels.

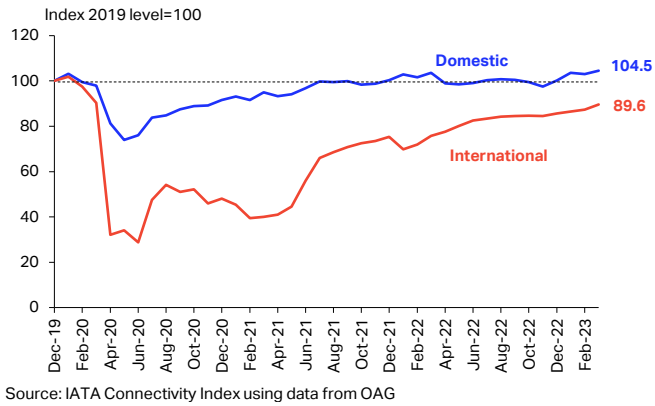
- The recovery in connectivity is broad-based across regions, with Africa the strongest performer currently; international air connectivity in Africa has exceeded its 2019 level, reaching 104% in March 2023. Latin America & the Caribbean and the Middle East regions are approaching pre-Covid levels at 97% and 98%, respectively, while for both Europe and North America, international connectivity is currently at 87% of the 2019 level. Asia Pacific continues to lag the recovery in the other regions, at a modest 62% of 2019 levels in March (Chart 28). However, it is worth noting that Asia Pacific has seen a strong increase of 40 ppts in international air connectivity over the past year. With China and other important regional markets only relatively recently reopening borders and lifting travel restrictions, we anticipate a sizeable improvement again this year, closing the gap further with the performance of other regions.

Chart 26: IATA Global Air Connectivity Index, Jan 2020-Mar 2023



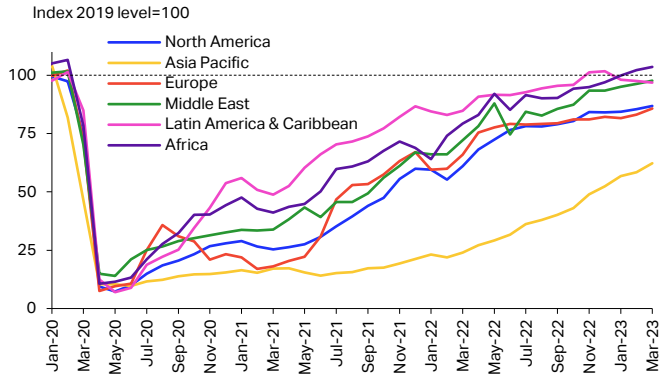
Source: IATA Connectivity Index using data from OAG

Chart 27: Global Airport Pairs, Monthly Jan 2020-Mar 2023



Source: IATA Connectivity Index using data from OAG

Chart 28: Recovery in international connectivity by region through Mar 2023



Source: IATA Connectivity Index using data from OAG

Cargo Traffic

- Growth in world merchandise exports is expected to slow marginally this year, to 2.2% this year, from 2.3% in 2022. This indicates that the air cargo industry may continue to be challenged by soft demand in 2023. From November 2022 through the first two months of 2023, global goods trade has been experiencing year-on-year contractions. Consequently, the demand for air cargo in Q1 2023, measured by cargo tonne-kilometers (CTKs), remained below the levels seen in the same period in 2022.

- Inflation is a significant factor behind the softening global trade and air cargo demand. Although headline inflation peaked at 8.7% in 2022 and is likely to pull back to 7% in 2023, the overall price level will continue to rise this year, albeit at a slower pace. The increasing price of inputs finished products, and services will continue to limit purchasing power, dampen consumption, and ultimately impact the air cargo business.

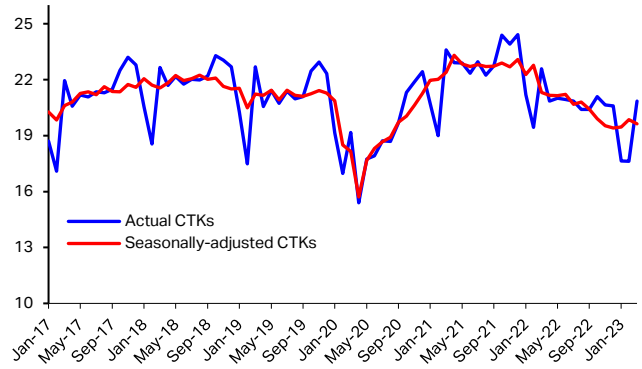
- Amidst these economic challenges, the air cargo industry remained relatively weak and experienced seasonal fluctuations during the first quarter of 2023 (Chart 29). Industry CTK levels picked back up above the 2019 level from the low point in January, before dropping again below the March 2019 level at the end of Q1. North America and Africa remained the only two regions with CTKs above 2019 levels, while Asia Pacific exceeded the pre-Covid level in February before seeing a significant drop in March (Chart 30).

- The uneven growth in CTKs across regions in 2022 resulted in further changes in the distribution of total CTKs among regions (Chart 31). Asia Pacific, though still the largest air cargo market, saw a reduction in its market share from 34.5% in 2019 to 32.4% in 2022. Airlines in North America, with their strong air cargo performance in 2022, increased the region's share of global CTKs from 24.3% in 2019 to 28.1% in 2022. In contrast, due to the war in Ukraine, European airlines experienced an 11.5% decline in CTKs compared to 2021, leading to a decrease in the market share of European airlines from 23.6% in 2019 to 21.8% in 2022.

- Capacity, measured by available cargo tonne-kilometers (ACTKs), continued to rise in Q1 2023, despite the pressures of seasonal factors (Chart 33). The growth in ACTKs was primarily driven by the strong recovery of belly hold capacity in passenger aircraft that are returning to service. In contrast, the capacity of dedicated freighters has been declining since December 2021 (Chart 33).

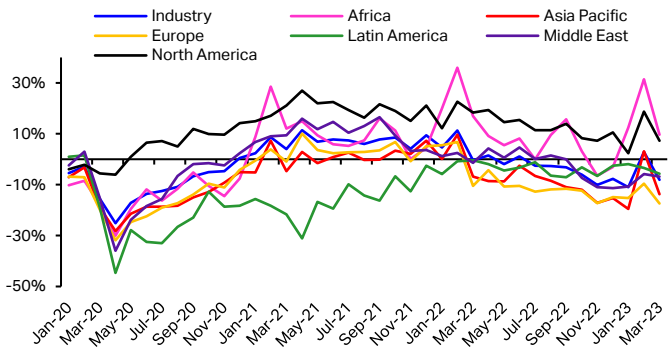
- International CTKs transported by different types of air cargo flights are returning to pre-Covid volumes (Chart 34). With the recovery in international passenger flights, the share of CTKs carried in the belly-holds of passenger aircraft increased to 36% in Q1 2023, with the remaining 64% carried by dedicated freighters. Although the share of CTKs carried by passenger carriers has increased significantly compared to the pandemic period, it has still not returned to the balanced proportions of 2019.

Chart 29: Industry monthly CTKs in billions



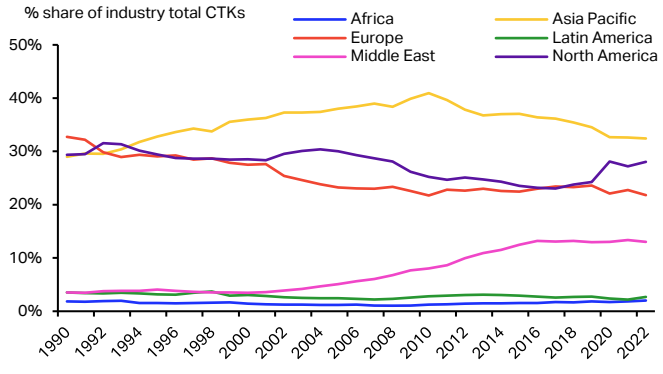
Sources: IATA Monthly Statistics

Chart 30: Global and regional CTKs, % change vs 2019



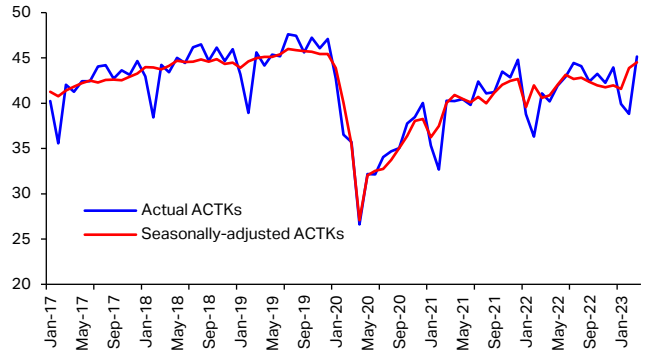
Sources: IATA Monthly Statistics

Chart 31: Share of annual CTKs by region



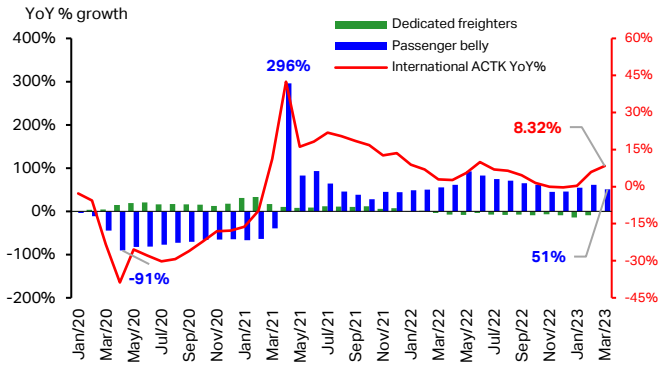
Source:IATA Monthly Statistics

Chart 32: Industry monthly ACTKs in billions



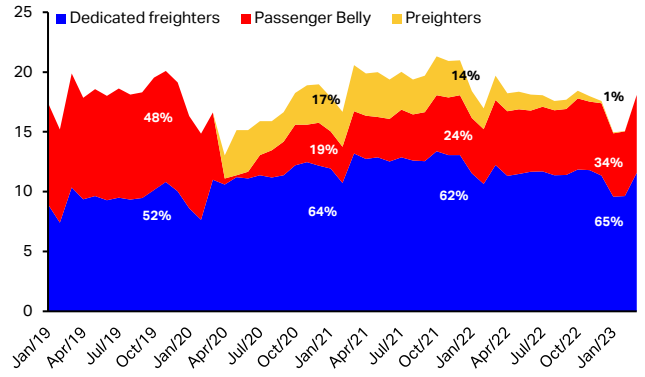
Sources: IATA Monthly Statistics

Chart 33: Growth of international ACTKs by type



Sources: IATA Monthly Statistics

Chart 34: International CTKs (millions) by type



Source: IATA Monthly Statistics

- Seasonally adjusted international CTKs showed varied trends across regions in the first quarter of 2023 (Chart 35). North America experienced a significant decline in international CTKs in January, which stabilized in February and March. On the other hand, airlines in Asia Pacific, Latin America, Africa, and the Middle East showed upward trends during at least the first two months of Q1. Europe, however, exhibited a moderate softening trend throughout Q1 2023.

- Due to the challenging economic climate, international CTKs in March were below the levels seen in 2022 across all regions (Chart 36**Chart 37**). Asia Pacific recorded the largest year-on-year contraction by the end of Q1 2023, followed by Europe and North America. The decline in international CTKs within these three major regional markets contributed to the overall softening demand in the industry.

- With the increased capacity coming online from belly-hold capacity of passenger flights, coupled with the weakened air cargo demand, air cargo load factors have been decreasing across regions over the past year. However, load factors showed improvement in Q1 2023 in all regions compared to the lowest levels observed in January 2023. Asia Pacific-North America and Europe-North America routes experienced a slight decline in load factors in March (Chart 37).

- The purchasing managers' index (PMI) for export orders has historically served as a leading indicator of air cargo demand (Chart 38). It has been below the key 50 threshold since the beginning of 2022, except for February 2022, indicating less buoyant new export orders and consequently, air cargo demand. However, the recent upward trends observed in Q1 2023 suggest a possible improvement in air cargo demand during Q2.

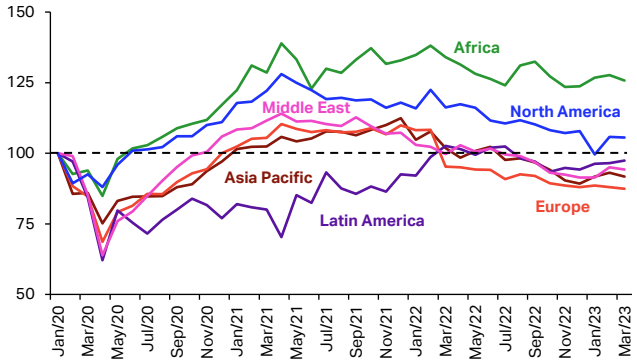
- New export orders PMIs for major economies showed a mixed picture in Q1 2023 (Chart 39). China's PMI retreated to below the 50-mark in March, following a slight improvement that brought it above this threshold in February. In contrast, other major economies such as Germany, Japan, the US, and South Korea all experienced contraction in March compared to February. However, the slight upticks in the PMIs of Germany and Japan suggest a slowdown in the pace of their deceleration.

- Global cross-border trade and industrial production remained above the pre-Covid level in the first quarter of 2023. However, there has been a decoupling between global CTKs and the growth of these two indicators since February 2022, with the difference widening recently. While the gap narrowed slightly in the first quarter of the year, it indicates that the maritime industry has benefited more from the recovery of global trade and industrial production compared to the air cargo industry (Chart 40, Chart 41 and Chart 42).

- Our Business Confidence Survey of airline Heads of Cargo shows that the industry's outlook remains positive for the next twelve months, with 54% of respondents expecting an improvement in cargo operations, and only 17% expecting a decrease (Chart 43). The weighted score of business confidence for the next twelve months is 68.8, higher than for the next three months, which stands at 54.3 (Chart 44).

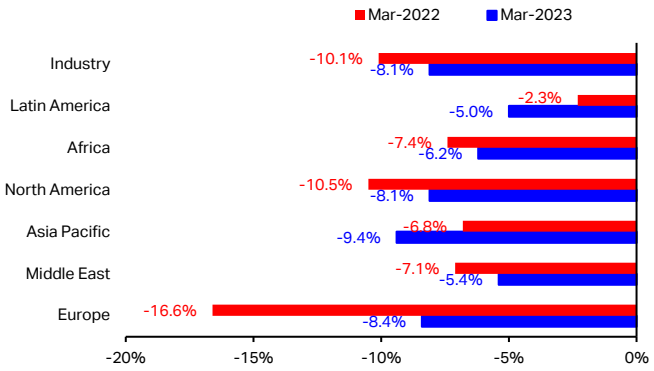
Chart 35: Seasonally adjusted monthly international CTKs

Indexed, Jan 2020 level = 100



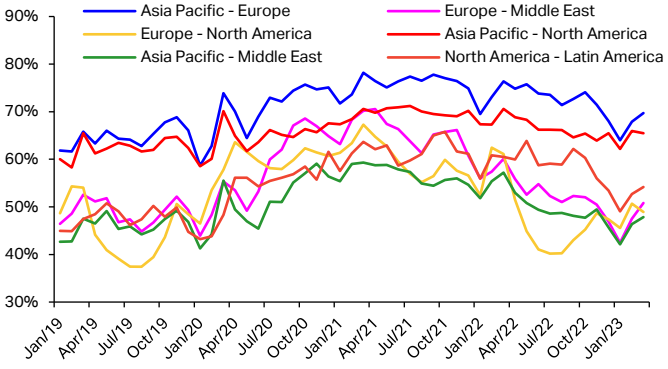
Sources: IATA Monthly Statistics

Chart 36: International CTK growth by airline region of registration, % change YoY



Sources: IATA Monthly Statistics

Chart 37: Cargo load factors in major route areas, % share of ACTK

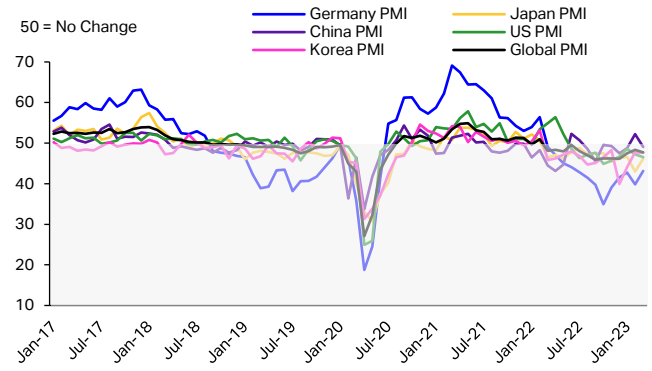


Sources: IATA Monthly Statistics

Chart 38: Global manufacturing new export orders and industry CTK growth

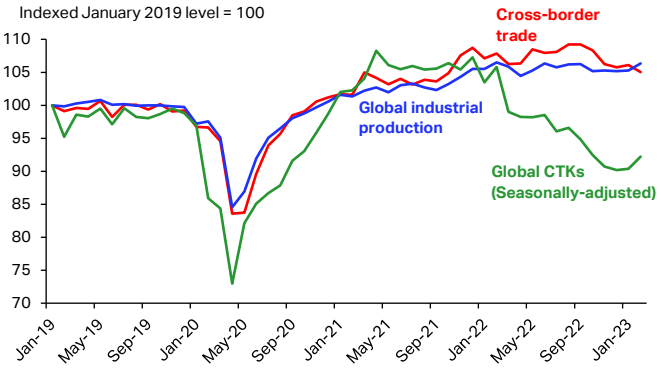
Sources: IATA S&E Economics, IATA Monthly Statistics, Markit

Chart 39: Country-specific PMI new export orders



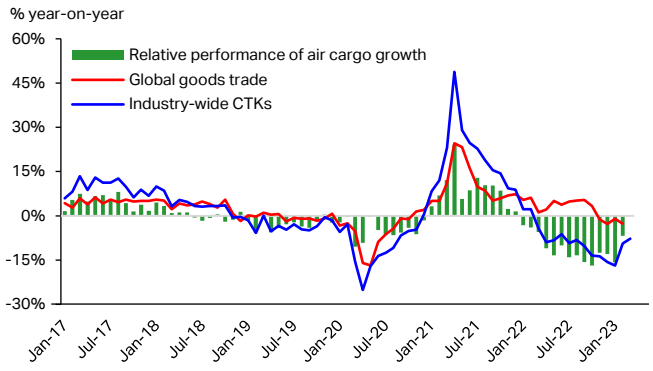
Sources: Markit

Chart 40: Global trade, industrial production and CTKs



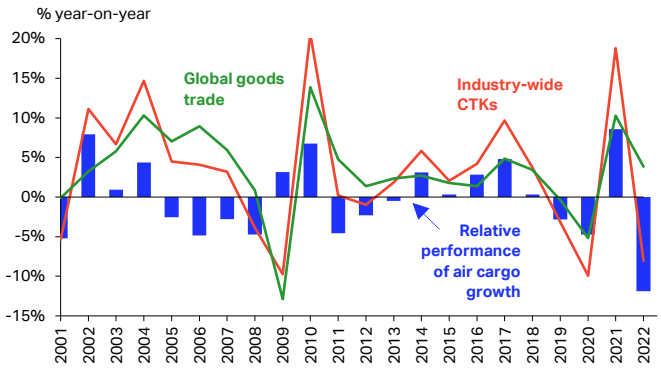
Source: IATA Economics, Netherlands CPB

Chart 41: Growth in industry-wide CTKs and global merchandise trade



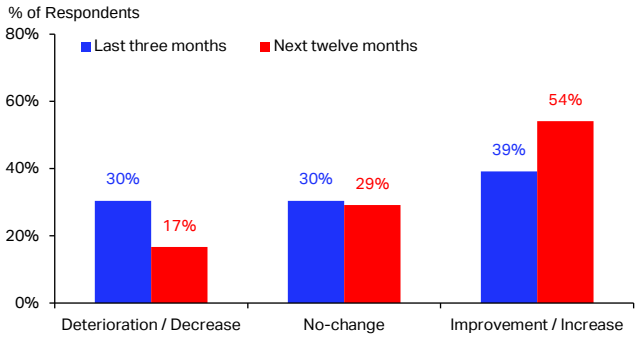
Sources: IATA Statistics, Netherlands CPB

Chart 42: Growth in industry-wide CTKs and global trade



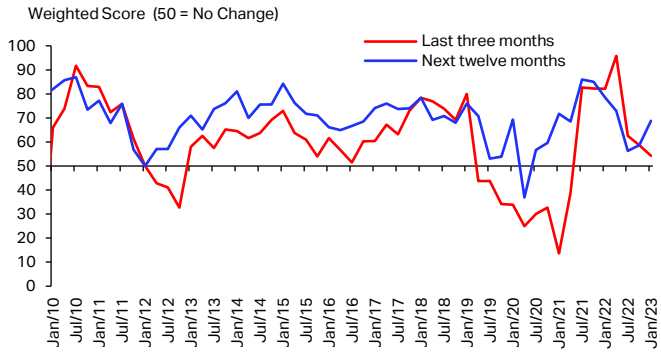
Sources: IATA Monthly Statistics, Netherlands CPB *average of monthly data. 2021

Chart 43: Business Survey Results: How did cargo operations in the last three months compare with the same period last year and how do you expect them to change over the next twelve months?



Sources: IATA Business Confident Survey (January 2023)

Chart 44: Business Survey Results: How did your cargo operations in the last three months compare with the same period last year and how do you expect them to change over the next 12 months? (Jan 2010-23)



Source: IATA Business Confidence Survey (January 2023)

IV. Regional Outlook

Africa and the Middle East

- The passenger traffic recovery has been strong for the Africa and Middle East carriers, with year-over-year growth of 87.1% and 64.6%, respectively, in the first quarter of 2023. For carriers based in Africa, RPKs this quarter were only 9.4% below their levels in Q1 2019. The region, however, continues to face economic barriers that impact the propensity of air travelers to spend, along with various infrastructure challenges that curtail aviation capacity and impede the establishment of reliable air service.

- Middle East airlines saw their RPKs reach within 8.3% of their Q1 2019 levels. Both regions outperformed the global recovery of RPKs, which reached 85.9% (within 14.1%) of pre-Covid levels for the quarter (Chart 45). Since most of the passenger traffic for Africa and the Middle East is international, total RPKs followed similar growth trends and recovery rates as international RPKs for these regions (Chart 46).

- Ticket sales for the regions have consistently outperformed the global average since spring 2021, and although the gap is narrowing, the positive trend in ticket sales suggests sustained passenger demand in the upcoming quarter (Chart 48).

- The country total origin-destination (O-D) passenger traffic trends exhibited high recovery rates for the main economies of the regions. In Northern Africa, compared to the same period in 2019, Morocco and Egypt saw 20% and 29% growth in O-D passenger traffic, while Tunisia and Algeria trended very close to pre-pandemic levels. Reflecting its weakened local economy, as well as airline capacity constraints, South Africa's passengers were 12% below their 2019 levels for the same period, but still improved from the 21% deficit observed last quarter. Passenger traffic in Nigeria was an impressive 57% above 2019 levels, sustaining the positive results we highlighted in the fourth quarter of 2022.

- The Middle East has also seen sustained recovery with most countries having rebounded, except for Iran and Kuwait where traffic was respectively 26% and 4% short of full recovery. Jordan, Qatar, Saudi Arabia, and UAE all posted strong growth numbers compared with their 2019 passenger levels (Chart 49).

- Although the annual growth in available seat kilometers (ASKs) lagged the growth in RPKs, capacity still increased by 62.6% and 35.9% for carriers from Africa and the Middle East, respectively. This slower growth in capacity led to higher passenger load factors for both regions, surpassing pre-pandemic levels. African airlines experienced a 9.8ppt increase in passenger load factors compared to 2022, while Middle East carriers saw a 13.8ppt rise (Chart 50).

- Cargo performance for airlines registered in Africa was robust in 2021, with cargo volumes mostly surpassing 2019 levels since early that year. In February 2023, CTKs were a remarkable 26% above 2019 levels. Although CTKs remained 15.4% above 2019 levels in Q1 2023, they have gradually declined since September 2022, with an average annual decline of 6.4% in the first quarter of 2023.

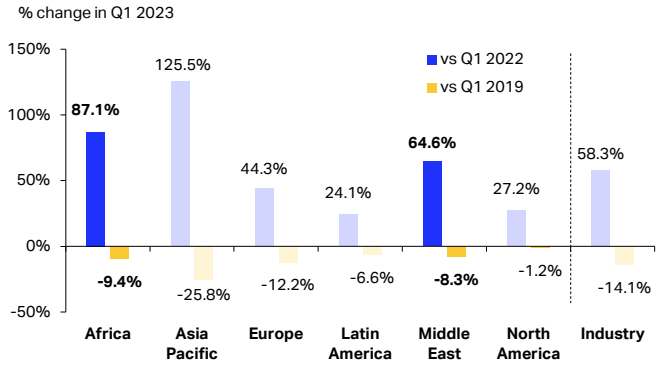
- Cargo activity for Middle East airlines also decreased from the volumes seen in 2021, which were significantly higher than pre-crisis levels. Starting in January 2022, Middle East airlines experienced a continuous decline in cargo, with CTKs falling 8.1% YoY in Q1 2023 and dropping to 7.5% below 2019 levels (6.8% below 2019 levels in March). This decline in cargo activity in Africa and the Middle East regions reflects the global slowdown in air cargo demand (Chart 47).

- Aircraft deliveries in Africa are expected to pick up to 32 aircraft in 2023. Most deliveries will be received by a few carriers in the region. While 23 out of 48 deliveries (48%) in 2019 were for widebody jets, the majority of deliveries in 2020 through 2023 are for narrowbodies. However, regional jet and turboprop

aircraft deliveries remain healthy in the region, supporting short-haul and intra-regional air travel (Chart 50).

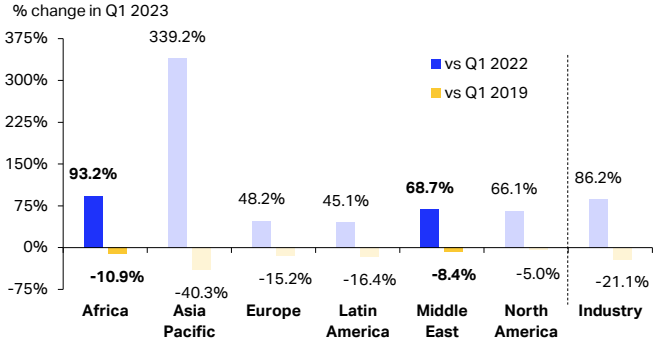
- For Middle East carriers, aircraft deliveries have maintained an upward trend since the lows of 2020. Deliveries for 2023, including 57 planes that are scheduled to be received by the end of the year, are set to increase by nearly 50% over the previous year's numbers. With 82 aircraft in total for 2023, Middle East aircraft deliveries are set to recover to their 2019 levels. This region has also seen a shift in deliveries from predominantly widebody jets in 2019 to narrowbodies since 2020. The scheduled deliveries for 2023 indicate growth in both types of jet aircraft, with narrowbodies still accounting for most of the deliveries in the region (Chart 50).

Chart 45: Growth in RPKs by region (Africa-Middle East)



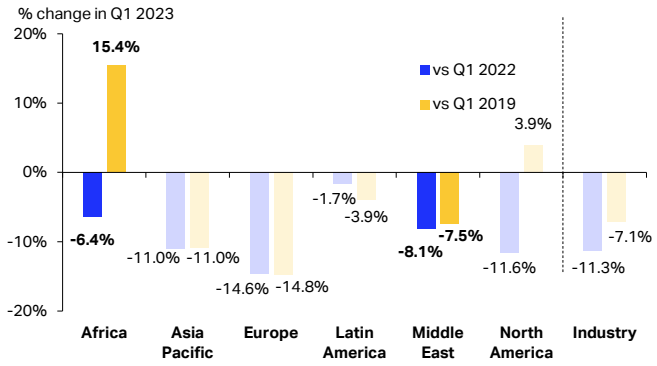
Source: IATA Monthly Statistics

Chart 46: Growth in international RPKs by region (Africa-Middle East)



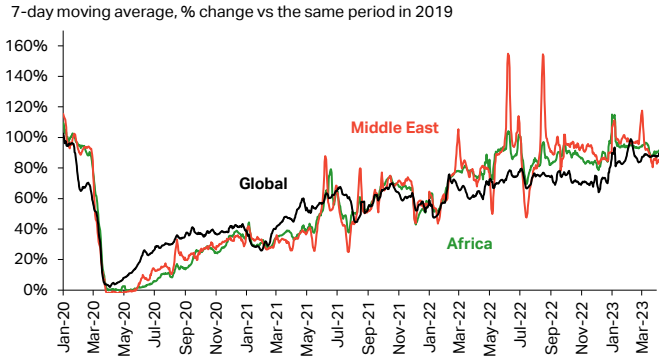
Source: IATA Monthly Statistics

Chart 47: Growth in CTKs by region (Africa-Middle East)



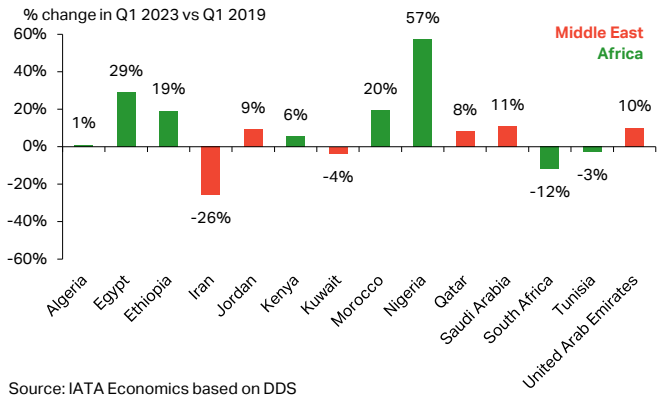
Source: IATA Monthly Statistics

Chart 48: Ticket sales by region (7-day moving average), Africa-Middle East



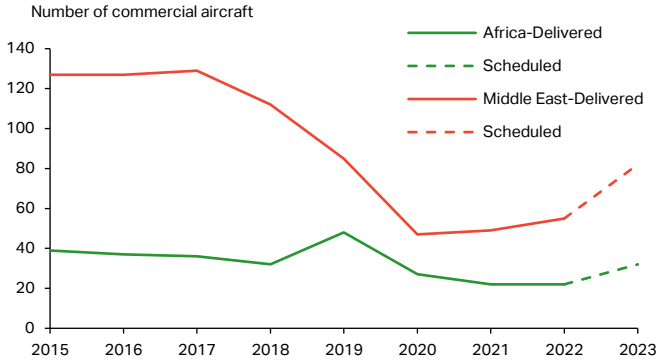
Source: IATA Economics based on DDS data

Chart 49: Passenger traffic (O-D) growth by country in Q1 2023 (Africa-Middle East)



Source: IATA Economics based on DDS

Chart 50: Aircraft deliveries in 2015-2023 (scheduled), Africa-Middle East



Source: IATA Economics using data from Cirium

	World share [1]	Q1 2023 (% ch vs the same quarter in 2022)				Q1 2023 (% ch vs the same quarter in 2019)			
		RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]	RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]
Total market	***100.0%***	**58.3%**	**37.6%**	**10.3%**	**78.9%**	**-14.1%**	**-12.0%**	**-1.9%**	**78.9%**
Africa	*2.1%*	87.1%	62.6%	9.8%	74.5%	-9.4%	-13.4%	3.3%	74.5%
Middle East	*9.8%*	64.6%	35.9%	13.8%	79.4%	-8.3%	-15.0%	5.8%	79.4%

[1]% of industry RPKs in 2022 [2]Change in load factor [3]Load 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 registrated; it should not be considered as regional traffic.

Americas

- In the first quarter of 2023, North America and Latin America airlines increased their total RPKs by 27.2% and 24.1%, respectively, compared to Q1 2022. This expansion in passenger traffic contributed to the strong recovery for the region's carriers, as they have almost returned to their 2019 levels, recovering 98.8% in North America and 93.4% in Latin America airlines (Chart 51).

- For North America airlines, international RPKs followed the general upward trend of the other regions with a growth of 66.1% in Q1 2023 over the same period in 2022. Although their international passenger volume was 5.0% below 2019 levels, they remain the closest to pre-Covid levels compared with other regions. This improvement can be attributed to Canada's fast recovery in this quarter, recovering 90% of pre-pandemic traffic while the US market stayed just above 2019 levels (Chart 52, Chart 55).

- Latin America airlines, with a 45.1% annual increase, had the lowest international passenger traffic growth amongst the regions, but were close to the average recovery of pre-pandemic traffic, with their RPKs sitting 16.4% below Q1 2019 levels (Chart 52). This region's traffic also exhibits a high degree of variation across countries. Some countries have demonstrated a strong recovery including Colombia, Mexico, and the Dominican Republic, growing to more than 15 ppts above 2019 levels. Other important markets in the region, such as Argentina, Peru, and Brazil, remained 5 to 12 ppts below 2019 levels.

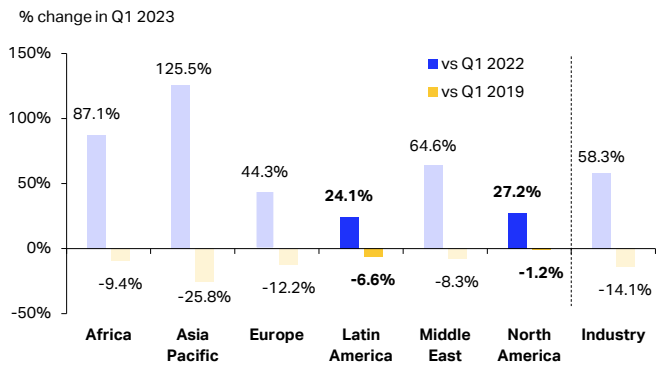
- The passenger load factor increased the first quarter for both regions with a 5.8% rise for North America carriers and 1.7% for airlines based in Latin America. Ticket sales showed a positive trend in the first quarter, and recent data suggest that airlines in the region are increasing capacity to cover the summer season (Chart 54). Although ticket sales outperformed the global average trend, they have converged in the latest period as global ticket sales picked up momentum to catch up with their pre-crisis volumes.

- Cargo traffic for North America and Latin America airlines followed the industry's downward trend of CTKs, which was 11.3% below its Q1 2022 level. Although cargo traffic for Latin America carriers was 1.7% below Q1 2022 levels, they experienced the smallest decline in CTKs compared with other airline regions that suffered significant traffic losses over the same period. In part, this can be attributed to the strong demand for flower exports from Colombia and Ecuador, the world's second and third largest flower exporters, and more than 95% of these exports are moved by air cargo. On the other hand, North American airlines saw their CTKs drop 11.6% below Q1 2022 levels, showing the second-biggest decline in cargo traffic after the European carriers. The decline in air cargo demand in North America, in part, is tied to the rebound of the maritime industry, which was facilitated by the easing of shipping restrictions and logistical bottlenecks (Chart 53).

- Several Latin American countries continued to maintain their O-D passenger traffic above 2019 levels, including Colombia, Mexico, Ecuador, and the Dominican Republic. With 4% growth over 2019 levels, Costa Rica joined the group of Latin American markets that posted passenger numbers above pre-crisis levels in Q4 2022. Although Jamaica's traffic dipped below pre-pandemic levels in Q1 2023, Caribbean states have benefited from air service expansions, flexible operating environments and government policies that promote tourism in the region. Cuba continued to lag in the recovery, although it showed modest improvements in the passenger numbers for this quarter (Chart 55).

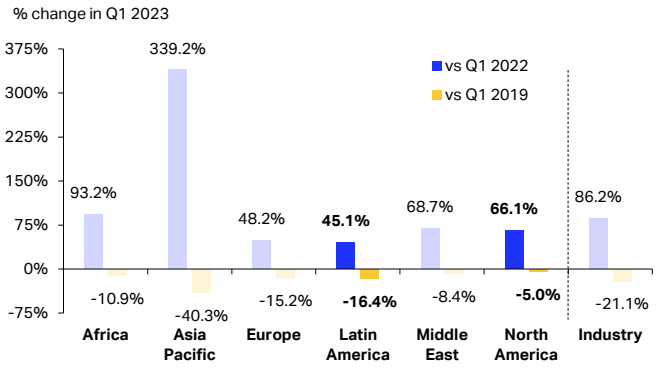
- Around one-third of global aircraft deliveries for 2023 are anticipated to be received by carriers in North America (primarily in the US). Although the region's aircraft deliveries were already above 2019 levels last year, they are expected to grow by an additional 72 units this year. The aircraft deliveries planned for 2023 support the region's expected full recovery of passenger traffic this year. Deliveries in the Latin American region also recovered to pre-pandemic levels in 2022. Scheduled and fulfilled deliveries in 2023 suggest that the fleet growth for in terms of new aircraft is moderating this year. For both regions, deliveries are expected to be primarily narrowbody jets (Chart 56).

Chart 51: Growth in RPKs by region (Americas)



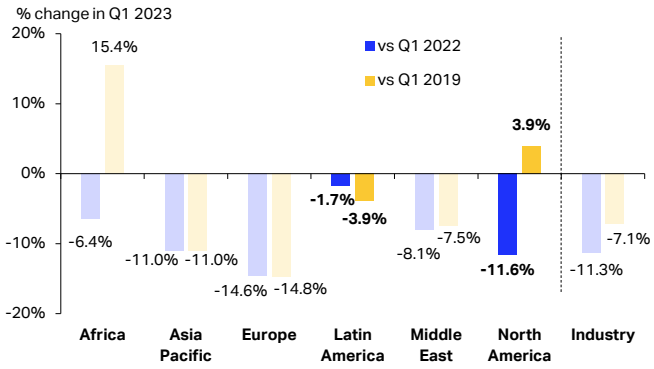
Source: IATA Monthly Statistics

Chart 52: Growth in international RPKs by region (Americas)



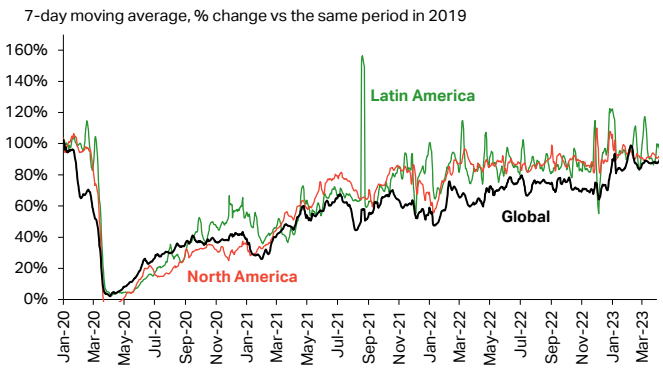
Source: IATA Monthly Statistics

Chart 53: Growth in CTKs by region (Americas)



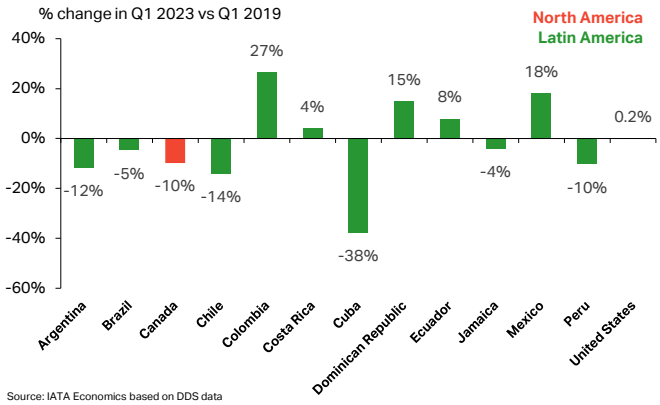
Source: IATA Monthly Statistics

Chart 54: Ticket sales by region (7-day moving average), Americas



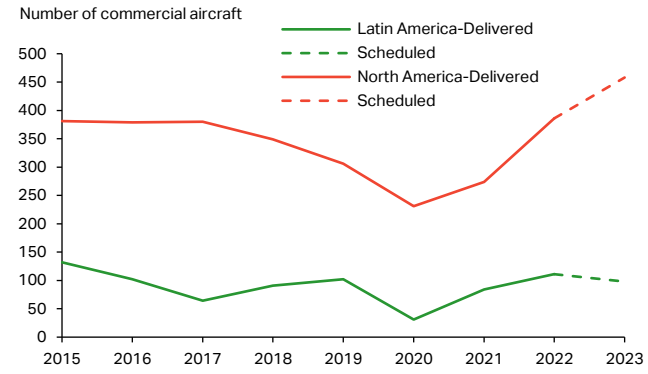
Source: IATA Economics based on DDS data

Chart 55: Passenger traffic (O-D) growth by country in Q1 2023, Americas



Source: IATA Economics based on DDS data

Chart 56: Aircraft deliveries in 2015-2023 (scheduled), Americas



Source: IATA Economics using data from Cirium Fleet

	World share [1]	Q1 2023 (% ch vs the same quarter in 2022)				Q1 2023 (% ch vs the same quarter in 2019)			
		RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]	RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]
Total market	*100.0%*	**58.3%**	**37.6%**	**10.3%**	**78.9%**	**-14.1%**	**-12.0%**	**-1.9%**	**78.9%**
Latin America	*6.4%*	24.1%	21.6%	1.7%	81.3%	-6.6%	-6.0%	-0.5%	81.3%
North America	*28.9%*	27.2%	18.0%	5.8%	80.2%	-1.2%	1.1%	-1.8%	80.2%

[1]% of industry RPKs in 2022 [2]Change in load factor [3]Load 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 registrated; it should not be considered as regional traffic.

Asia Pacific

- The Asia Pacific airlines registered a strong traffic recovery in Q1 2023, compared to the same period last year, with RPKs increasing by 125.5% (Chart 57). This was the highest growth amongst the regions. However, when compared to pre-Covid traffic levels, Asia Pacific still lagged other regions, with RPKs at only 74.2% of the levels seen in Q1 2019. Total ASKs for airlines in the region grew by 74.3% YoY in Q1 2023, reaching 77.2% of pre-pandemic levels and marking a significant increase in capacity. Additionally, the passenger load factor for the region's airlines also improved, showing a year-on-year increase of 17.9 ppts and reaching 78.8%. These developments in total ASK and passenger load factor are highly encouraging and support the increasing demand for air travel in the region.

- Similar but more pronounced trends in the annual growth and recovery to pre-pandemic levels were observed in Asia Pacific's international RPKs (Chart 58). International RPKs of airlines in the region grew by more than three times in Q1 2023, compared to the same period last year. Starting from a low base, this was by far the strongest growth across the regions. However, international traffic of Asia Pacific airlines is still the lowest versus 2019 levels of all regions, reaching only 59.7% of Q1 2019 RPKs. This trend reflects the fact that borders in the region opened much later than in other regions and the recovery only started to take place late last year.

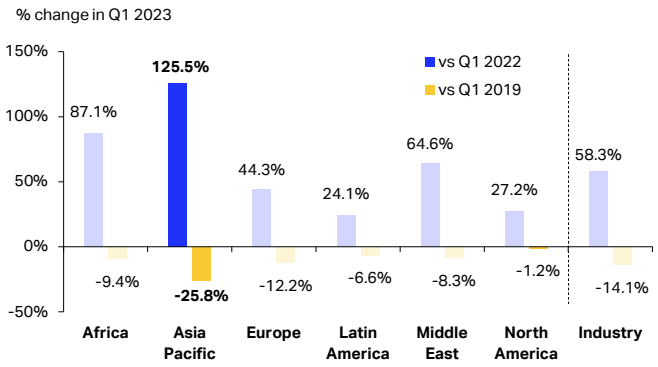
- Cargo traffic for Asia Pacific airlines during Q1 2023 experienced an 11% decrease compared to both Q1 2022 and pre-pandemic levels (Chart 59), placing the region behind most other regions on this measure. Airlines in the region continued to be impacted by disruptions to trade, manufacturing, and supply chains due to pandemic-related challenges in China.

- Ticket sales in the region were below the global average for most of 2022, reflecting the slower reopening of borders in the region. However, ticket sales caught up in Q1 2023 (Chart 60) as traffic in the region continued to recover to pre-pandemic level. This includes China's domestic air travel market, which has recovered fully to 2019 levels over the course of the first quarter this year. Shortly after the reopening of China's international borders in January, a surge in international ticket sales also indicated the start of the rebounding trend in China's international markets.

- Since Q4 2022, the region has seen a broad recovery in O-D passenger numbers. With the slower reopening of the Greater China region and residual restrictions in China, however, China lagged significantly behind other major economies in the Asia Pacific region last quarter. In Q1 2023, the strong recovery in China's domestic and international markets helped China increase passenger traffic to be within 15% of 2019 levels for the same period (Chart 61). Chinese Taipei and Hong Kong (SAR) have also improved their O-D passenger traffic, although not at the pace of mainland China. Other economies in the wider region have benefited from the remarkable recovery that is taking place in the Greater China area, although passengers for most remained significantly below their 2019 numbers. Vietnam's passenger traffic climbed just above pre-crisis while India also recovered passenger volumes to be 1% above 2019 levels. Apart from New Zealand, where traffic remained stable, all countries achieved further recovery in Q1 2023 as connectivity with other regions continued to be restored.

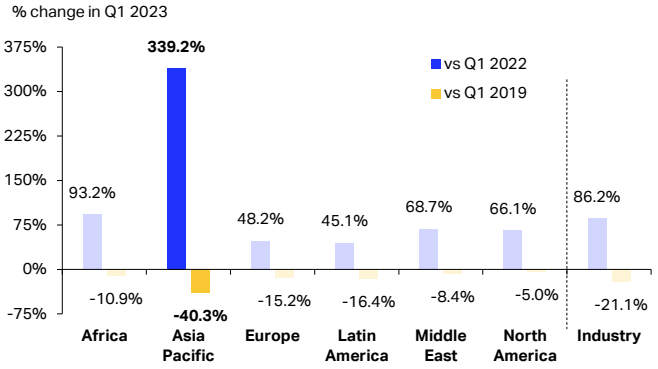
- The number of aircraft expected to be delivered in the Asia Pacific region remains relatively low as the region has yet to recover to pre-Covid levels (Chart 62). However, deliveries have maintained a steady increase from the depth of 2020 levels, and the region expects a 21% YoY increase in new aircraft for 2023. With 427 units scheduled for 2023, of which 88 have already been delivered, the Asia Pacific region will account for the second-highest volume of aircraft deliveries in 2023 (29% share). Prior to the pandemic, the Asia Pacific region (mainly China and India) typically accounted for the largest share of global aircraft deliveries (39% share in 2019). Since Asia Pacific also accounted for the largest share of widebody orders, the slower recovery of the region's traffic has thus contributed to the delayed recovery in widebody aircraft deliveries.

Chart 57: Growth in RPKs by region (Asia Pacific)



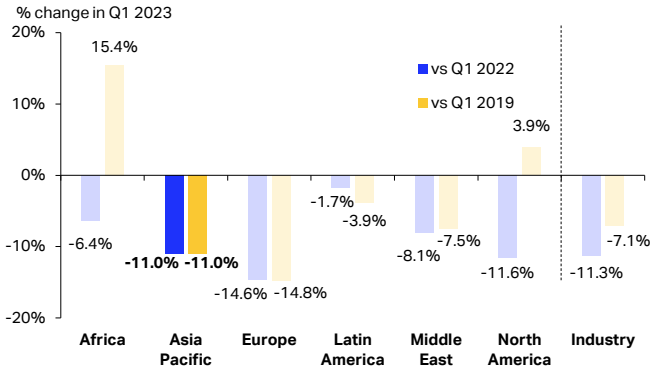
Source: IATA Monthly Statistics

Chart 58: Growth in international RPKs by region (Asia Pacific)



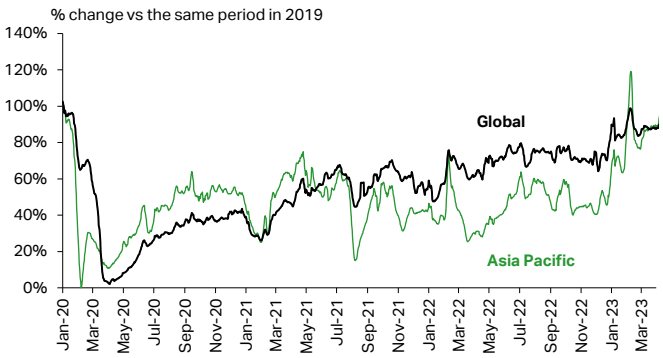
Source: IATA Monthly Statistics

Chart 59: Growth in CTKs by region (Asia Pacific)



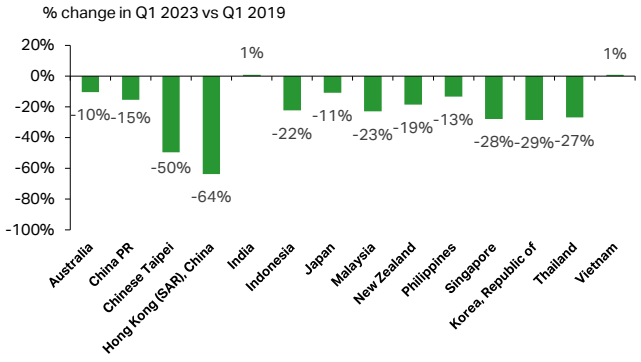
Source: IATA Monthly Statistics

Chart 60: Ticket sales by region (7-day moving average), Asia Pacific



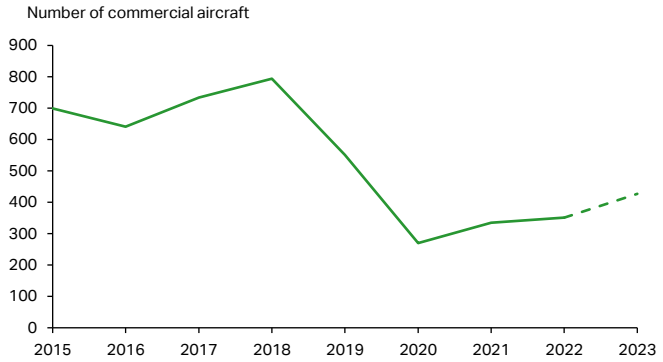
Source: IATA Economics

Chart 61: Passenger traffic (O-D) growth by country in Q1 2023, Asia Pacific



Source: IATA Economics based on DDS data

Chart 62: Aircraft deliveries in 2015-2023 (scheduled), Asia Pacific



Source: IATA Economics using data from Cirium Fleet

	World share [1]	Q1 2023 (% ch vs the same quarter in 2022)				Q1 2023 (% ch vs the same quarter in 2019)			
		RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]	RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]
Total market	***100.0%***	**58.3%**	**37.6%**	**10.3%**	**78.9%**	**-14.1%**	**-12.0%**	**-1.9%**	**78.9%**
Asia Pacific	*22.1%*	125.5%	74.3%	17.9%	78.8%	-25.8%	-22.8%	-3.2%	78.8%

[1]% of industry RPKs in 2022 [2]Change in load factor [3]Load 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 registrated; it should not be considered as regional traffic.

Europe

- Despite the impacts of the ongoing war in Ukraine, and the wave of Omicron variant cases early in 2022, air passenger traffic in Europe has been rebounding swiftly since March 2022. This rapid growth continued through the first quarter of 2023, as European airlines experienced a robust 44% increase in total passenger traffic compared to the same period in 2022 (Chart 63). Though not fully recovered by the end of the first quarter, European airlines managed to narrow the gap to just 12% below pre-pandemic levels. This recovery was mostly led by domestic air passenger traffic, which has already surpassed its Q1 2019 level by more than 10%.

- Moreover, European airlines have been responsible for carrying almost 40% of global international air passengers. In the first quarter, international traffic handled by the airlines saw a 48% surge compared to the same period last year. However, it remains 15% below pre-pandemic levels (Chart 64).

- In terms of capacity, ASKs by European airlines have recovered to 92% of 2019 levels during the first quarter of this year, shortly behind airlines in the Americas, but ahead of airlines from the rest of the world. Domestic air passenger capacity has fully recovered to pre-pandemic levels, while international passenger capacity, however, was affected by Russia's invasion of Ukraine and by limited air space capacity. Still, international ASKs have managed to recover by almost 27% YoY and are only 8% short of their pre-pandemic level.

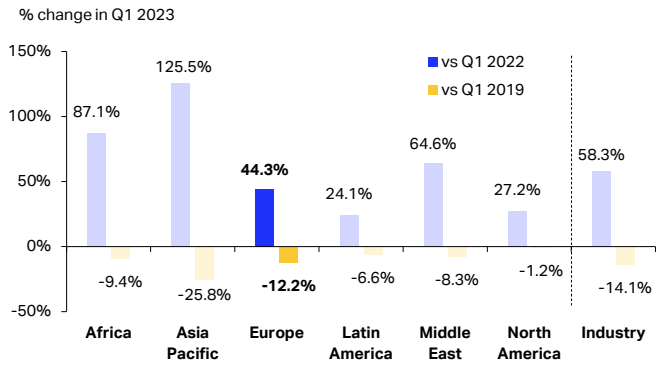
- The load factors of European carriers have been improving steadily from the air passenger side and stood at 77% at the end of the first quarter, slightly below their pre-pandemic level. This is mostly led by the domestic passenger segment, where the load factor reached 88% during the first quarter and recorded the highest domestic passenger load factor compared to airlines from other regions. Cargo load factors, on the other hand, had seen some improvement since the start of this year, despite the downward trend they experienced since early 2021. Cargo load factors averaged 56% for European carriers for the first quarter in 2023, 10 ppts higher than the average industry cargo load factor, and the highest compared to airlines from other regions.

- Air passengers in Europe showed a rapid recovery in ticket sales through mid-2022. Since then, the upward trend has slowed down, aligning with the global average in recent months (Chart 66). These developments are partly reflected in the varied O-D passenger trends for the region's major markets. During the first quarter of this year, Portugal stood out with 23% more traffic compared to pre-pandemic levels, owing to the reviving tourism travel. Italy, Poland, Greece, and Spain also registered growth this quarter over their 2019 passenger levels. Despite the recovery in the breadth of Europe's connectivity, O-D passengers in Finland and Germany were notably still 24% and 29% below their respective 2019 levels. With the summer season approaching, we can anticipate increased activity among travelers to and from the region (Chart 67).

- In the realm of air cargo, fluctuations have been observed across all regions. After experiencing a downward trajectory throughout 2022, total air cargo traffic for European airlines began stabilizing at the beginning of 2023. During the first quarter of 2023, these airlines transported approximately 15% less cargo compared to both the corresponding period in 2022 and pre-pandemic levels (Chart 65). Europe's air cargo performance was the weakest compared with other regions.

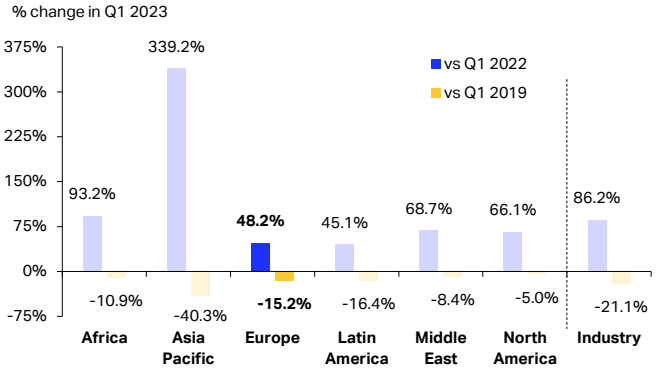
- European airlines demonstrated confidence in their traffic growth as they continued to acquire new aircraft for this year. Maintaining their steady growth in delivery volumes from 2020, deliveries are set to grow by 20% in 2023. With 98 units delivered and an additional 279 aircraft to be received in Europe, a total of 377 aircraft deliveries places European carriers as the third-largest recipients of aircraft in 2023 (26% share). Europe accounts for the second largest share of widebodies scheduled for delivery in 2023, following Asia Pacific. Although widebody deliveries are up by more than 20% YoY, they are still lagging their pre-pandemic levels (Chart 68).

Chart 63: Growth in RPKs by region (Europe)



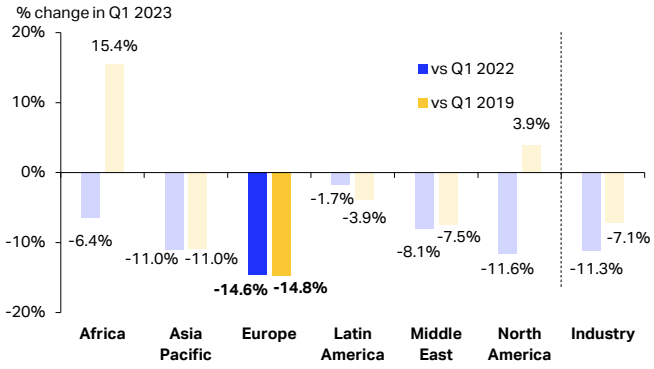
Source: IATA Monthly Statistics

Chart 64: Growth in international RPKs by region (Europe)



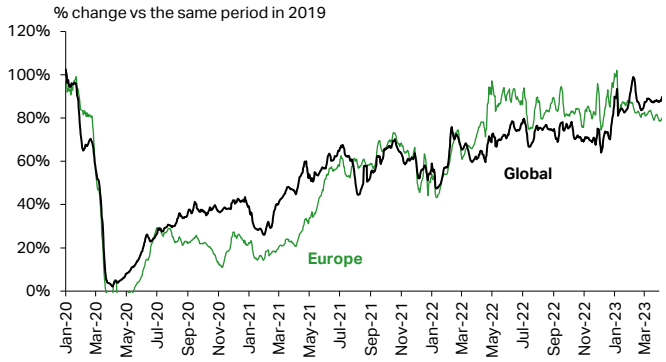
Source: IATA Monthly Statistics

Chart 65: Growth in CTKs by region (Europe)



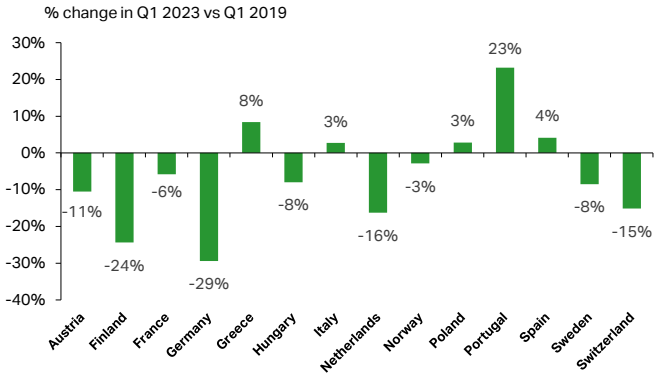
Source: IATA Monthly Statistics

Chart 66: Ticket sales by region (7-day moving average), Europe



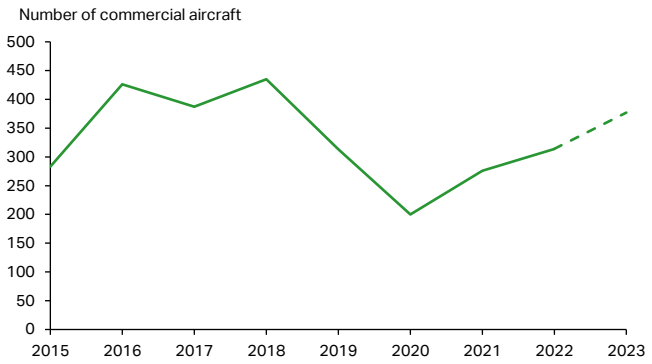
Source: IATA Economics based on DDS data

Chart 67: Passenger traffic (O-D) growth by country in Q1 2023, Europe



Source: IATA Economics based on DDS data

Chart 68: Aircraft deliveries in 2015-2023 (scheduled), Europe



Source: IATA Economics using data from Cirium Fleet

	World share [1]	Q1 2023 (% ch vs the same quarter in 2022) RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]	Q1 2023 (% ch vs the same quarter in 2019) RPK	ASK	PLF (%-pt)[2]	PLF (level)[3]
Total market	***100.0%***	**58.3%**	**37.6%**	**10.3%**	**78.9%**	**-14.1%**	**-12.0%**	**-1.9%**	**78.9%**
Europe	*30.7%*	44.3%	26.9%	9.3%	77.4%	-12.2%	-7.2%	-4.4%	77.4%

[1]% of industry RPKs in 2022 [2]Change in load factor [3]Load 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 registrated; it should not be considered as regional traffic.

V. Appendix

Table A: Top 100 countries based on the International Connectivity Index 2022

Country	International Connectivity Score 2022	Global Ranking 2019	Global Ranking 2022	Difference in ranking between 2019 and 2022	Growth in International Connectivity between 2019-2022
United States	41,581,617	1	1	=	-25%
United Kingdom	30,661,411	3	2	↑1	-27%
Germany	25,096,867	4	3	↑1	-31%
Spain	24,355,319	6	4	↑2	-15%
Italy	19,217,163	7	5	↑2	-25%
France	18,523,275	9	6	↑3	-23%
United Arab Emirates	16,677,454	10	7	↑3	-25%
India	14,631,645	13	8	↑5	-22%
Mexico	14,557,109	19	9	↑10	11%
Türkiye	13,689,158	18	10	↑8	0%
Canada	12,374,830	15	11	↑4	-30%
Netherlands	9,994,019	20	12	↑8	-23%
Saudi Arabia	9,343,537	27	13	↑14	-7%
Singapore	9,018,972	14	14	=	-51%
Switzerland	8,982,575	23	15	↑8	-27%
Portugal	8,144,580	28	16	↑12	-4%
Thailand	7,947,586	8	17	↓9	-68%
Japan	7,796,545	5	18	↓13	-76%
Greece	7,608,231	31	19	↑12	6%
Qatar	7,590,885	29	20	↑9	-10%
Korea, Republic of	6,235,668	11	21	↓10	-71%
Ireland	6,224,766	30	22	↑8	-14%
Australia	5,874,971	22	23	↓1	-53%
Egypt	5,329,968	38	24	↑14	6%
Vietnam	5,130,054	24	25	↓1	-58%
Philippines	5,087,617	25	26	↓1	-54%
Denmark	5,028,040	33	27	↑6	-25%
Malaysia	4,951,311	17	28	↓11	-65%
Chinese Taipei	4,929,463	16	29	↓13	-71%
Austria	4,880,385	32	30	↑2	-32%
Poland	4,822,626	35	31	↑4	-19%
Indonesia	4,490,084	21	32	↓11	-65%
Sweden	4,260,618	34	33	↑1	-32%
Pakistan	4,118,028	42	34	↑8	-4%

Israel	4,041,296	39	35	↑4	-15%
Hong Kong (SAR)	3,983,993	12	36	↓24	-81%
Belgium	3,944,200	36	37	↓1	-25%
Norway	3,769,163	40	38	↑2	-21%
Dominican Republic	3,709,490	50	39	↑11	9%
Brazil	3,649,433	37	40	↓3	-29%
Russian Federation	3,493,876	26	41	↓15	-68%
Morocco	3,368,671	44	42	↑2	-13%
China PR	3,314,579	2	43	↓41	-93%
Colombia	3,283,407	53	44	↑9	10%
Kuwait	2,991,730	43	45	↓2	-26%
Romania	2,853,258	52	46	↑6	-9%
Finland	2,837,374	41	47	↓6	-37%
Bangladesh	2,392,432	60	48	↑12	1%
Iran	2,308,292	58	49	↑9	-5%
Panama	2,204,145	61	50	↑11	-6%
Bahrain	2,090,387	57	51	↑6	-15%
Hungary	2,058,440	54	52	↑2	-30%
Jordan	1,946,083	64	53	↑11	-9%
South Africa	1,937,336	51	54	↓3	-40%
Czech Republic	1,932,861	48	55	↓7	-46%
Oman	1,862,658	46	56	↓10	-50%
Croatia	1,836,896	67	57	↑10	-12%
Argentina	1,827,451	55	58	↓3	-35%
Cyprus	1,823,423	66	59	↑7	-14%
Lebanon	1,742,045	62	60	↑2	-23%
Jamaica	1,639,535	75	61	↑14	-3%
Ethiopia	1,603,085	63	62	↑1	-28%
Peru	1,548,066	65	63	↑2	-27%
Iraq	1,541,110	71	64	↑7	-20%
Maldives	1,538,482	82	65	↑17	17%
Costa Rica	1,528,565	77	66	↑11	0%
Tunisia	1,483,046	73	67	↑6	-14%
Serbia	1,468,422	78	68	↑10	-4%
Sri Lanka	1,467,298	56	69	↓13	-44%
Iceland	1,447,343	76	70	↑6	-13%
Algeria	1,378,069	68	71	↓3	-33%
Chile	1,335,259	69	72	↓3	-34%
New Zealand	1,320,836	47	73	↓26	-63%
Bulgaria	1,196,526	74	74	=	-29%
Nepal	1,163,285	79	75	↑4	-21%

Kenya	1,095,967	81	76	↑5	-22%
Nigeria	1,080,284	85	77	↑8	-9%
Uzbekistan	1,076,566	88	78	↑10	3%
Kazakhstan	1,073,619	80	79	↑1	-27%
Cambodia	998,619	49	80	↓31	-72%
Bahamas	989,834	84	81	↑3	-18%
El Salvador	973,597	87	82	↑5	-10%
Cuba	962,154	72	83	↓11	-48%
Malta	894,208	86	84	↑2	-23%
Ecuador	844,818	92	85	↑7	-11%
Azerbaijan	832,709	90	86	↑4	-15%
Latvia	813,892	83	87	↓4	-34%
Mauritius	763,815	91	88	↑3	-20%
Luxembourg	763,809	89	89	=	-23%
Georgia	749,577	94	90	↑4	-11%
Sudan	749,315	102	91	↑11	22%
Guatemala	728,853	97	92	↑5	-1%
Albania	693,411	106	93	↑13	38%
Ukraine	690,603	45	94	↓49	-82%
Lithuania	621,724	95	95	=	-21%
Aruba	585,909	101	96	↑5	-6%
Tanzania	574,232	99	97	↑2	-10%
Ghana	537,466	105	98	↑7	-1%
Senegal	503,324	108	99	↑9	12%
Kyrgyzstan	474,718	120	100	↑20	29%

iata.org/economics
economics@iata.org