# IATA Factsheet

## The impact of the war in Ukraine on the aviation industry

### Impact on air passenger traffic

- The impact on aviation pales in comparison to the unfolding humanitarian crisis, though our industry promotes peace and freedom by bringing people together, and its implications need to be both assessed and addressed.
- The Ukrainian airspace is closed, putting a halt to the movements by air of roughly 3.3% of total air passenger traffic in Europe, and to 0.8% of total traffic globally, as per 2021.
- Belarus has prohibited flights over parts of its territory, while Moldova has fully shut its airspace. Those two countries account for minor shares of regional and global air passenger traffic.
- As of 25 March 2022, 36 countries, including EU countries, the UK and the US, have closed their airspace to Russian airlines. Russia has in turn banned airlines in most of those countries from entering or flying over Russia. Several airlines from countries not directly impacted by sanctions have also temporarily reduced flights to/from Russia, for example in Japan and South Korea. In 2021, international traffic between Russia and the rest of the world accounted for 5.2% of global international traffic, but only 1.3% of global total traffic. International air traffic to and from Russia accounted for 5.7% of total European traffic in 2021 (**Table 1**).

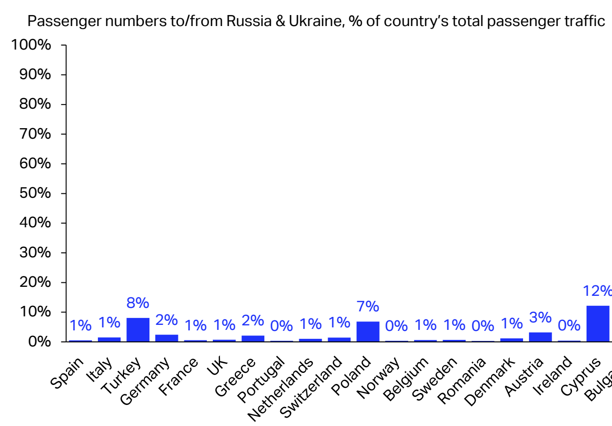
**Table 1**: Traffic shares for selected markets impacted by the conflict

| % share of passenger numbers in 2021 | Total European traffic (excl. Russia domestic) | Global traffic |
|---|---|---|
| Ukraine | 3.3% | 0.8% |
| Belarus | 0.3% | 0.1% |
| Moldova | 0.4% | 0.1% |
| Russia international | 5.7% | 1.3% |

Source: IATA Economics using DDS

- Looking at specific countries, the wide majority of European economies are not significantly exposed to Russia and Ukraine (**Figure 1**). Cyprus, Turkey, Poland and Bulgaria had the highest share of total passenger numbers coming from those two countries in 2021 (5% to 12%). Since Turkey remains open to Russia, it might in fact benefit from its popularity for Russian holidaymakers, as options to travel to other warm countries will be limited.

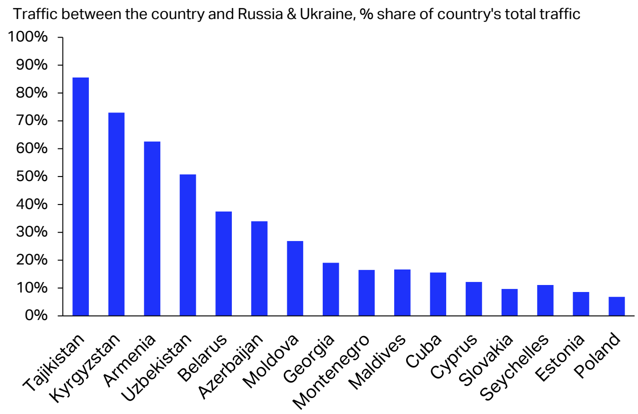
**Figure 1**: Exposure of European markets to Russia and Ukraine in 2021



Source: IATA Economics using DDS

- Several countries are highly dependent on Russia and Ukraine for their air passenger traffic, mostly those neighboring Russia and Ukraine, and which have not at this stage implemented a flight ban on Russia. Tajikistan and Kyrgyzstan are the most exposed, at respectively 86% and 73% of their total passenger numbers (**Figure 2**).

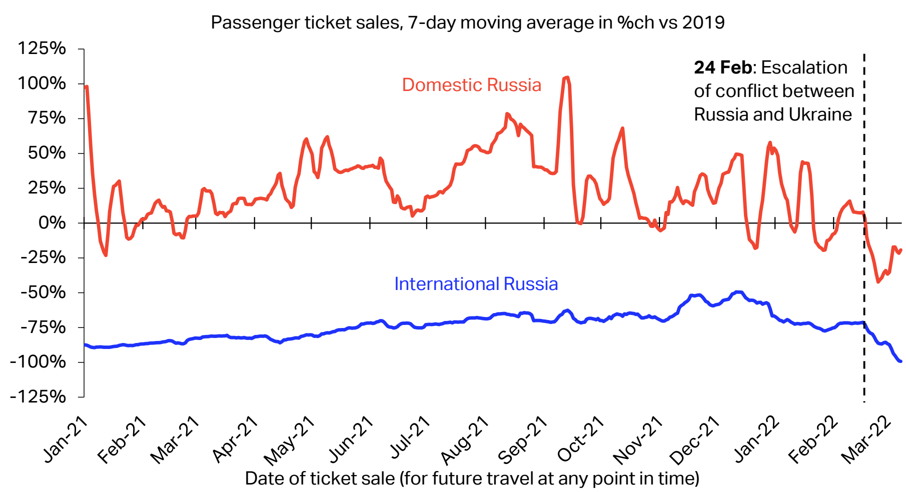
**Figure 2**: Countries with high share of traffic to and from Russia and Ukraine in 2021




Source: IATA Economics using DDS

- In 2021, Russian domestic RPKs (revenue passenger kilometers) accounted for 4.5% of global RPKs. The Russian domestic air passenger and cargo market will be impacted by sanctions on leased aircraft, spare parts, maintenance, and training. At present, airlines continue to operate regular schedules, outside of the airspace close to Ukraine, which has been shut. Industry experts in Russia estimate that the extent of the disruption is likely to become more apparent within two months from the start of the war.
- The impact of the war on air travel to, from and within Russia is already visible in ticket sales. International bookings dropped sharply on 24 February 2022. They continued to deteriorate over the following days, with the number of refunds being close to the number of new tickets sold as per our most recent data (14 March). Domestic ticket sales often trended far above the 2019 pre-crisis levels, as Russians substituted international trips for domestic holidays, and amid efforts from the government to promote domestic travel. Following the start of the military conflict however, domestic ticket sales fell 40% below 2019 levels, though they have since recovered somewhat (**Figure 3**).

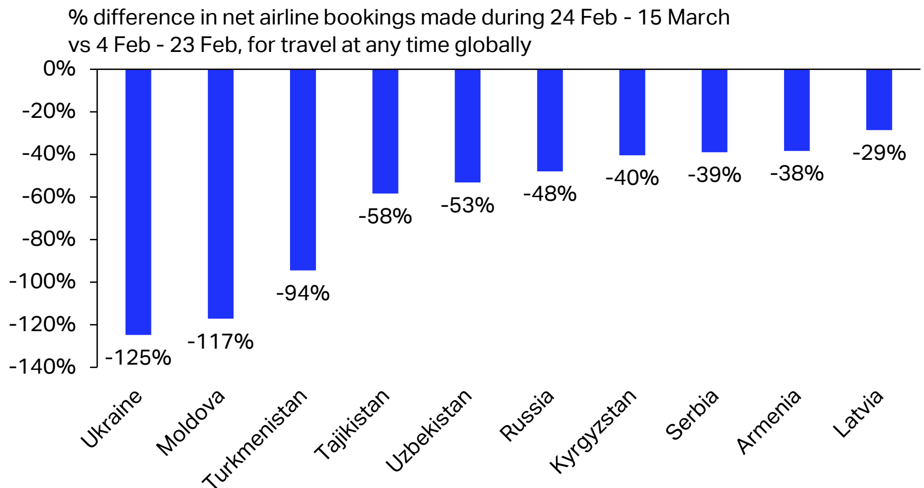
**Figure 3**: The evolution of tickets sold for future travel to/from/within Russia




Source: IATA Economics using DDS ticketing data (14 Mar 2022)

- A few countries have been even more impacted than Russia. Ukraine's and Moldova's complete airspace closures have led to refunds for previously booked trips exceeding new ticket sales. Other countries facing a strong impact are those that are highly dependent on traffic to and from Russia, such as Tajikistan and Armenia (**Figure 4**).

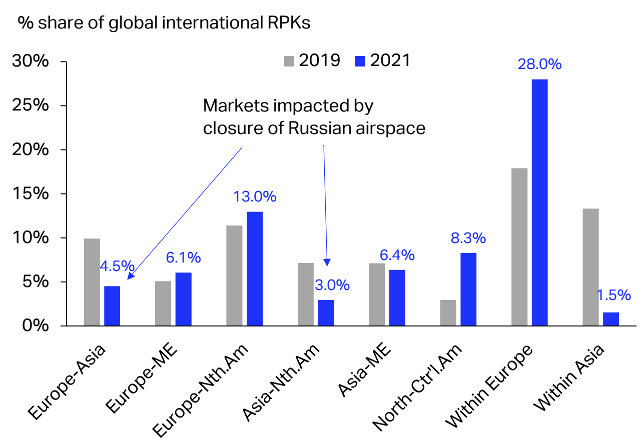
**Figure 4**: Ten countries with largest impact from the war on demand for air travel




Source: IATA Economics using data from IATA DDS

- In the week ending 11 March, inflation in Russia reached 12.5% year-on-year, up from 9% in the week to 25 February and the highest in roughly seven years. It is likely to rise further as a result of sanctions and of the ruble's depreciation. The Russian central bank lifted its key interest rate to 20% on 28 February but this action failed to prevent a slide in the USD/RUB exchange rate. It was around 105 rubles per USD on 22 March, from around 77 rubles per USD in January. Russian consumers have thus lost both domestic and international purchasing power, negatively impacting spending on air travel.
- With Russian airspace closed to carriers from close to 40 countries, flights will have to be rerouted or cancelled. The most heavily impacted markets are Europe-Asia and Asia-North America. This includes flights between the US and Northeast Asia, and between Northern Europe and most of Asia. In 2021, RPKs flown between Asia-North America and Asia-Europe accounted for 3.0% and 4.5% of global international RPKs respectively, both below their shares prior to the pandemic, due to the slow international recovery in Asia (**Figure 5**).

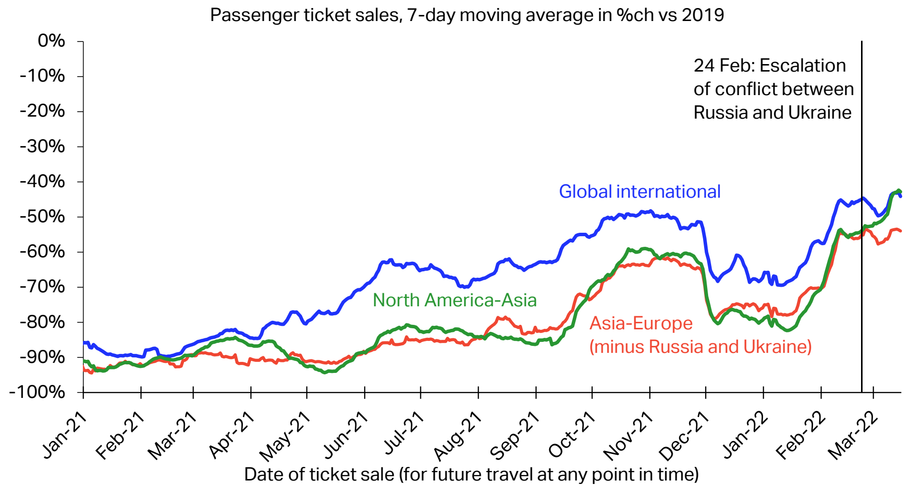
**Figure 5**: Key international markets, % share of total international RPKs in 2019 and 2021




Source: IATA Monthly Statistics

- International ticket sales on aggregate markets have so far held up relatively well. Globally, international ticket sales for future travel fell from roughly 55% of 2019 levels in the days prior to the escalation of the conflict on 24 February, to 50% in early March. That said, bookings made mid-March are already exceeding those prior to the conflict, at around 57% of 2019 values. Even on routes that are exposed to longer flight times and higher costs following the closure of the Russian airspace see resilient bookings. Bookings for travel between Asia and Europe fell only briefly in early March, while the North America-Asia route has so far been spared any visible impact whatsoever. (**Figure 6**).

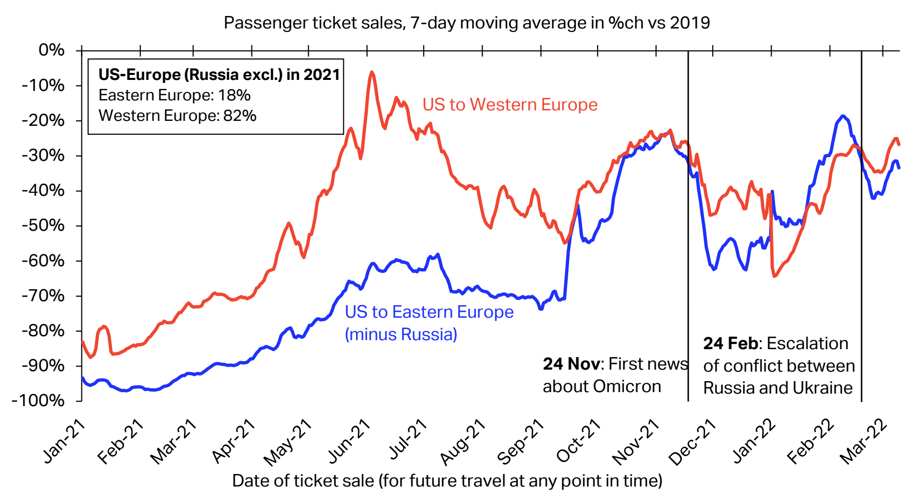
**Figure 6**: The recovery from COVID-19 continues for international air travel




Source: IATA Economics using DDS ticketing data (15 Mar 2022)

- Even the more exposed Northeast Asia-Europe market did not deteriorate following the conflict, although that was partly due to strict ongoing travel restrictions to countries in Northeast Asia (bookings at only 12% of 2019 levels in mid-March). Overall, the recovery from COVID-19 amid easing travel restrictions and strong willingness to travel is still very much alive.
- Following the start of the conflict, demand for air travel to Europe fell briefly on some routes, due to heightened uncertainty. Indeed, ticket sales for trips from the US to Europe were at 73% of 2019 levels during 15-20 February and fell to 65% of 2019 values in the first week of March. This was followed by a rapid rebound to around 74% on 12-15 March, showing that the fall in travelers' confidence was limited. Overall, the deterioration was larger, and the subsequent improvement weaker, regarding travel to Eastern Europe (**Figure 7**).

**Figure 7**: Ticket sales for US to Europe travel highlight resilient confidence



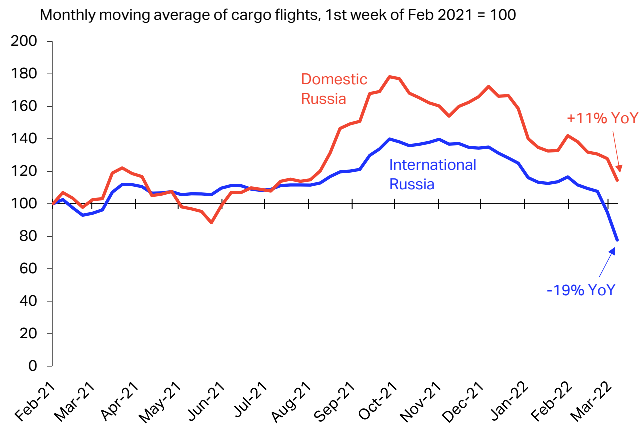

Source: IATA Economics using DDS ticketing data (15 Mar 2022)

## Impact on air cargo traffic

- Total segment-based freight tonnes carried by air to, from and within Russia and Ukraine accounted for 0.9% of the global total cargo traffic in 2021. That number captures both traffic that starts in the two countries, and traffic which only transits there. Transit traffic is sizeable due to large air-cargo-only carriers based in both markets.

- Russia accounted for 2.5% of global total dedicated cargo flights in 2021 according to data provided by FlightRadar24. The importance of these flights for global heavy-weight cargo is significant, and the corresponding capacity will be difficult to replace. Both domestic and international dedicated cargo flights for Russia deteriorated markedly since the conflict escalated. International flights were 19% down year-on-year during the same period, following growth rates in the range of 10-20% earlier in 2022. Domestic flights were still up 11% year-on-year in the week started 7 March, but that is down from 30-40% earlier in 2022 (**Figure 8**).

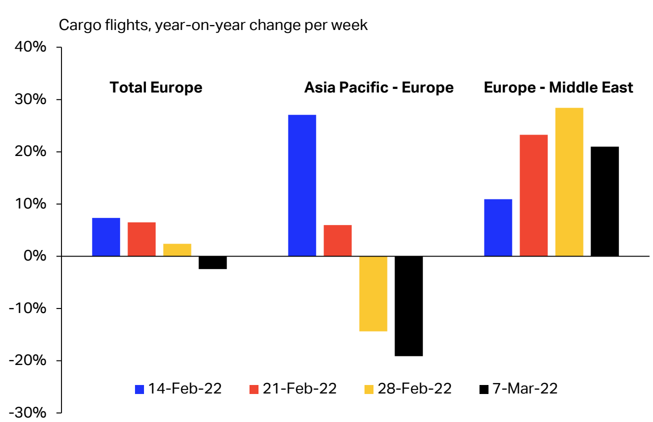
**Figure 8**: Dedicated air cargo flights fell markedly in Russia



Source: IATA Economics using data provided under license by FlightRadar24

- In terms of air cargo, the Europe-Asia market represented 20.6% of all international CTKs (cargo tonne-kilometres) over the past 12 months. The Asia-North America trade lanes accounted for 26.7% of global international CTKs, and Within Europe 2.2% (including Russia) over the same period. Flight bans and sanctions will cause a loss of capacity, especially affecting Europe-Asia and exacerbating the current capacity crunch. It is, however, possible that airlines in other parts of the world can fill the gap, such as the super-connector airlines in the Middle East.
- CTKs numbers for the relevant period are yet to become available. However, dedicated cargo flights provide an early indication of how the above markets have fared recently. Total flights to, from, and within Europe weakened since the start of the conflict, in part driven by the lower number of flights in Russia. The Asia Pacific-Europe route has, as expected, been significantly impacted, with cargo flights falling by 19% year-on-year in the week starting 7 March. This compares with a 3.1% year-on-year drop in the period between the start of the year and the start of the conflict, for the same market. Year-on-year growth shows the Europe-Middle East route may indeed be benefitting from those disruptions (**Figure 9**).

**Figure 9**: The evolution of cargo flights on routes impacted by the conflict

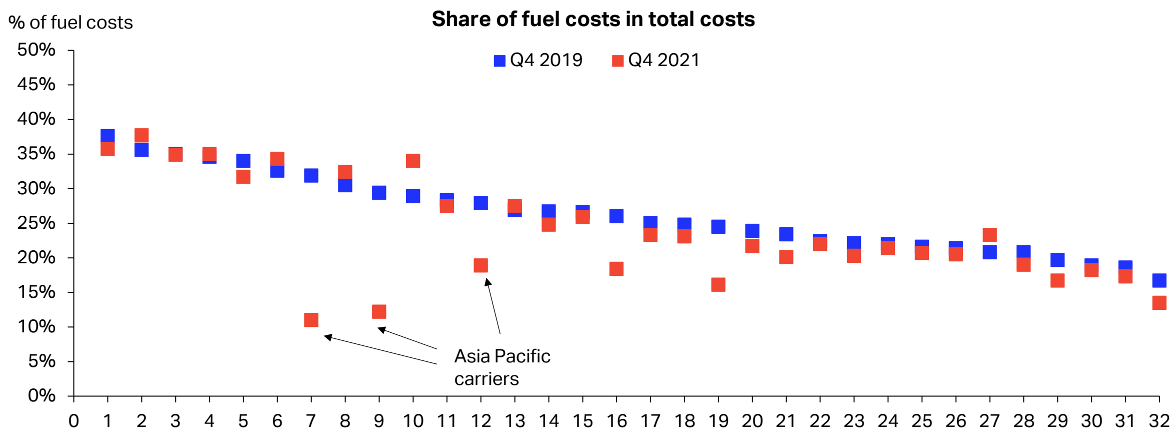


Source: IATA Economics using data provided under licence by FlightRadar24

## Jet fuel prices and air fares

- Jet fuel prices rose sharply since the start of the conflict. They were at USD 150 per barrel on 21 March (daily closing prices), up 39% on the month and 121% year-on-year. Upward pressures on prices may continue, in particular if more stringent sanctions are applied to the Russian energy sector, and depending on potential increases in production elsewhere.
- Fuel expenses – which factor in consumption, hedging and other elements – represented around 25% of airlines' operating expenses prior to the pandemic, globally. The share declined in 2020 and 2021, as airlines' variable costs fell, but in most cases, the share is now back to its pre-crisis level. Asia Pacific carriers, for which passenger traffic is often still limited, are the main exceptions (**Figure 10**).

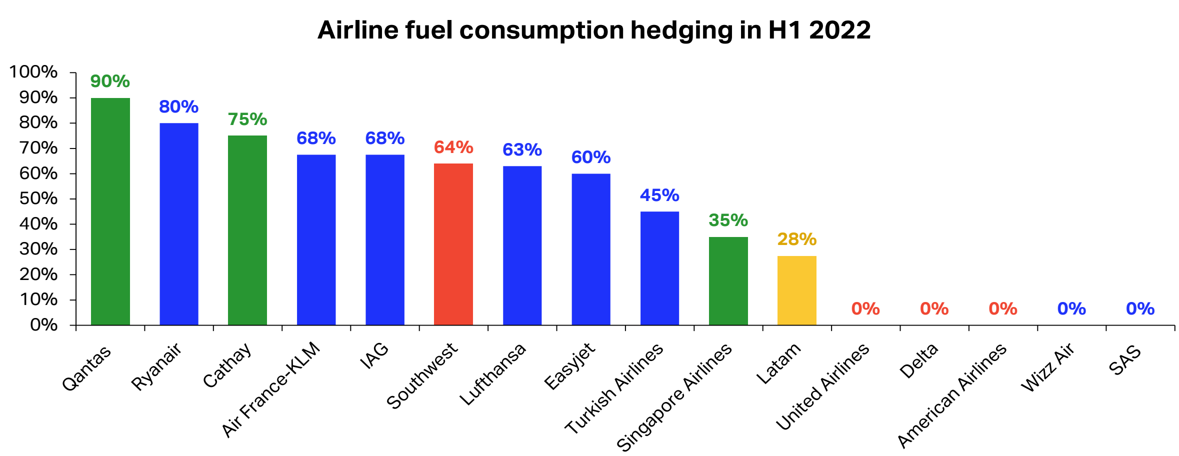
**Figure 10**: For most airlines, the share of fuel costs is back to pre-crisis values




Source: IATA Economics using Airline Analyst

- All airlines that have unhedged fuel demand will be directly impacted by the rising prices. There are some significant differences in hedging practices with US airlines, for example, often hedging less than airlines in other regions (**Figure 11**). Airlines have two options in terms of managing the increased cost of fuel; they must either absorb the costs themselves, which may be a challenge as profit margins are already slim currently, or pass the higher fuel costs on to passengers through higher air fares. At a time of already elevated inflation (5.8% for the all-items CPI in G7 countries in January), higher air fares could reduce demand for air travel.

**Figure 11**: Not all airlines impacted equally by the jet fuel price hike




Source: Reuters, airlines investor relations

- Air cargo rates are already close to record highs (116% above pre-crisis levels in February 2022), and the rising jet fuel price combined with loss of capacity are likely to push rates even higher. High cargo rates and limited capacity on some routes and for some types of goods may still impact demand for air cargo going forward.

## Impact on the broader economy

- Beyond air cargo, merchandise trade will be affected globally. Rail transport linking Asia and Europe through Russia has been reduced, and the important Black Sea trade area is fully closed to maritime transport. Hence, already significant supply chain issues will likely be exacerbated and linger for longer.
- The conflict and related sanctions will clearly reduce global trade, investment, and overall economic activity. Much uncertainty still reigns regarding the war, its potential reach, and its duration. From where we stand today, we can expect up to 1 percentage point of global GDP growth to be lost in 2022. Hence, a global recession is not currently in the cards, as the IMF forecasted global GDP to grow by 4.4% before the war. It is also worth noting that the world faced a Brent oil price in excess of USD 100 per barrel during 2011-2014, a period when global GDP growth averaged close to 3%.
- Though Russia and Ukraine are important to the world economy as large exporters of energy, precious metals, wheat, and other commodities, the two together account for less than 2% of global GDP. Most major economies have only limited trade exposure to Russia. Only 0.5% of US trade is with Russia, and the latter represents 2.4% of China's trade. The economy of Russia, on the other hand, is likely to see a double-digit outright contraction in GDP this year, and for Ukraine the outcome will in all probability be worse still.
- Longer term, Russia's war on Ukraine will almost certainly lead to increased military spending. Total global military expenditure rose to nearly USD 2 trillion in 2020, according to the Stockholm International Peace Research Institute (SIPRI), representing 2.4% of global GDP. Military spending adds to GDP growth but detracts from achieving development goals in a world already carrying record levels of debt.

IATA Economics
economics@iata.org
25 March 2022