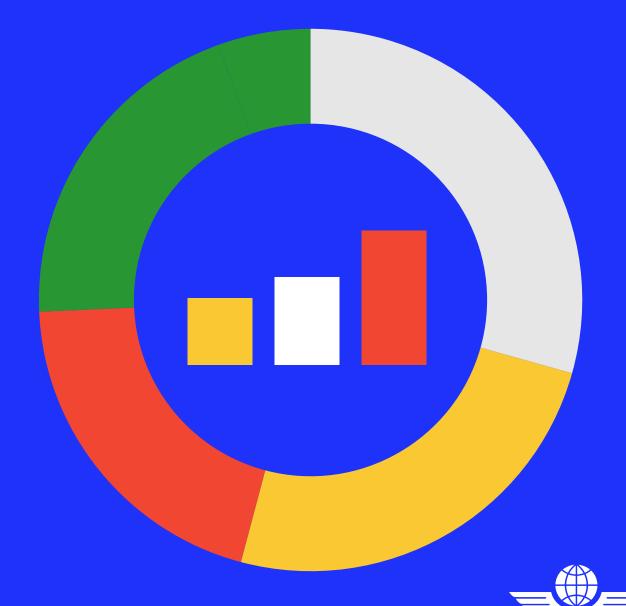
COVID-19

Initial impact* assessment of the novel Coronavirus

IATA Economics

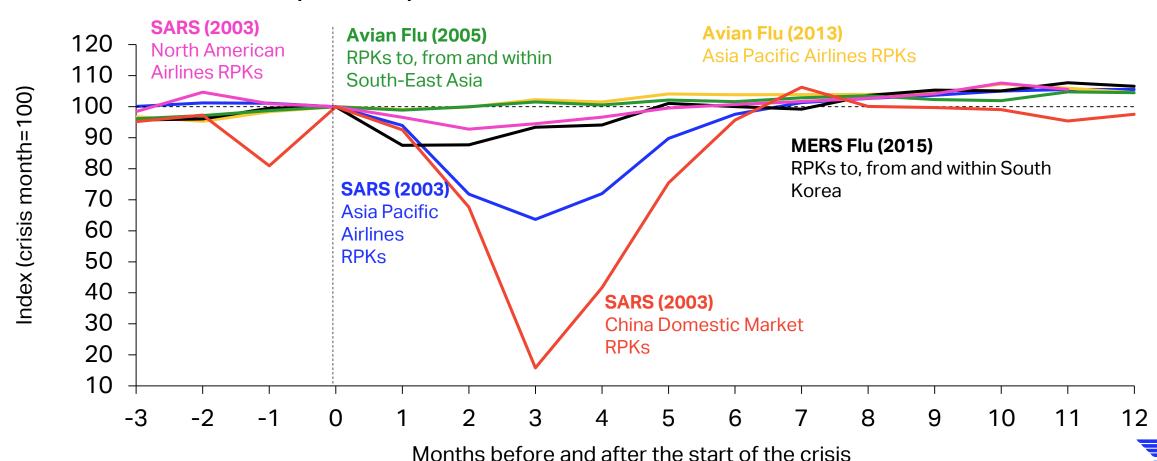
20th February 2020



^{*} This is a preliminary scenario. It is likely to change as the situation evolves and evidence builds.

Previous disease outbreaks have peaked after 1-3 months and recovered pre-outbreak levels in 6-7 months

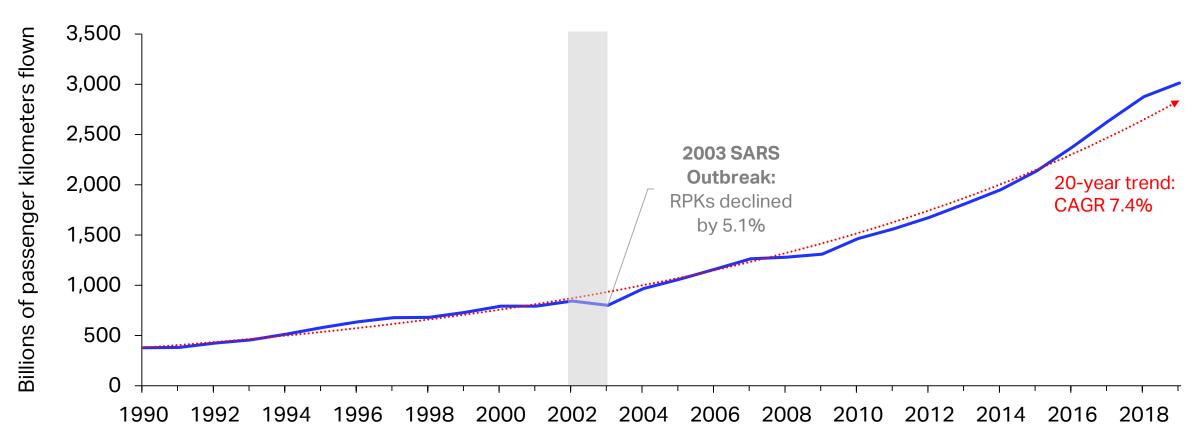
Impact of past disease outbreaks on aviation



Economics

SARS caused the only annual decline in Asia-Pacific traffic in almost two decades

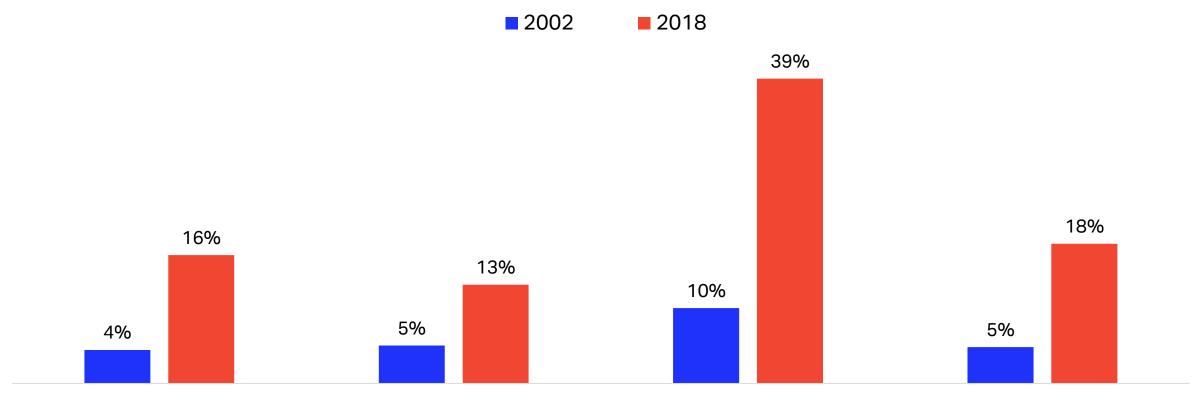
Asia-Pacific Airlines' Passenger Kilometers flown (RPKs)





SARS experience may underestimate today's impact because China's economic size is now much greater

China's Contribution to World Economy

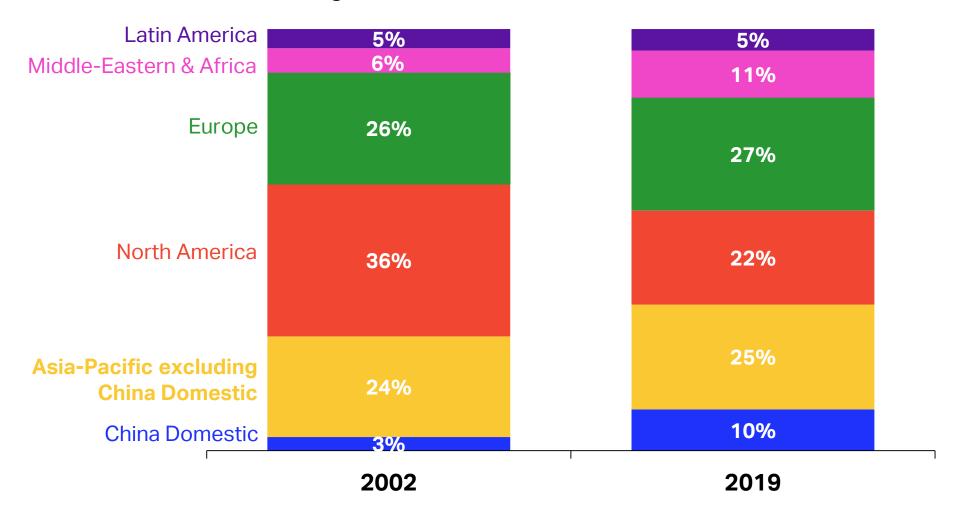


Share in World Economy Share in Trade (Exports + Imports) Share in Manufacturing

Share in Travel& Tourism

Since SARS China and other Asia Pacific airlines' share in worldwide RPKs have risen from 27% to 35%

Regional Share of RPKs (% of worldwide RPKs)

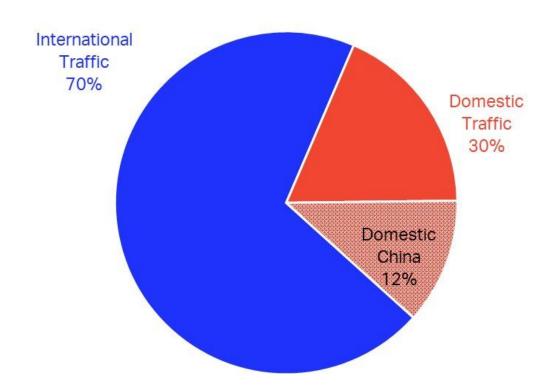


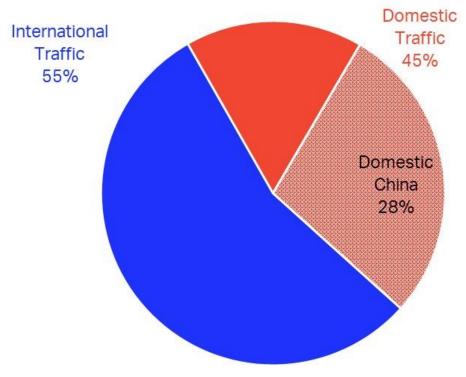


China's domestic market has become twice as important for total Asia Pacific airlines' RPKs

Asia-Pacific airlines RPKs **2002**

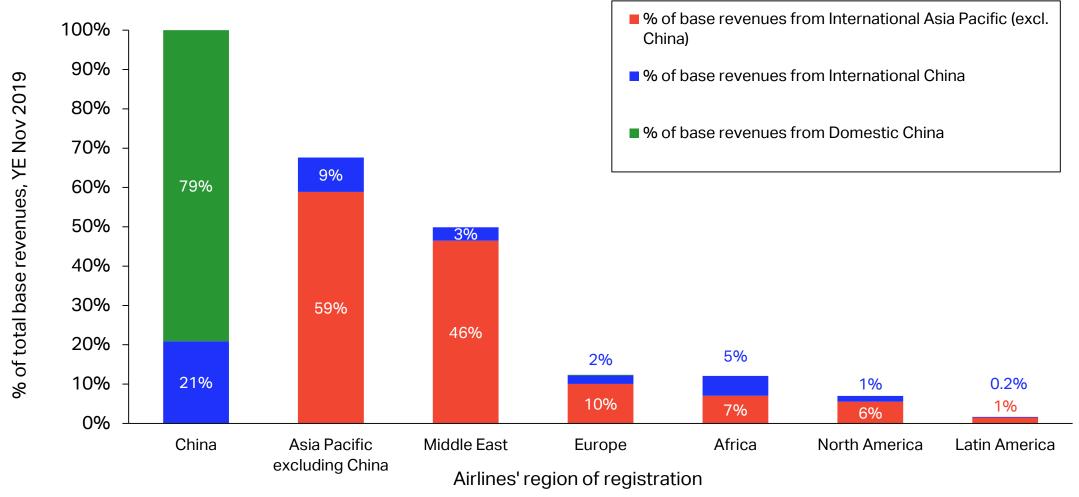








Asia-Pacific airlines are most exposed to Chinese markets, but others impacted if COVID-19 effects widen



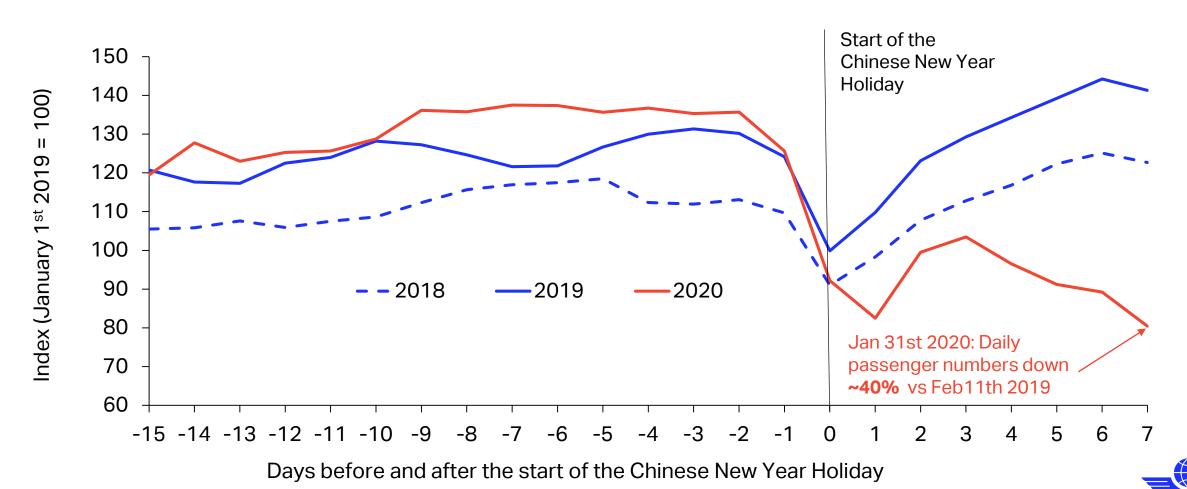
Base revenues: excluding revenues from ancillaries, baggage fees, etc.



January data from China indicates a sharper decline than SARS outbreak in the first month after the outbreak

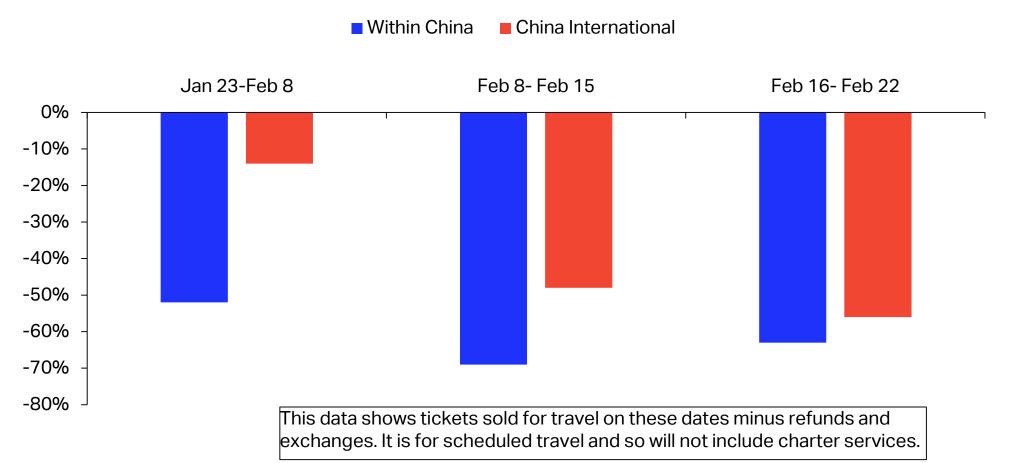
Daily China Passenger Numbers (Domestic+International)

Economics



February data shows further decline with domestic + international China passenger numbers down around 60%

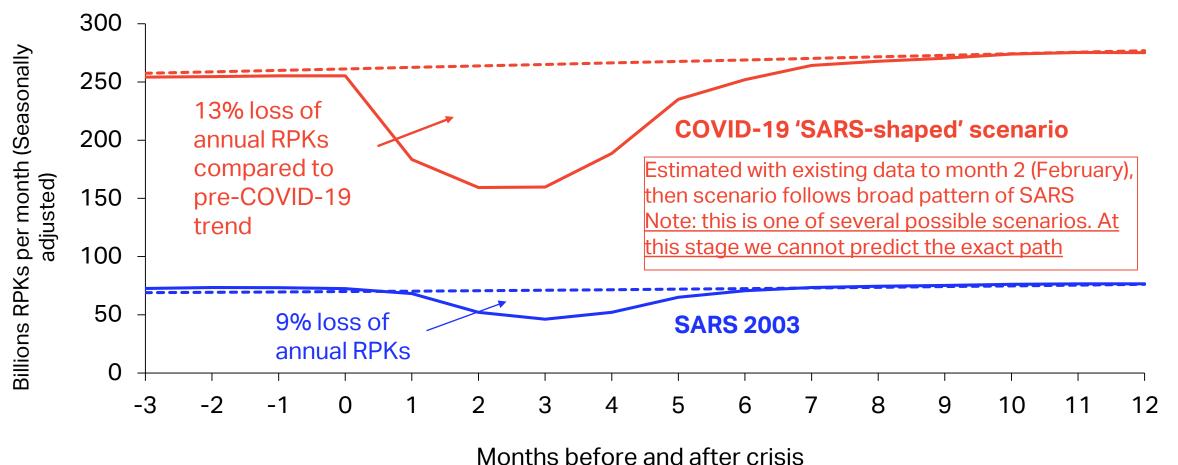
Year-on Year Change in Passenger Numbers





If COVID-19 impact has a SARS-shaped profile this implies a 13% loss of RPKs in 2020 for Asia-Pacific airlines







COVID-19 'SARS-shaped' scenario implies a 4.7% loss to industry-wide RPKs in 2020 and a \$29bn loss of passenger revenues

| Region of airline registration | Estimated Impact on 2020 RPKs (% of December forecast for 2020) | Estimated Impact on 2020 Passenger revenue (billion US\$) | |
|--------------------------------|---|---|--|
| Asia Pacific | -13.0% | -27.8 US\$ 12.8 bn comes from China domestic market. | |
| North America | -0.4% | -0.7 | |
| Europe | -0.4% | -0.6 | |
| Middle East | -0.2% | -0.1 | |
| Africa | -0.4% | -0.04 | |
| Latin America | -0.1% | -0.03 | |
| Industry | -4.7% | -29.3 | |

Scenario notes: Regional impacts outside Asia Pacific Region are based only on the direct exposure to Chinese markets. No additional or second round weakness of Asia Pacific markets are included. SARS had wider impacts but so far COVID 19 has 99% of its cases in mainland China. Revenue impacts are estimated based on the 2020 RPK impact assuming no change in yields.



2020 RPK forecasts before and after COVID-19 (assumes 'SARS-shaped' scenario and no other changes)

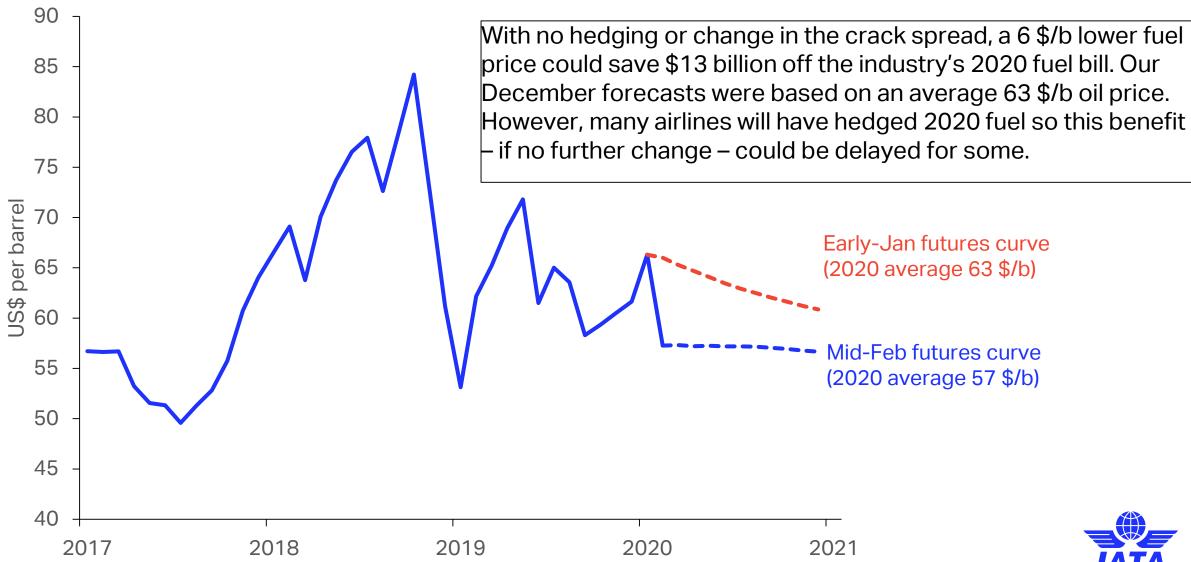
| Region of airline registration | December 2019 forecast | COVID-19 'SARS- shaped' scenario impact | Implied COVID-19 'SARS-shaped' scenario |
|--------------------------------|------------------------|--|---|
| Asia Pacific | 4.8% | -13.0% | -8.2% |
| North America | 3.8% | -0.4% | 3.4% |
| Europe | 3.8% | -0.4% | 3.4% |
| Middle East | 2.5% | -0.2% | 2.3% |
| Africa | 3.8% | -0.4% | 3.4% |
| Latin America | 4.3% | -0.1% | 4.2% |
| Industry | 4.1% | -4.7% | -0.6% |

Scenario notes: The December 2019 forecast can be found at <u>Economic performance report</u>. The final column is indicative, showing how the forecasts RPK growth numbers for 2020 could be reduced if this particular COVID-19 scenario came about. It takes no account of any other changes, such as lower fuel prices, policy actions or knock-on and second-round effects. The scenario impacts are subtracted from the December forecast for simplicity, though this is not exact.



Lower fuel prices may provide some offset

Brent crude oil prices and futures curves, US\$ per barrel





Contacts

economics@iata.org www.iata.org/economics



