

# COVID-19

## How will the structure of the aviation sector be changed by COVID-19?

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Chief Economist

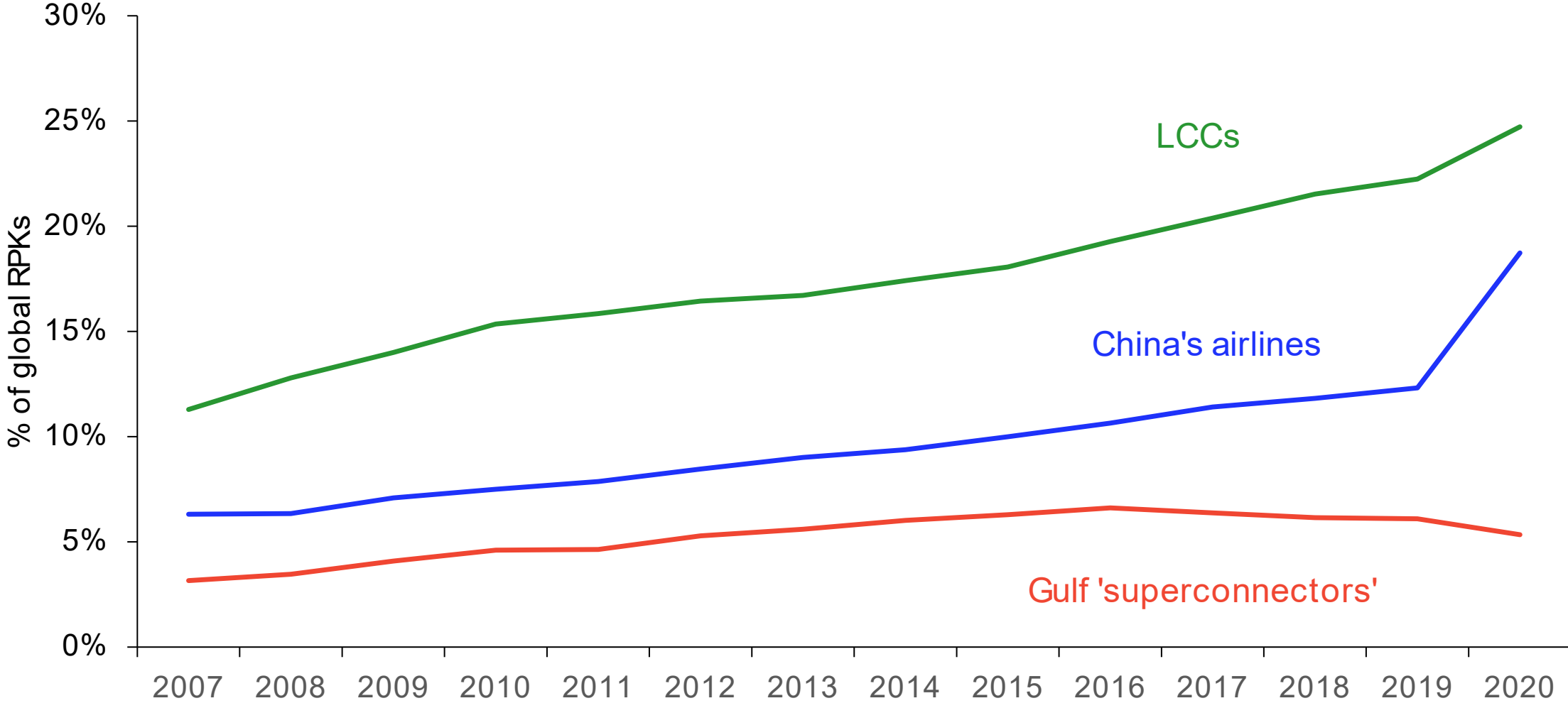
6<sup>th</sup> May 2021



# Structural change in the past driven by the supply side

Disruption before from technology, liberalization, new business models

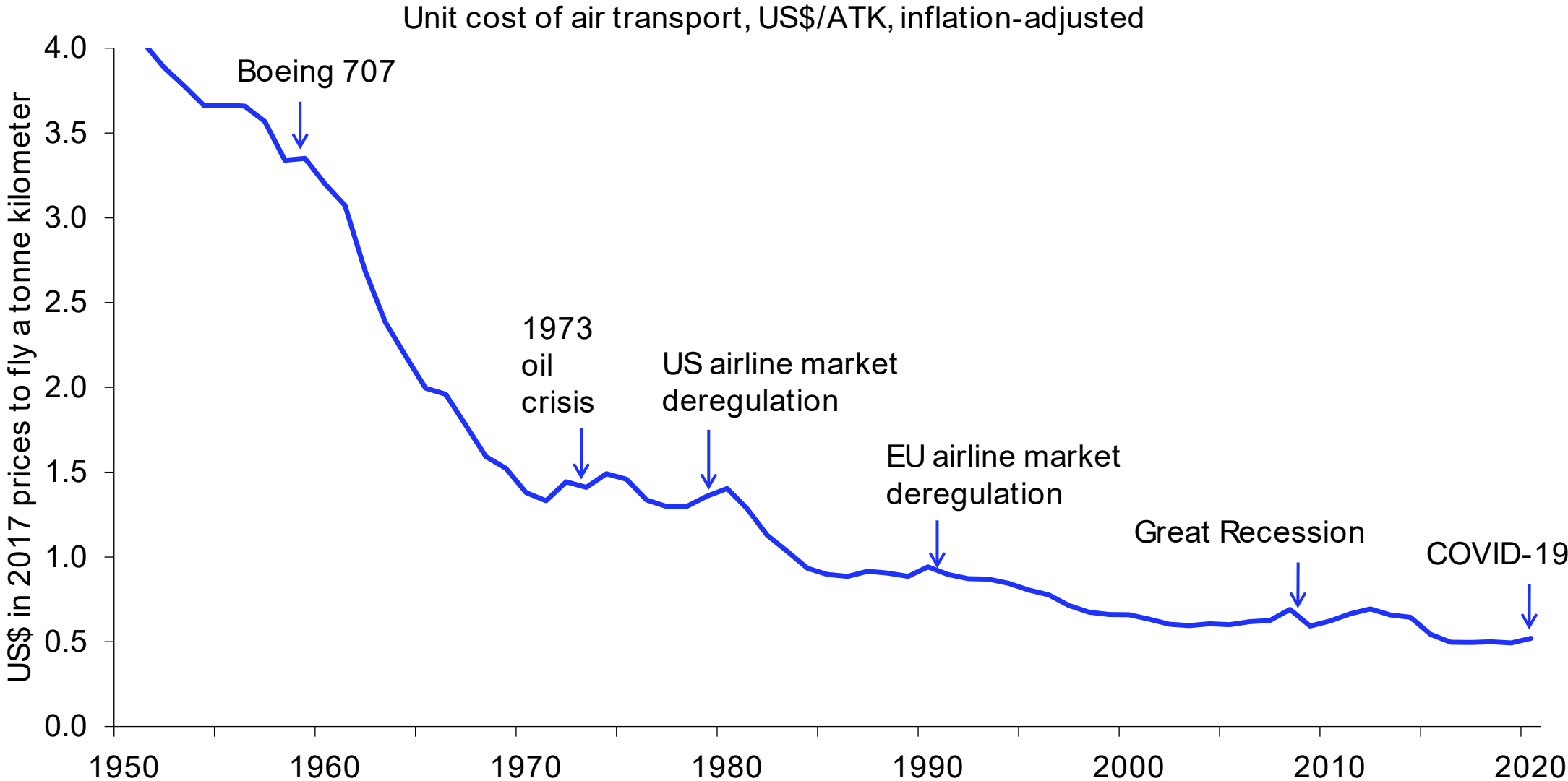
Shares of global passenger kilometers flown (RPKs)



Source: IATA Economics using data from PaxIS

# Cutting the real cost of air transport by almost 90%

New technologies and liberalization allowed innovation and efficiency

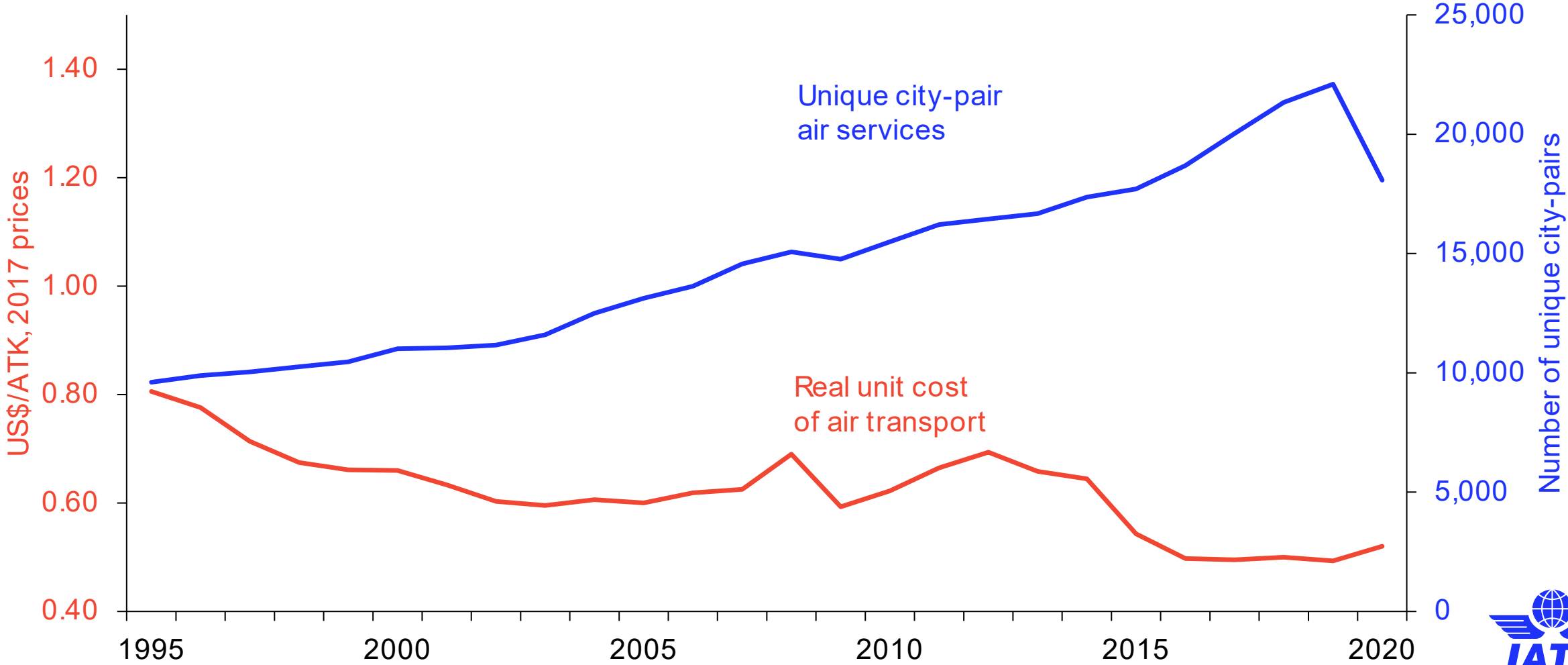


Source: IATA Economics using data from ICAO, IATA Statistics and OECD

# Doubling city -pairs connected in the past 25 years

Connectivity was damaged by COVID-19; 18% fall in city-pairs by year end

Unique city-pairs and real unit air transport costs

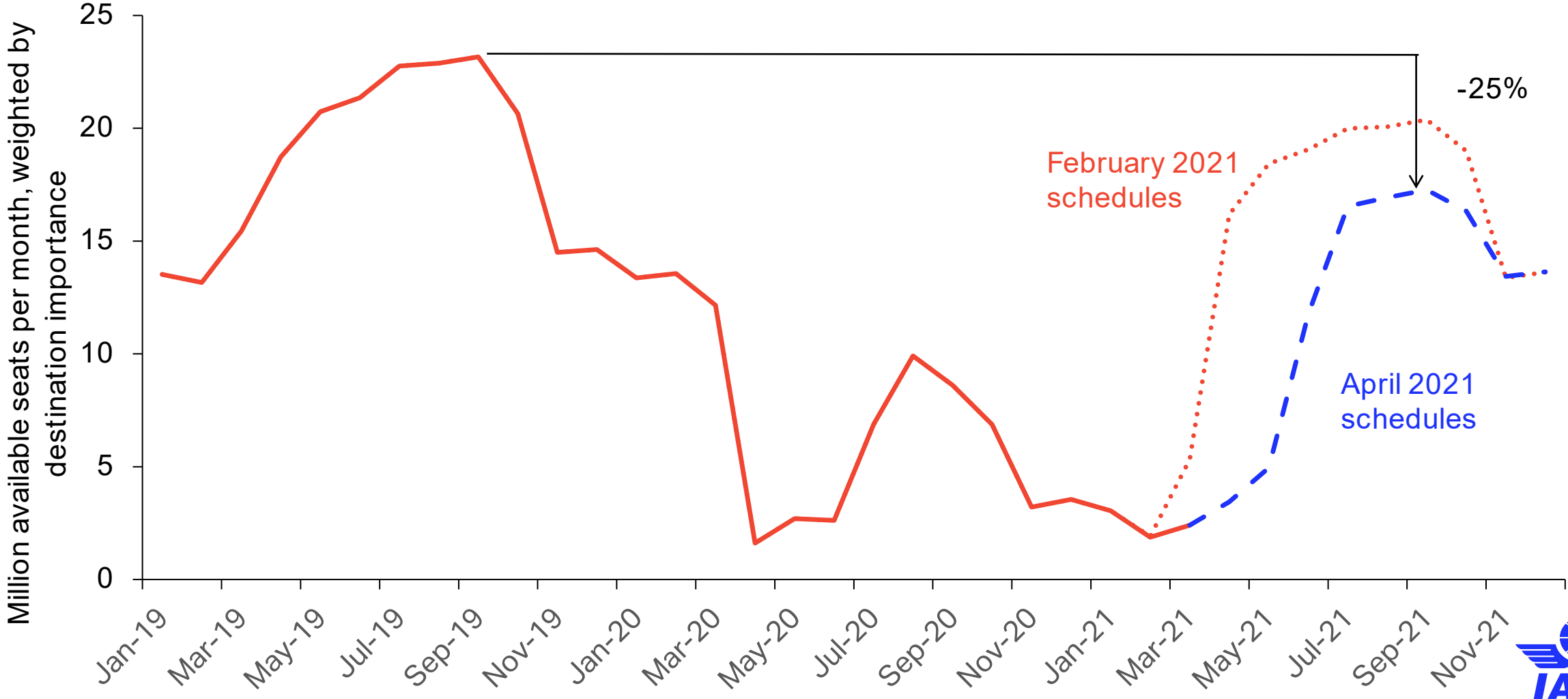


Source: IATA Economics using data from ICAO, IATA Statistics and OECD

# Air connectivity may not be restored on some markets

## Weighted by destination intra-Europe connectivity down -25% H2 2021

Intra-Europe international air connectivity

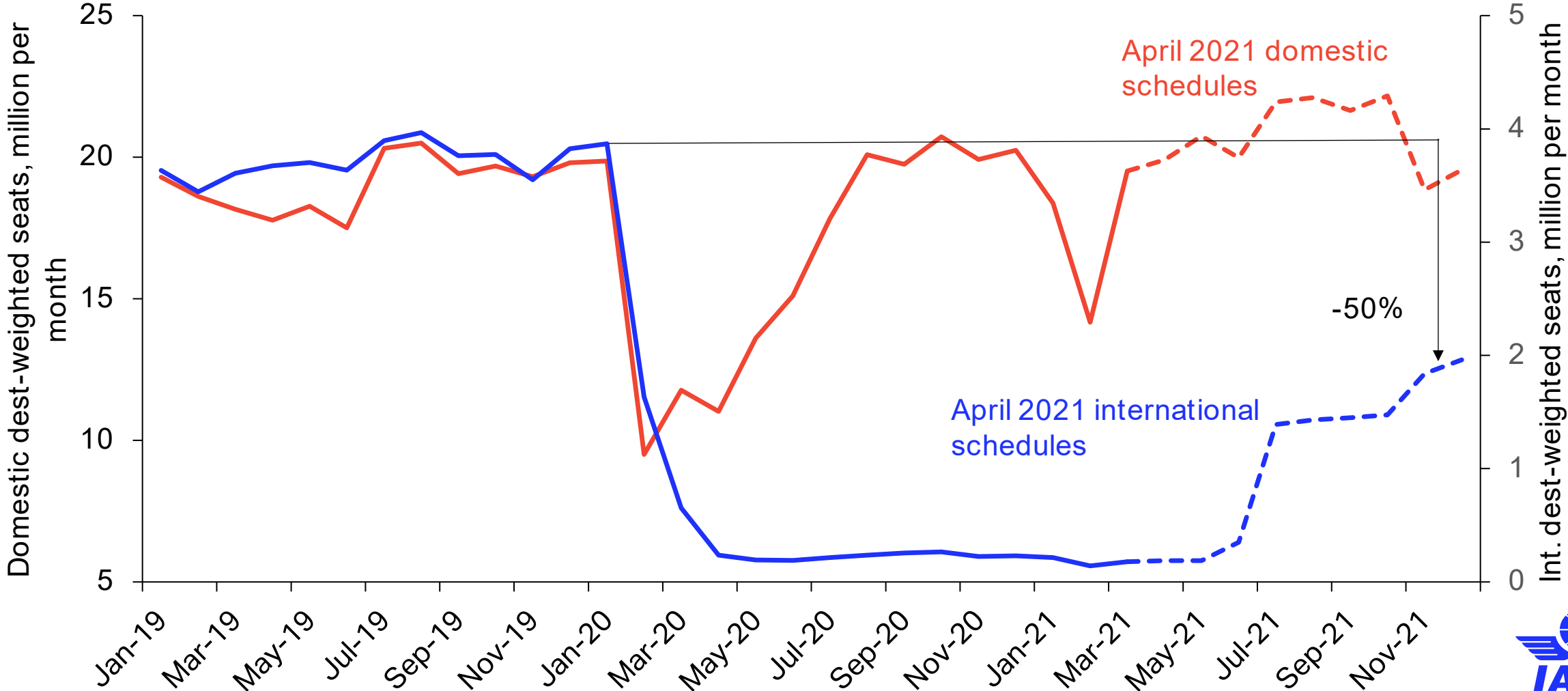


Source: IATA Economics using data from OAG and IATA's air connectivity measurement methodology

# Domestic air connectivity restored, risk for international

China domestic air connectivity full recovery. International Q4 2021 -50%

China domestic and international air connectivity



Source: IATA Economics using data from OAG and IATA's air connectivity measurement methodology

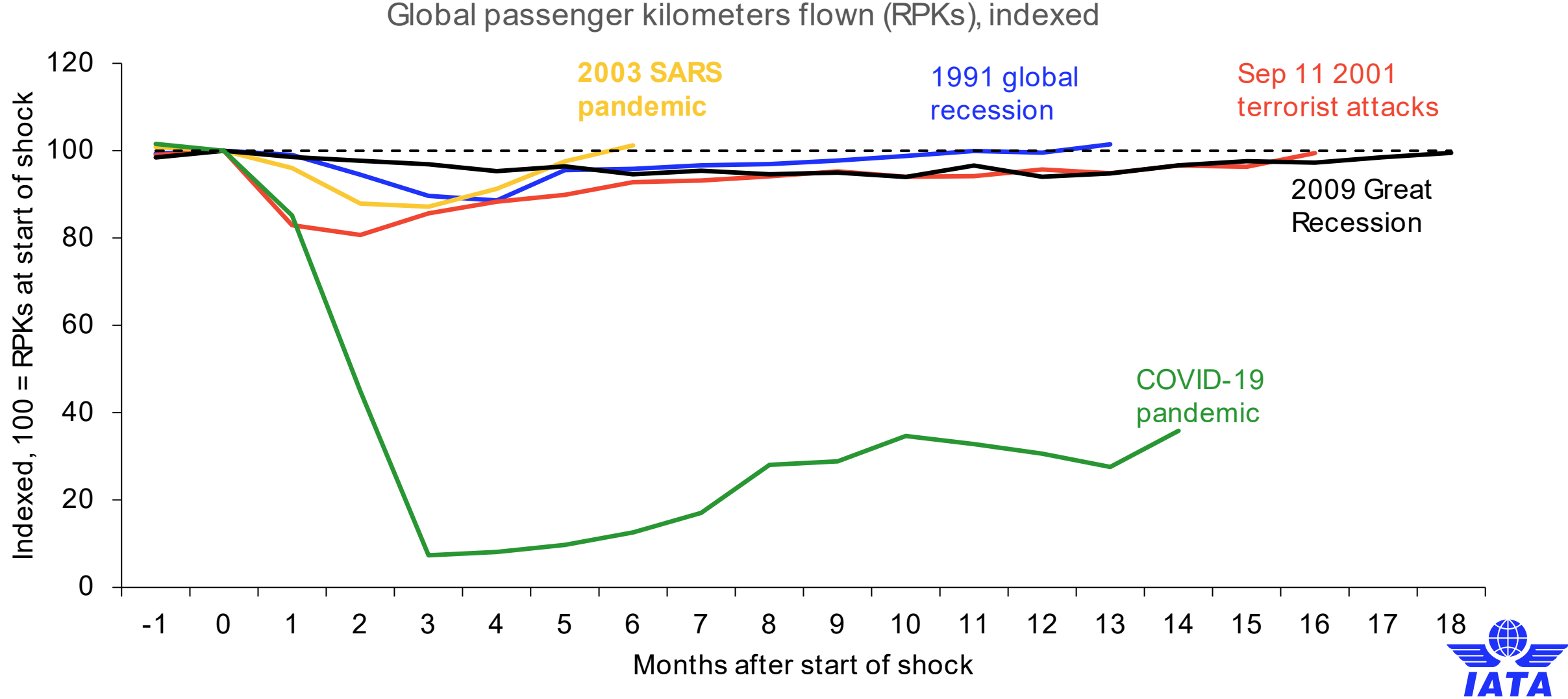
# COVID-19 boost East-shift of air travel centre of gravity

Temporary shift East to where we forecast centre of gravity in 20 years



# Demand shocks do not usually cause structural changes

Previous shocks cut 5-20% from RPKs but recovered after 6-18 months



Source: IATA Economics using data from IATA Monthly Statistics. Data is adjusted for seasonality.

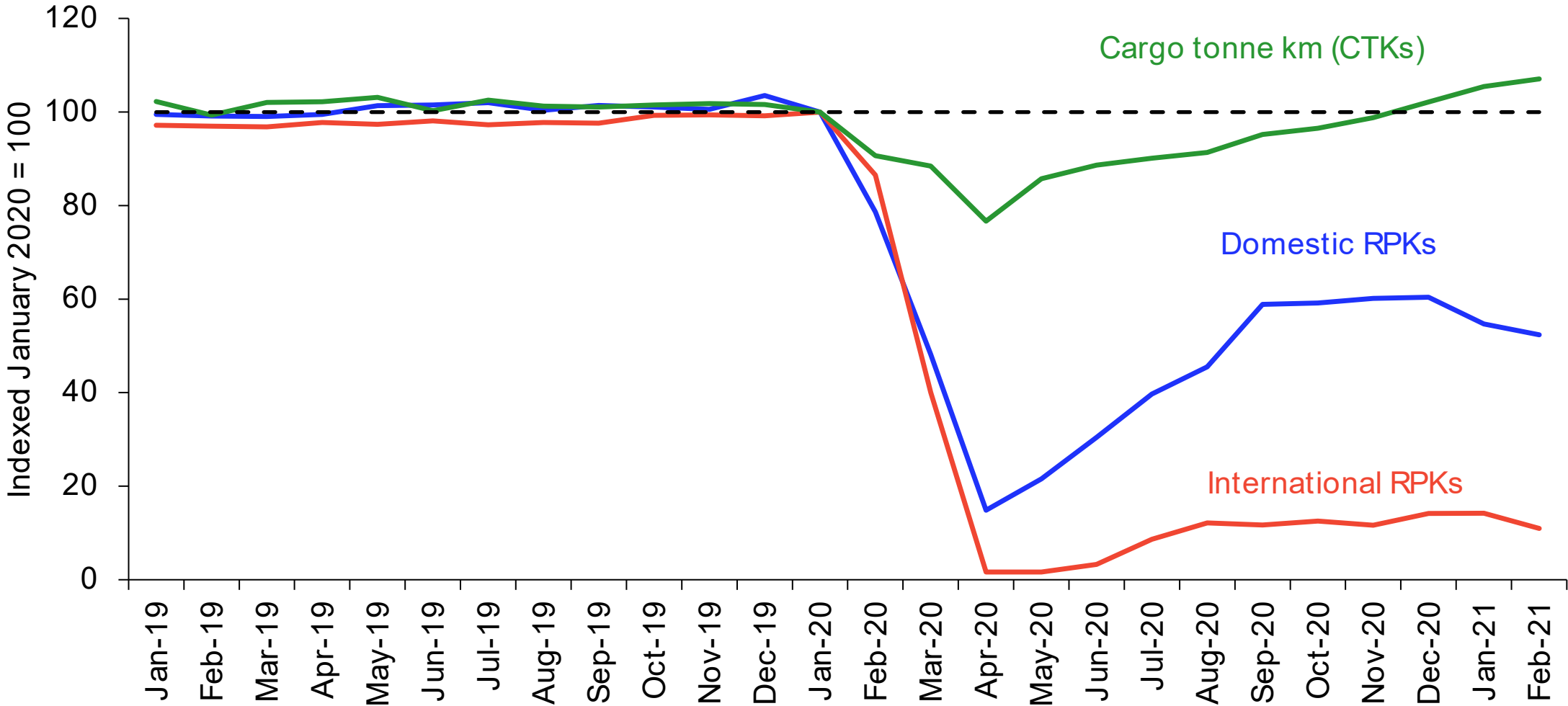




# This demand shock has been uneven across markets

Hardest hit has been international air travel. Air cargo much less affected.

Cargo tonne km (CTK) and passenger km (RPK), Jan 2020 = 100

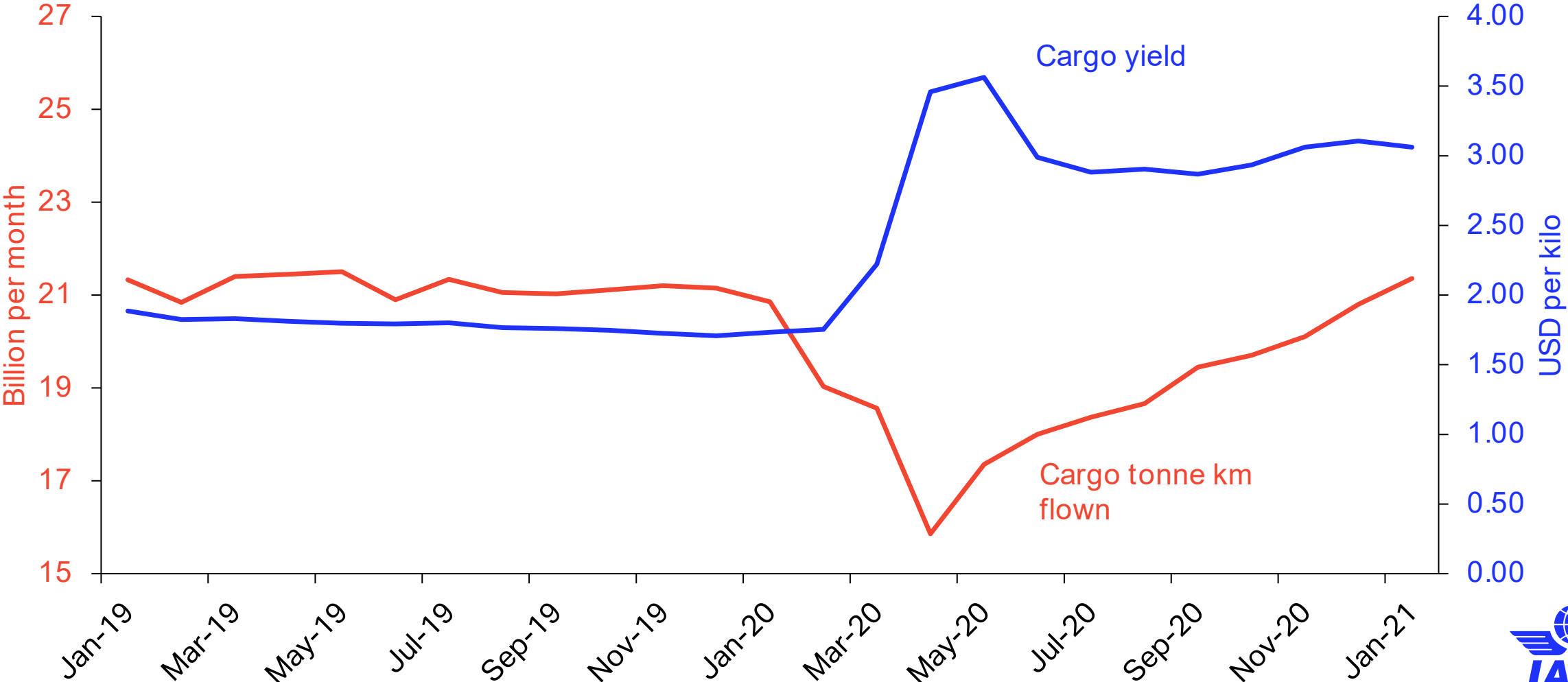


Source: IATA Economics using data from IATA Monthly Statistics. Data is adjusted for seasonality.

# But there has been a higher cost for trade using air

Ongoing severe capacity shortage has forced air shipping costs higher

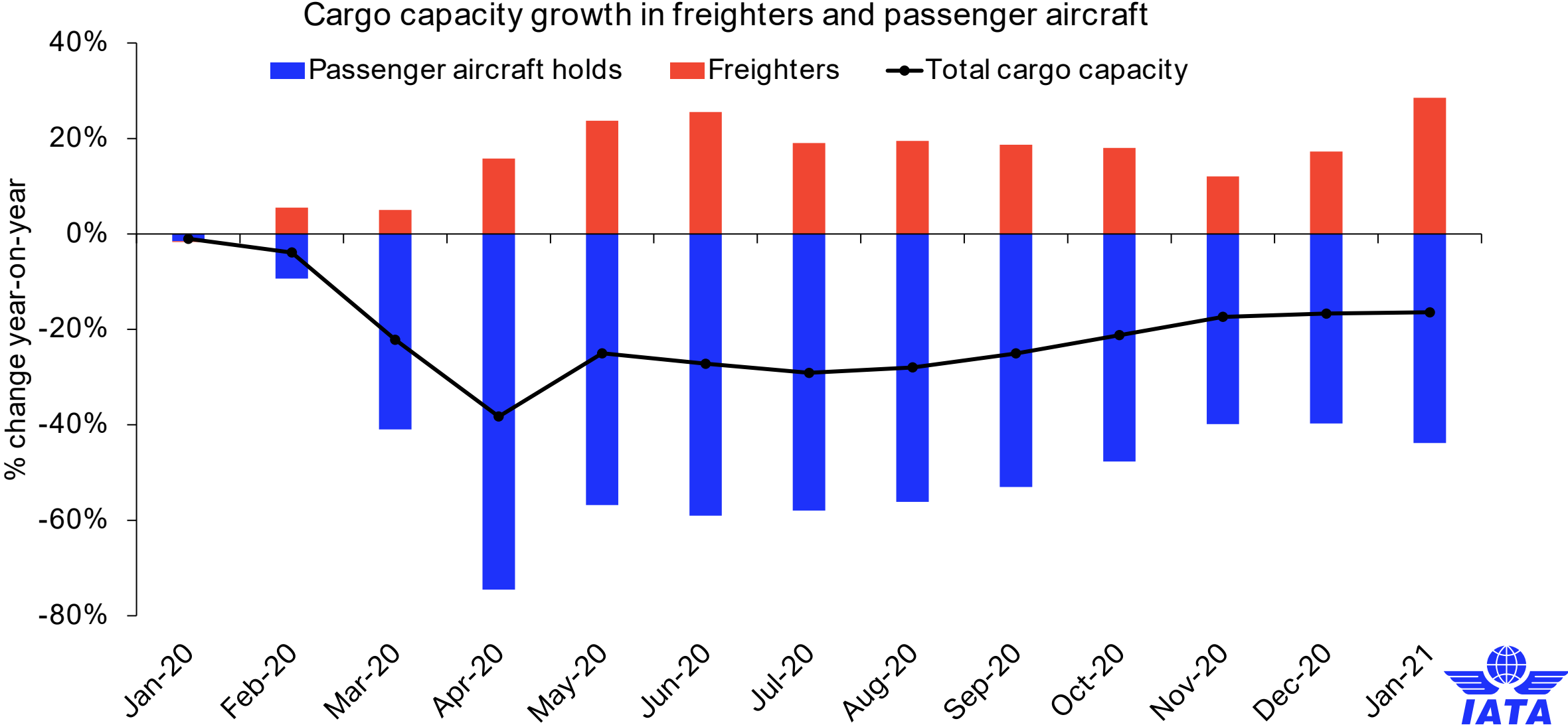
Cargo yields (inc surcharges) and cargo tonne km flown



Source: IATA Economics using data from IATA Monthly Statistics and CargoIS

# Capacity shortage for cargo due to grounded pax fleet

Freighters highly utilized but 50% cargo usually in passenger aircraft holds



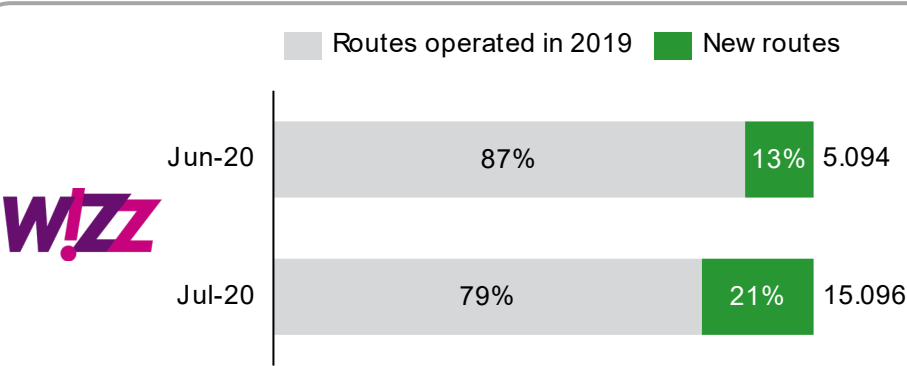
Source: IATA Economics using data from IATA Monthly Statistics



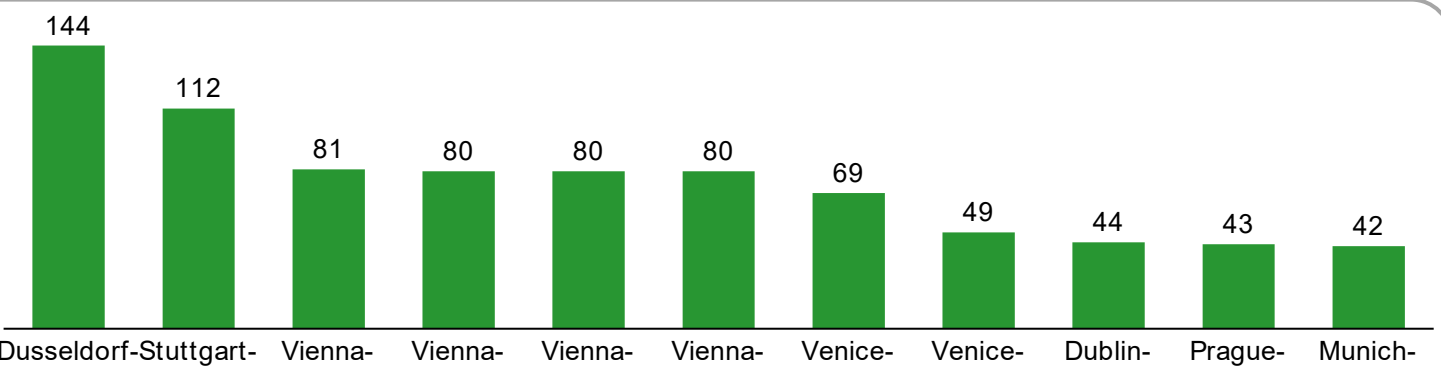
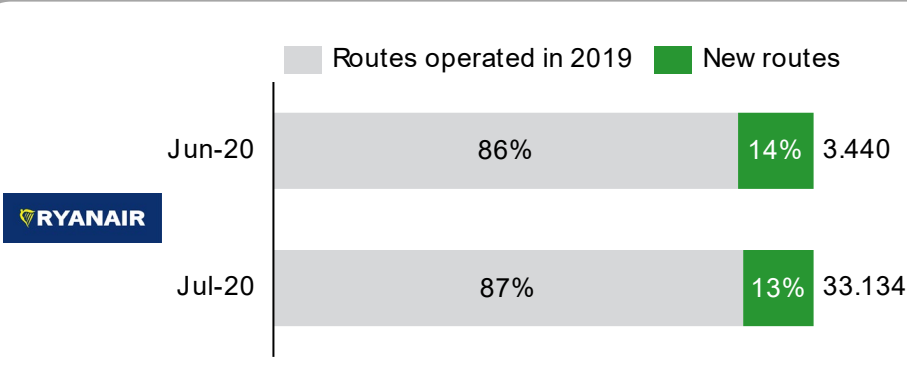
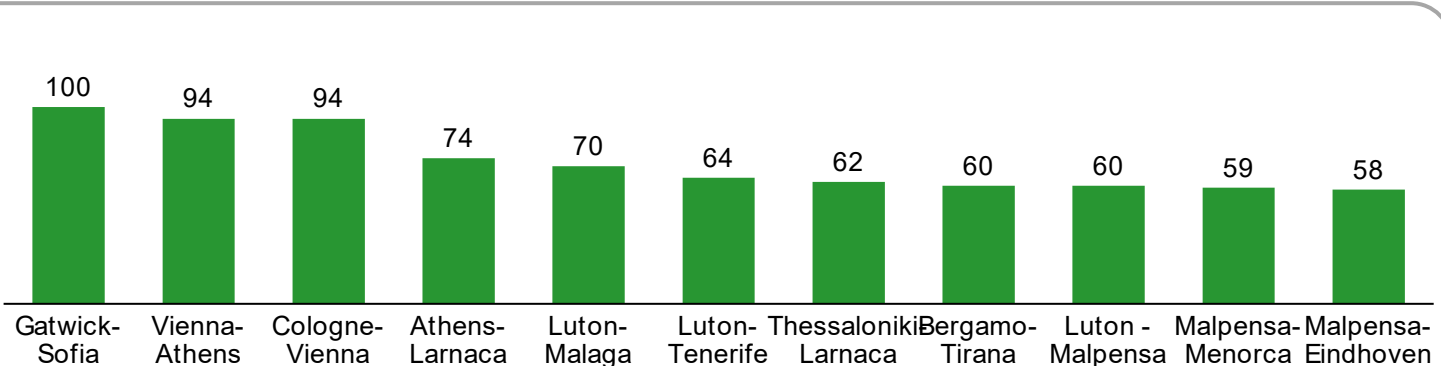
# Have slot holdings by incumbents held up recovery?

## Major European LCCs growing strongly and entering new markets

Share of flights on routes already operated in summer 2019 vs. new routes



Number of flights on top new routes, Jun-Jul 2020, both ways



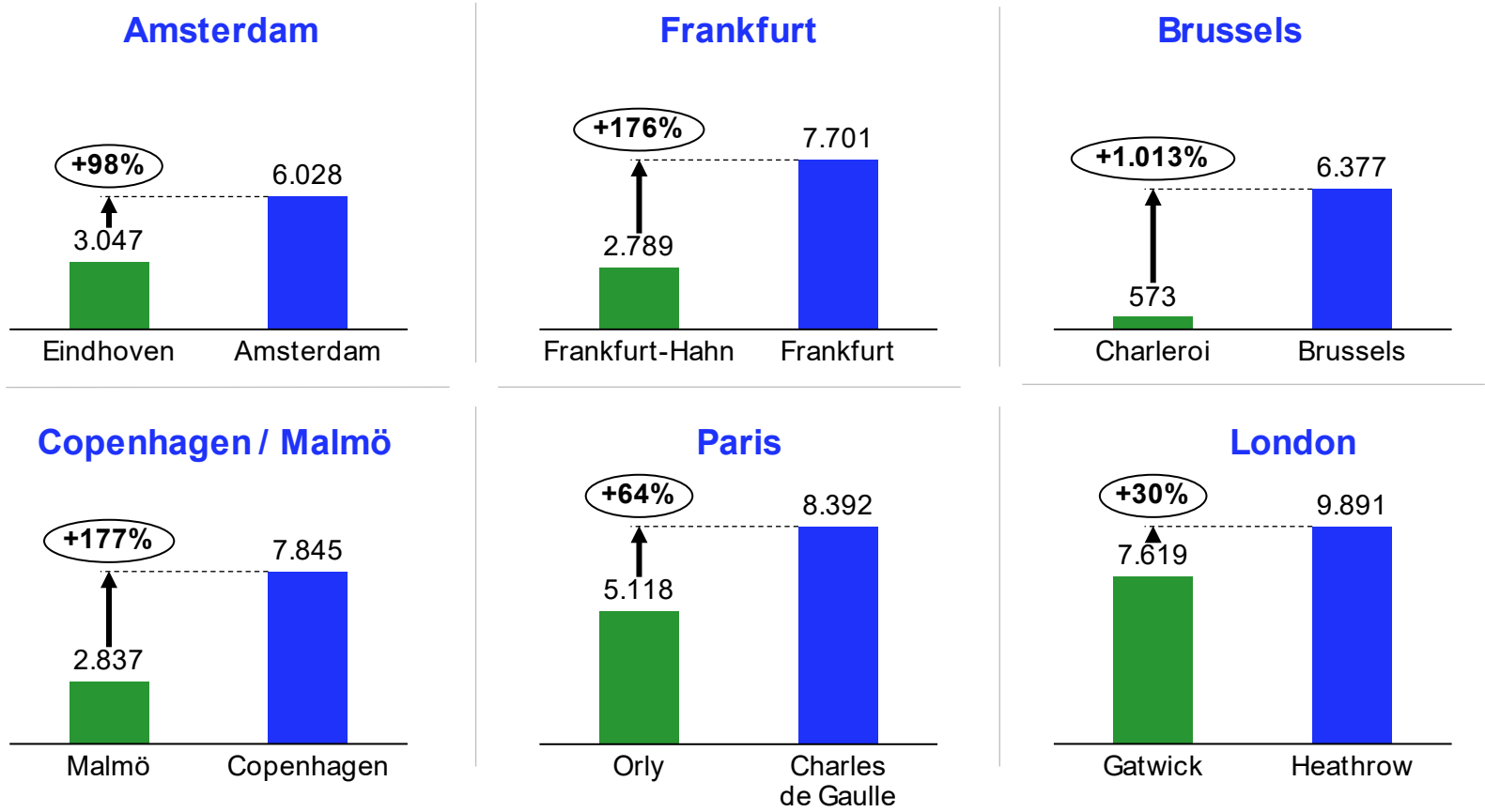
Source: IATA Economics using data from SRS Analyser

# Slot constrained airports often too costly for LCCs

## High cost of operating from congested airports discourages many LCCs

■ Tier 2 airport    ■ Tier 1 airport

Estimated airport charges for the turnaround of an A320 aircraft by airport (USD)

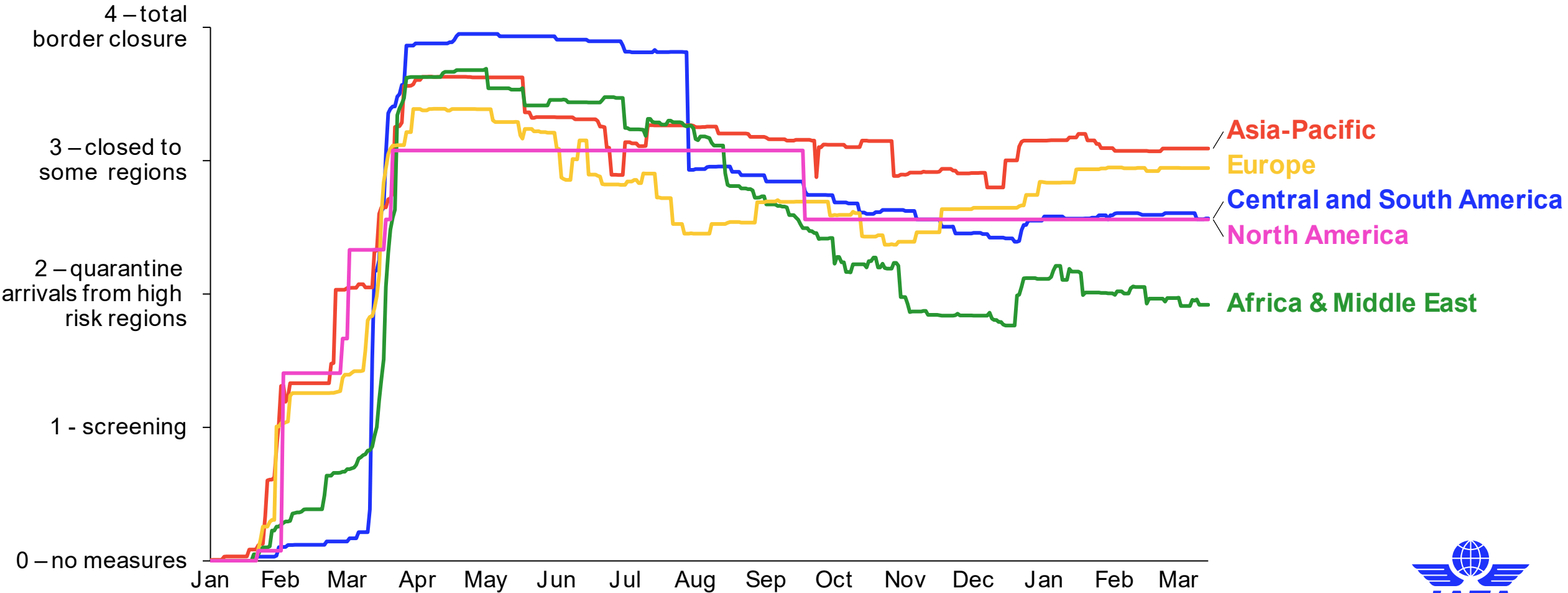


Source: IATA Economics. Estimated airport charges for turnaround on an A320 aircraft by airport in US\$

# Constraint to connectivity is border travel restrictions

Border controls on air travel remain high in all regions

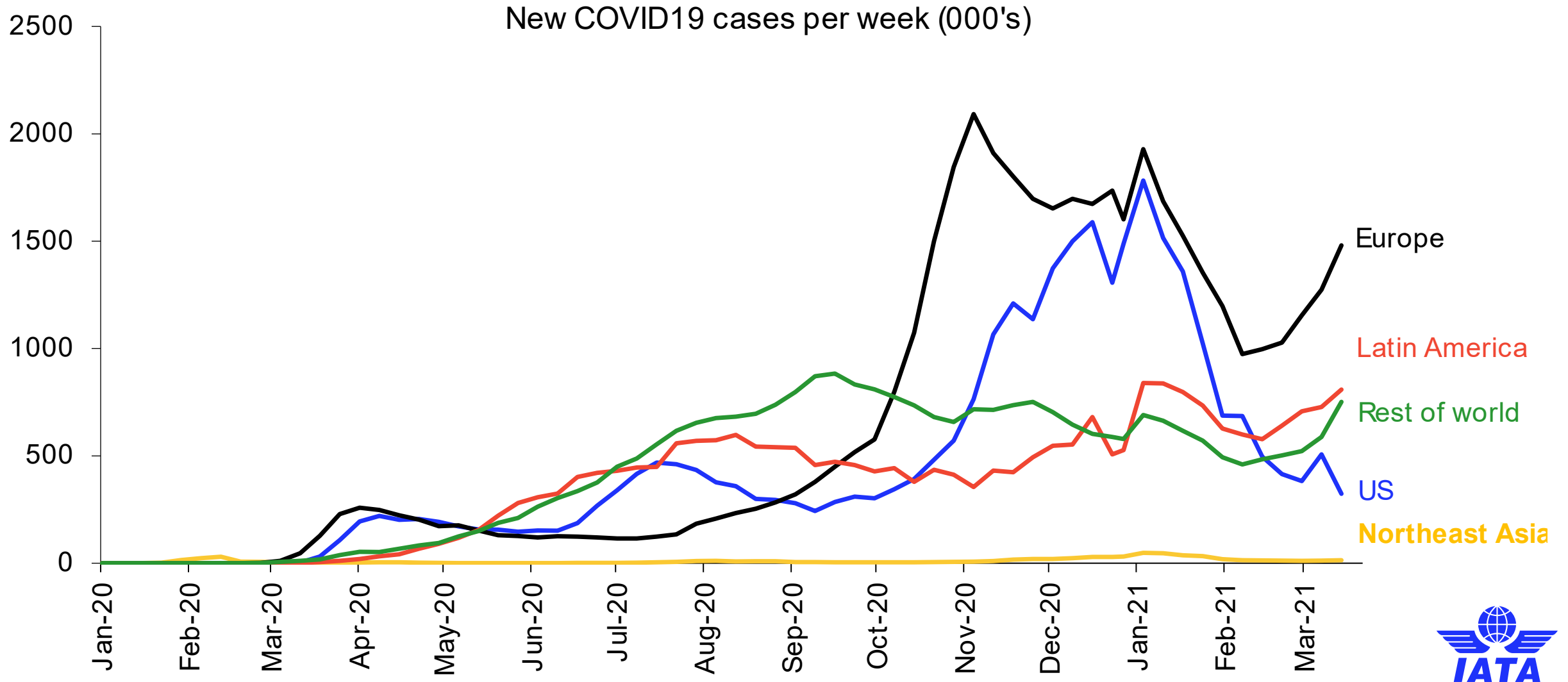
International travel stringency index weighted by population (Jan 2020-March 2021)



Source: IATA Economics analysis is based on Oxford University data

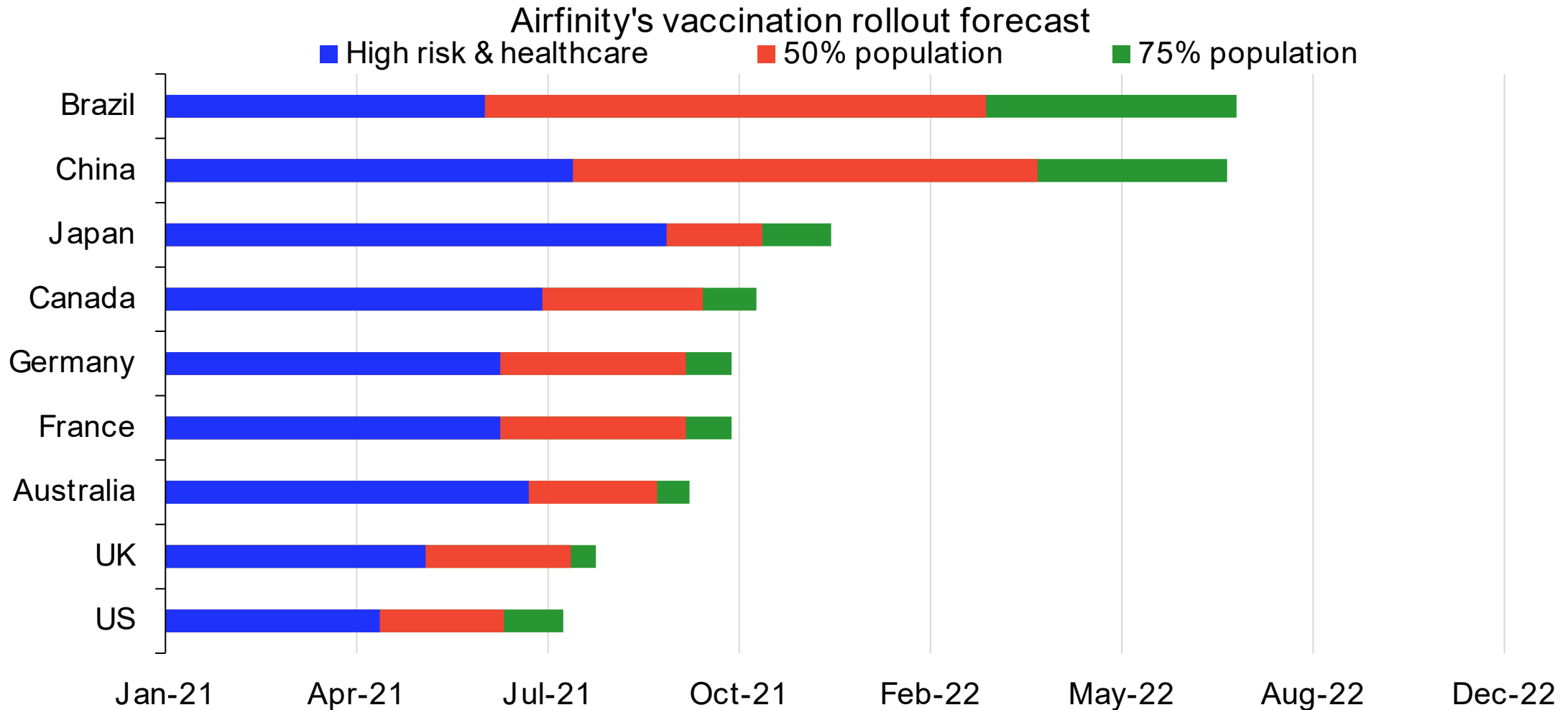
# Restrictions driven by COVID-19 control challenges

More infectious new variants have made the virus even harder to limit



# Vaccination should allow markets to reopen in stages

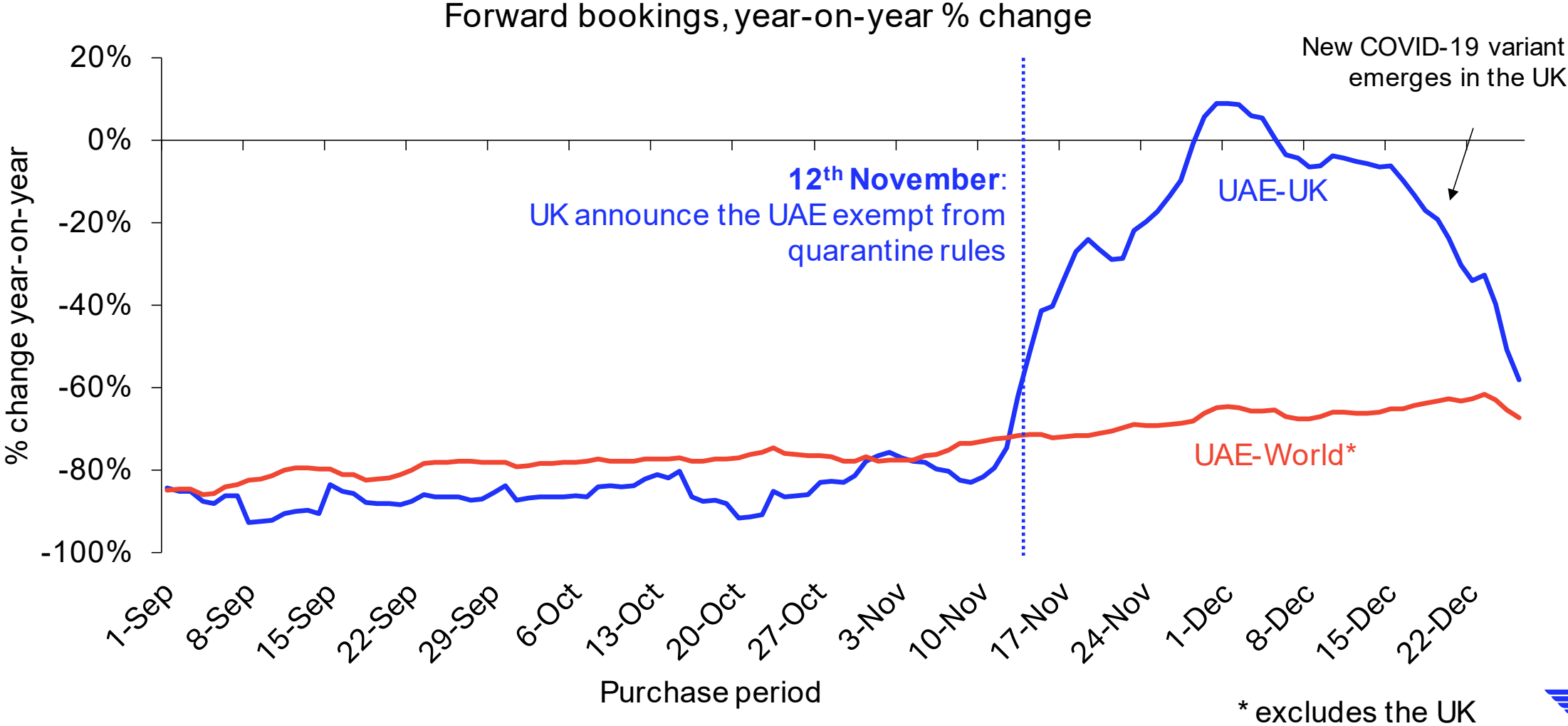
## Rollout of vaccination is uneven, as is governments' approach to risk





# We know that there is substantial pent-up demand

Whenever travel restrictions are eased leisure/VFR demand surges



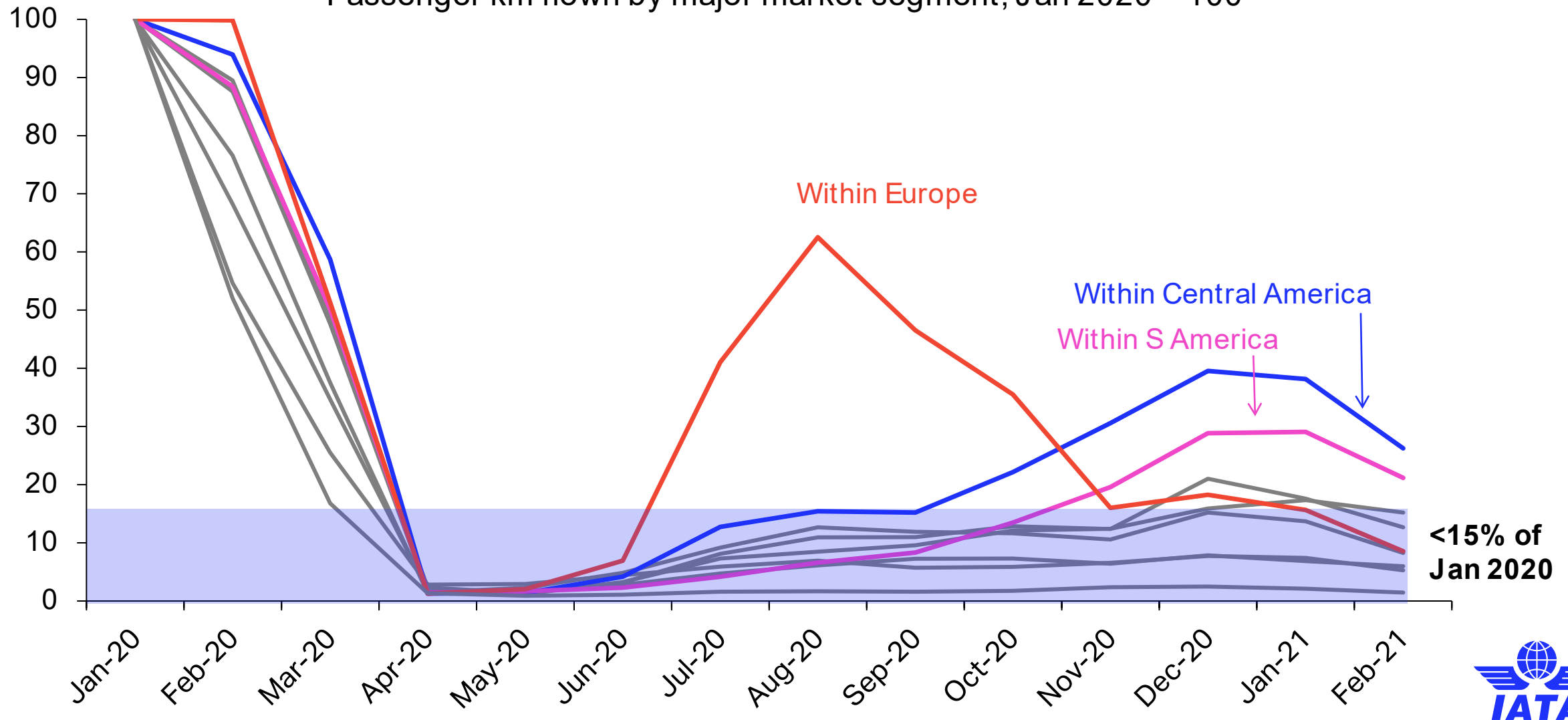
Source: IATA Economics using data from DDS



# International markets show air travel rises when allowed

## Impact of Europe's air corridors and removal of quarantine in Americas

Passenger km flown by major market segment, Jan 2020 = 100



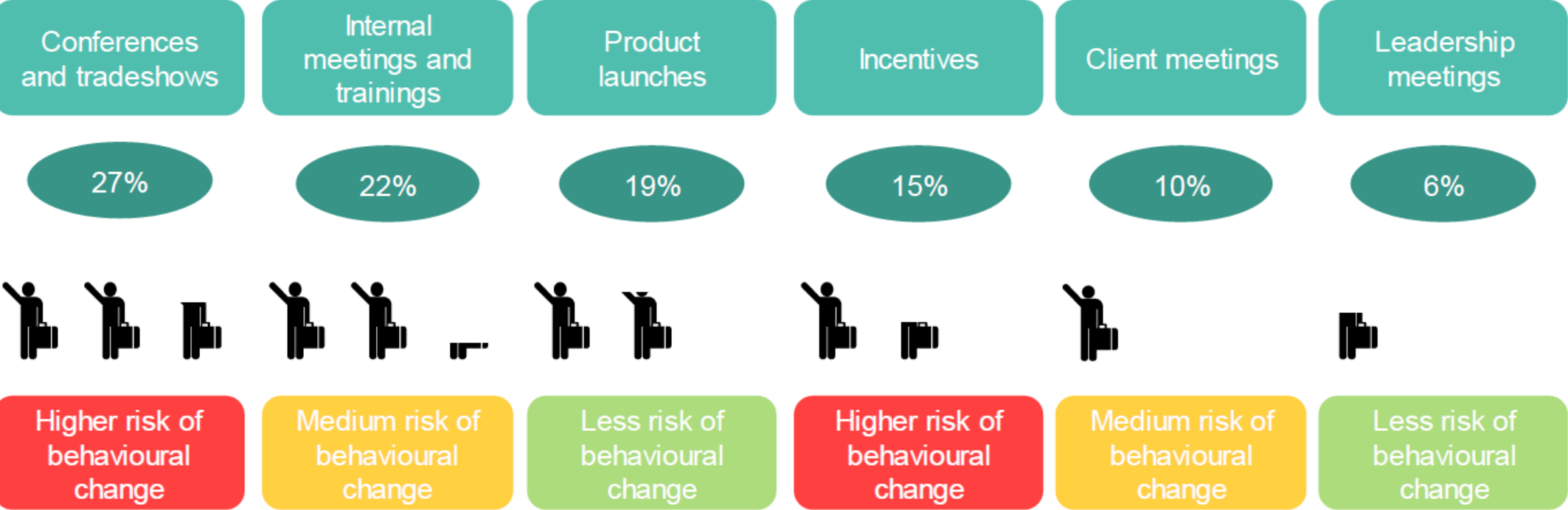
<15% of Jan 2020

Source: IATA Economics using data from IATA Monthly Statistics. Data is adjusted for seasonality.

# Will 'Zoom' cause structural loss of business passengers?

Long-haul services and network business models supported by high yield

EXHIBIT 17: Summary of outlook for different business travel types

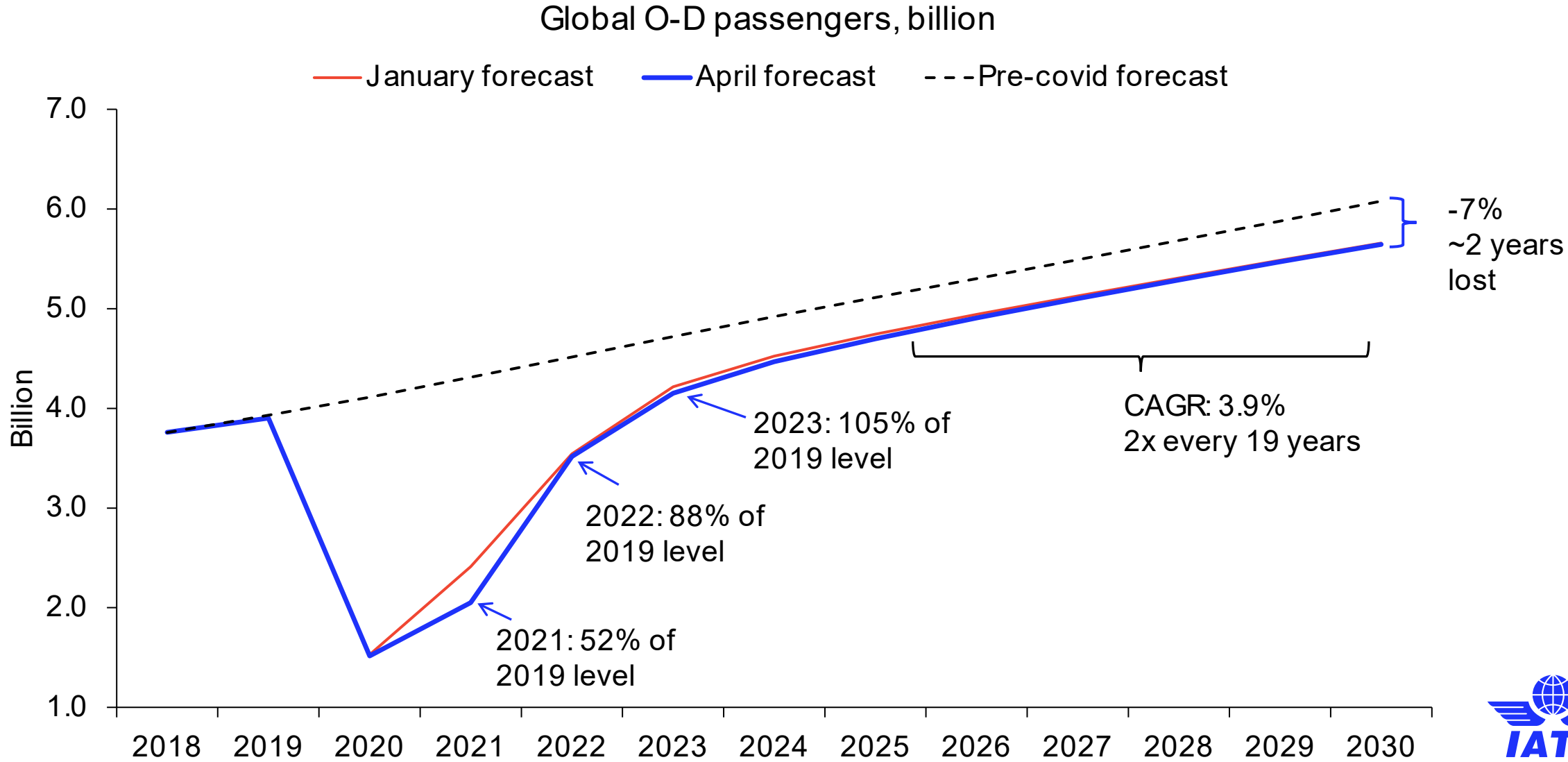


Source: Bernstein analysis



# We estimate COVID-19 long-term loss of 2 years growth

## Strong rebound when border travel barriers removed but not full recovery

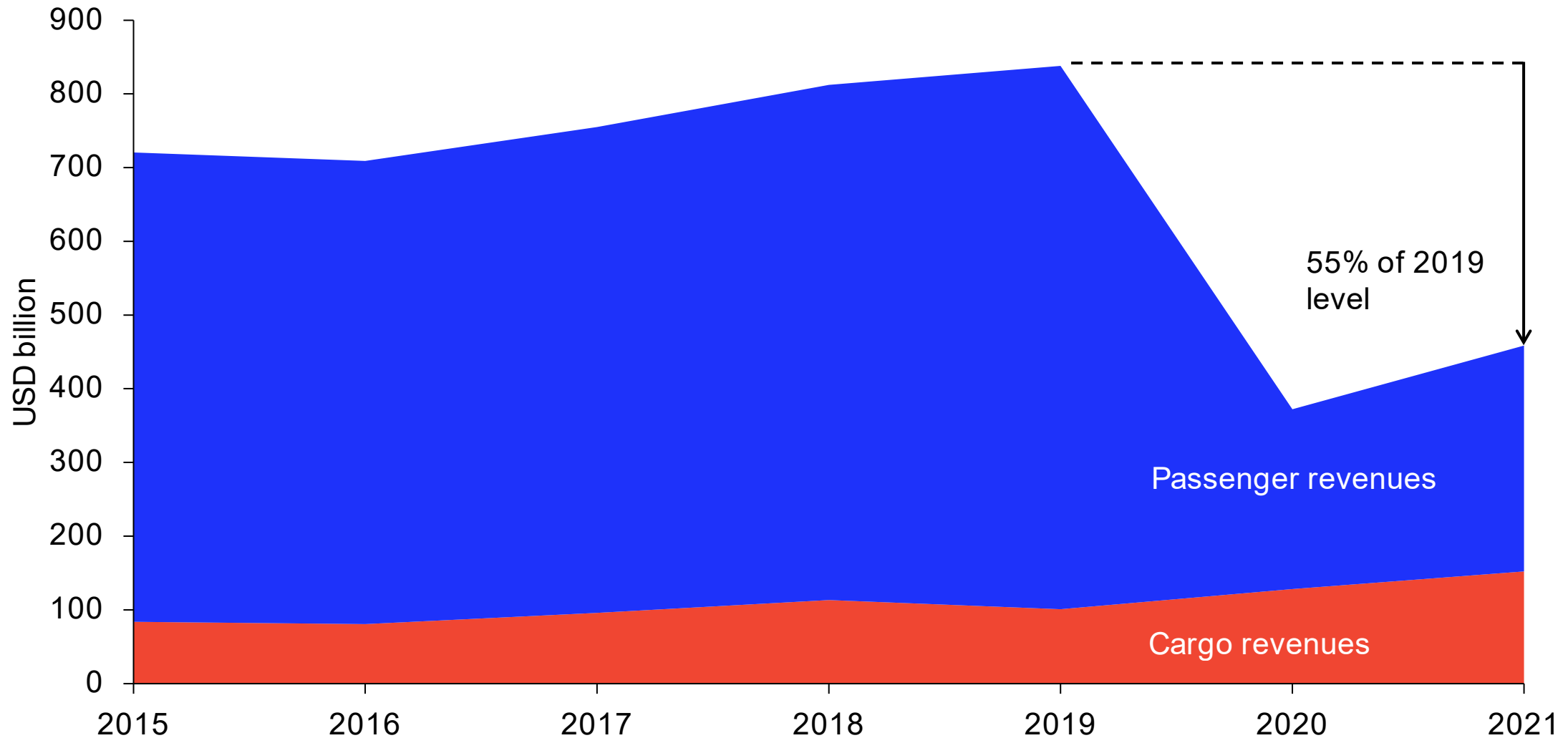


Source: IATA Economics using data from Tourism Economic/IATA Air Passenger Forecast, April 2021.

# But 2020/1 revenue shock challenge as many costs fixed

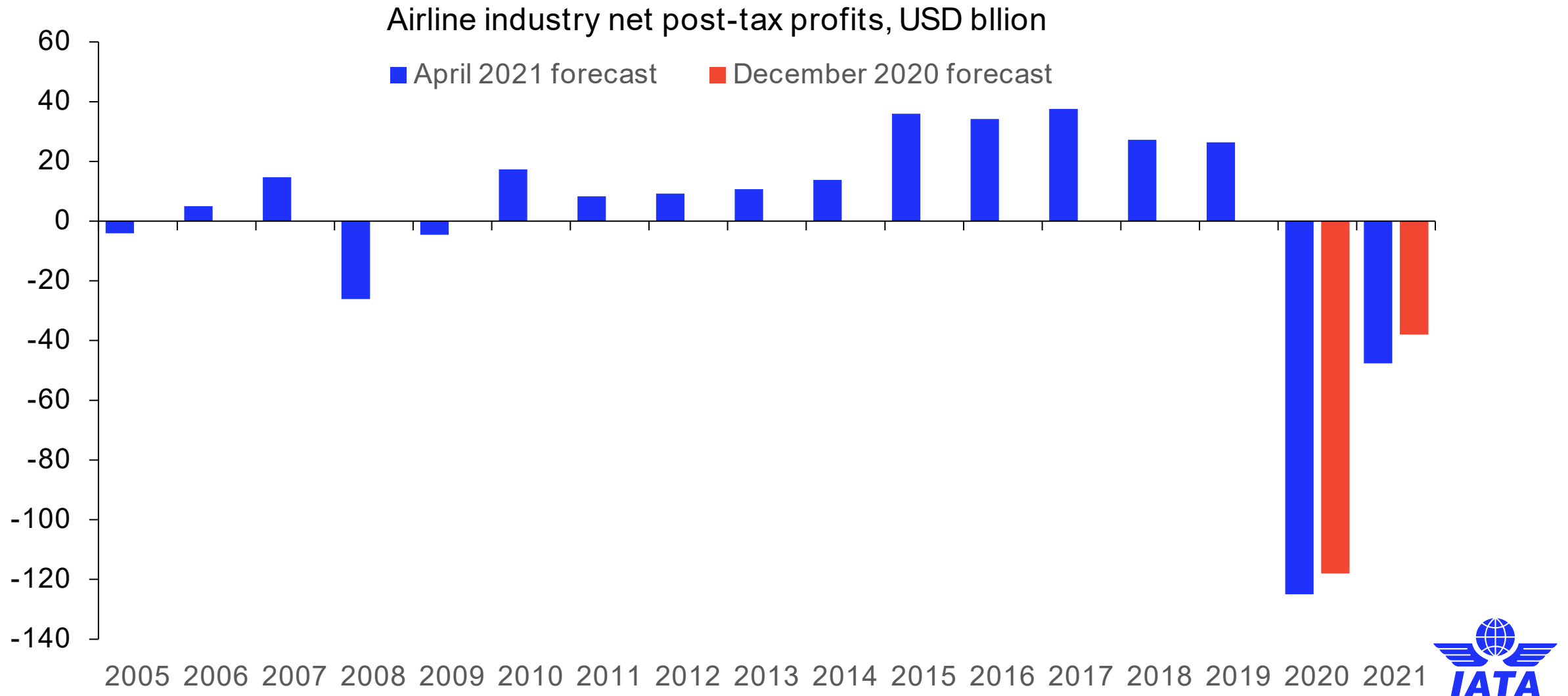
Difficult to avoid fleet and other 'semi-fixed' costs, so cash burn high

Global airlines revenue, USD billion



# More than US\$173bn airline losses in 2020 and 2021

## Unprecedented losses for airlines, far higher than during Great Recession

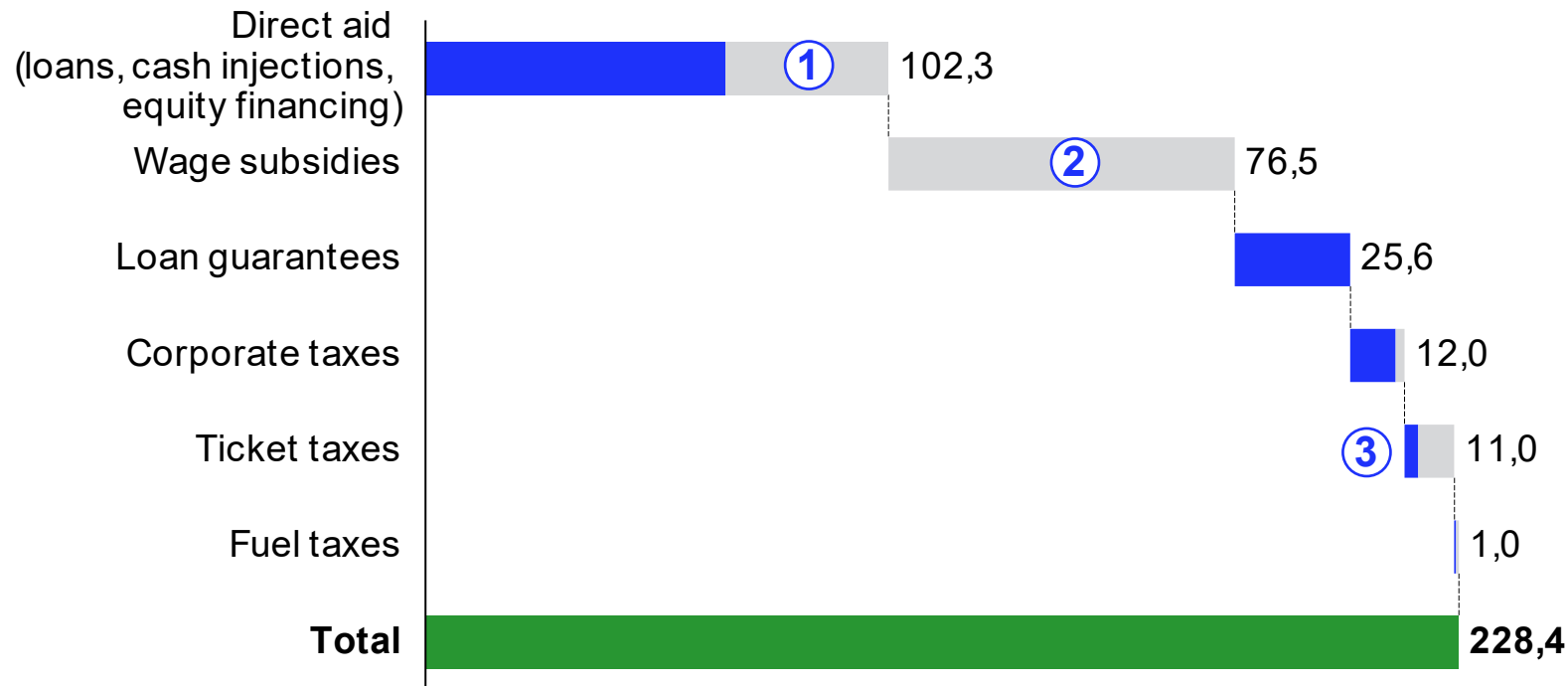


# Government aid could distort airline competition

## But significant proportion is debt and some aid conditional on remedies

Government aid made available to airlines due to COVID-19, by type (USD bn)

46% ■ Reimbursable / deferral only  
54% ■ Non-reimbursable / waiver/ discount

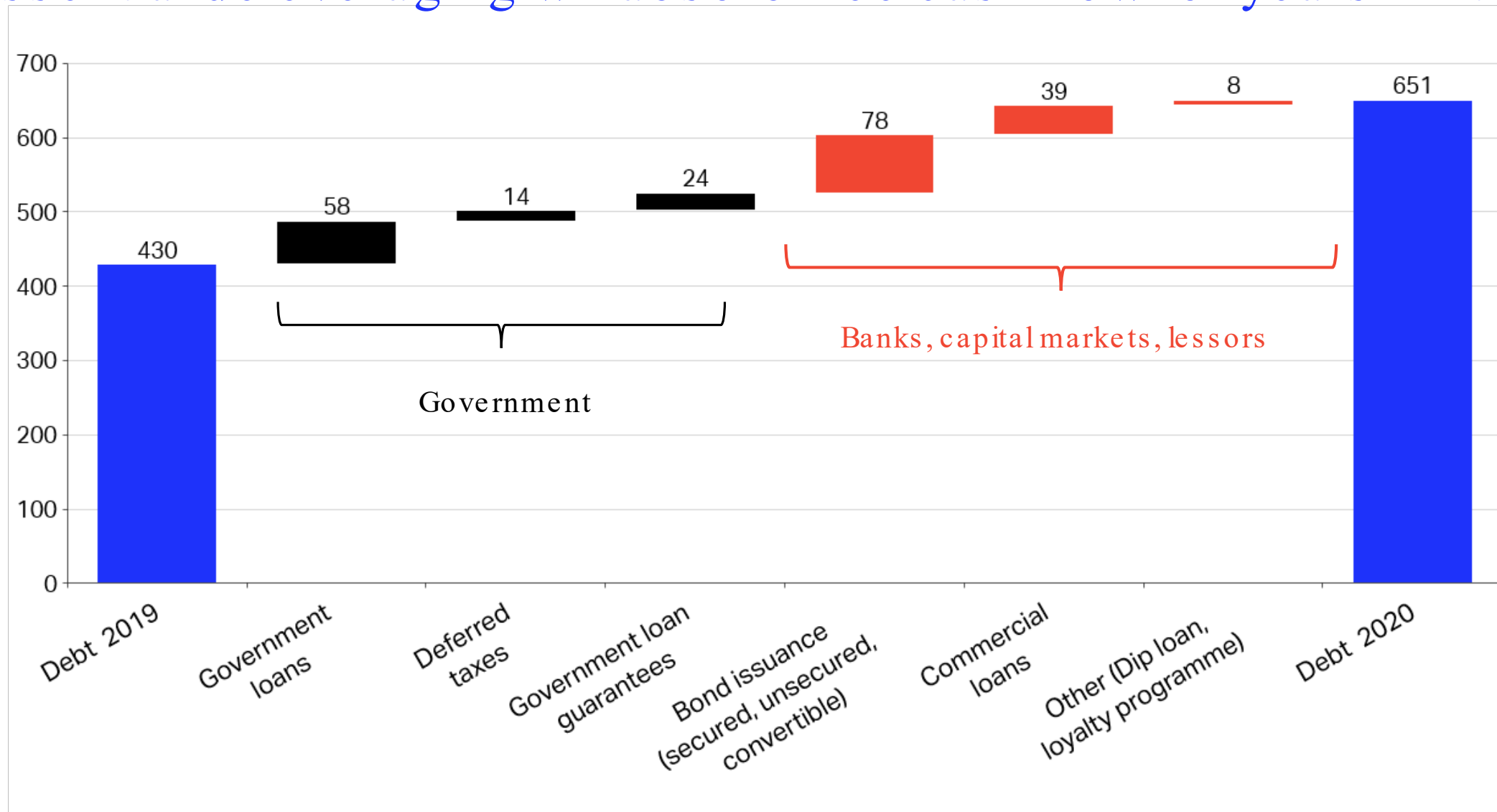


- **46% of aid is reimbursable** or deferral of liabilities
- The **remaining 54%** also resulted in **limited distortion of competition**:
  - ① Most of the **equity financing** (USD 36bn) was provided in the EU (subject to slot divestments), Asia-Pacific and Middle East
  - ② **Wage subsidies** have been available to all airline employees employed in a given country
  - ③ **Ticket tax** reductions have primarily benefitted passengers



# Survival at cost of huge rise in airlines' debt by end -2020

Essential deleveraging will absorb free cash flow for years limiting CAPEX



Source: IATA Economics using data from own estimates of Government aid, private debt estimates from Airfinance Journal, November 2020. Debt includes adjustment for operating leases.

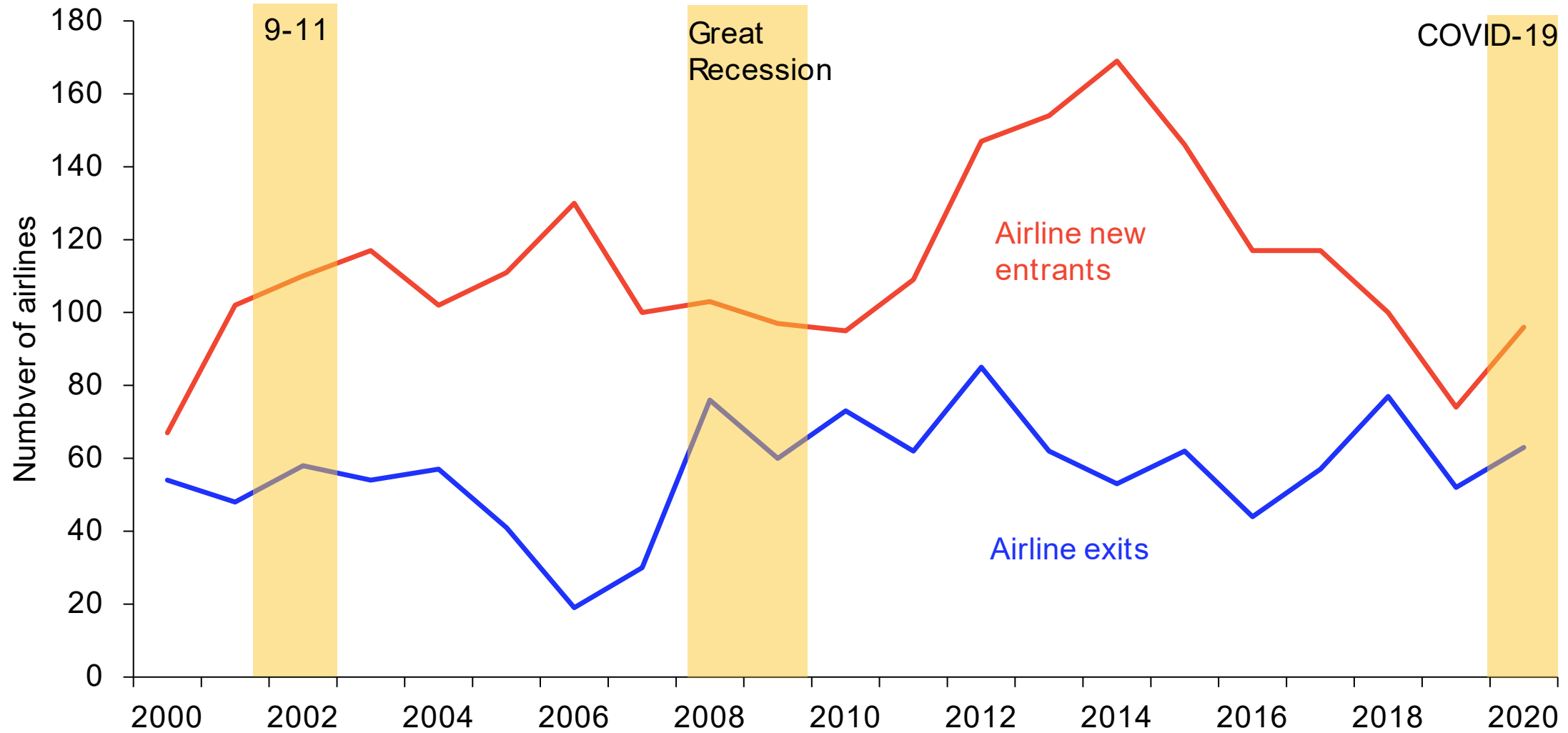




# Darwinian creative destruction may be absent

Failure and consolidation usually important part of adjustment to shock

Commercial airlines, worldwide exits and entries



# Contacts

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