CAPA Airline Leader Summit

CAPA Outlook: State of the Industry

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Airlines in Transition

State of the industry: agenda

- 20 numbers in 20 minutes
- Market structure and profitability
- Return on capital and barriers to entry and exit



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20 numbers in 20 minutes

Topics included

- Aircraft in service
- Capacity
- Traffic
- LCC share
- Boeing, Airbus deliveries
- Aircraft order backlog

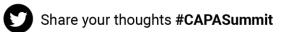
- Leasing
- Pilot numbers
- Fuel costs
- Air fares
- Industry profits
- Market concentration

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26 years to achieve ICAO's
Long Term Aspirational Goal
of net zero by 2050

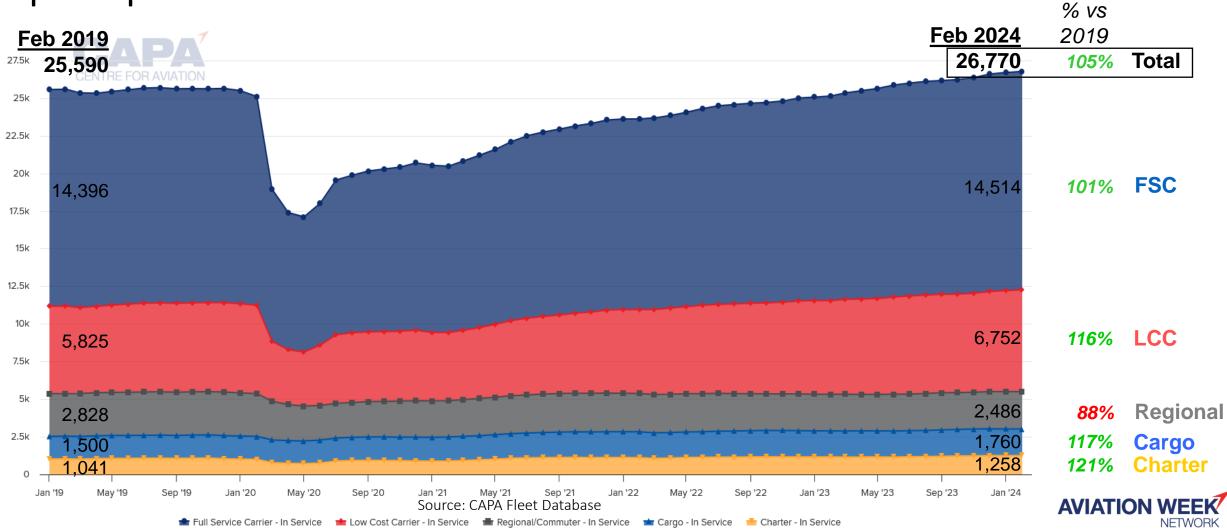
This goal **must** be reached before **26** runs down to **Zero**!



Jets in service at **105%** of pre-pandemic numbers

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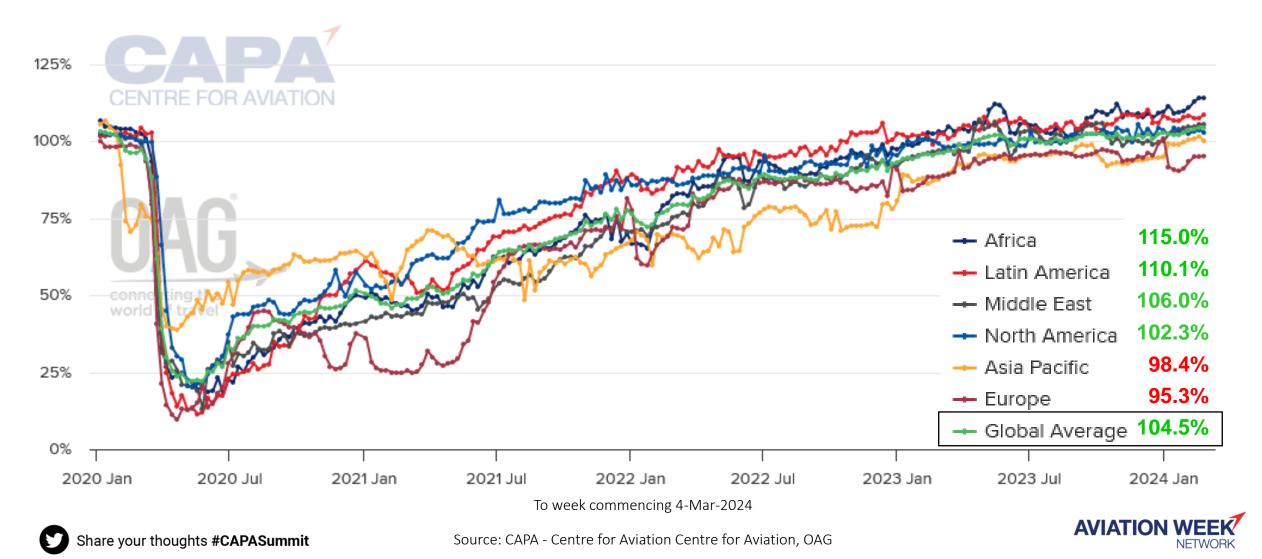
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Seat capacity **105%** of 2019 level

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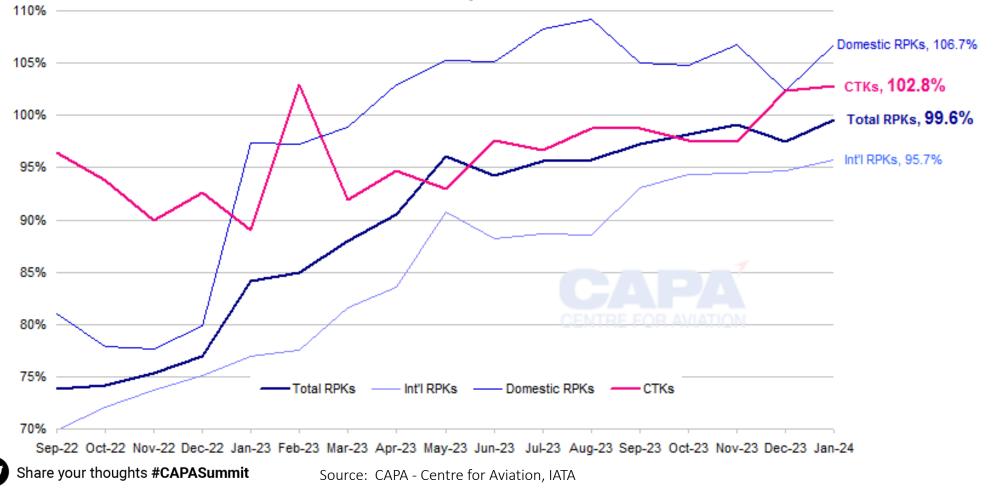
Jan-2024 traffic vs Jan-2019: Pax **99.6%**, Cargo **102.8%**

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AVIATION

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World airline traffic volumes as a percentage of equivalent month of 2019





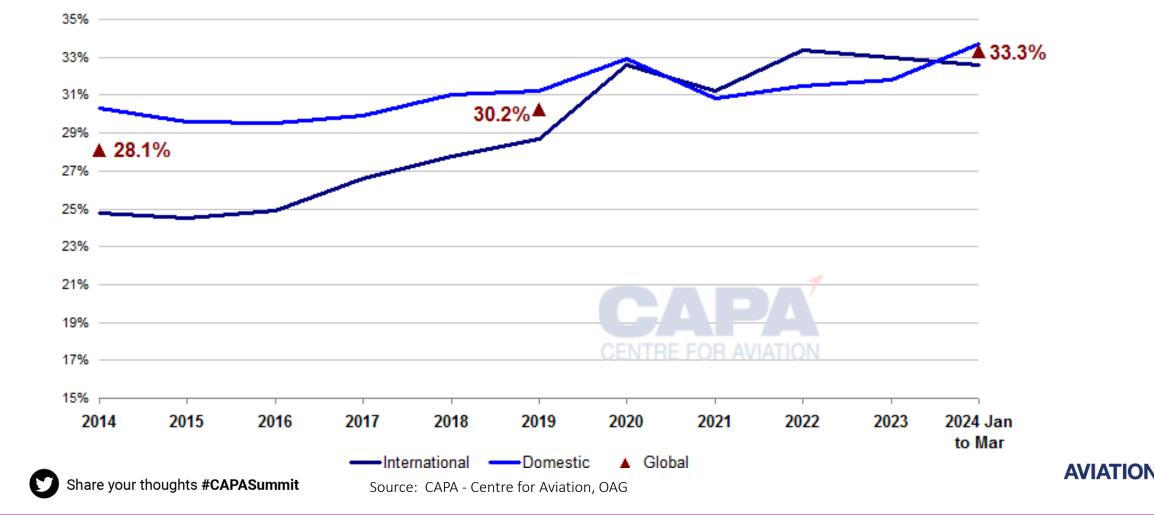
vs 30% in 2019

Low cost carrier seat share

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NFTWORK

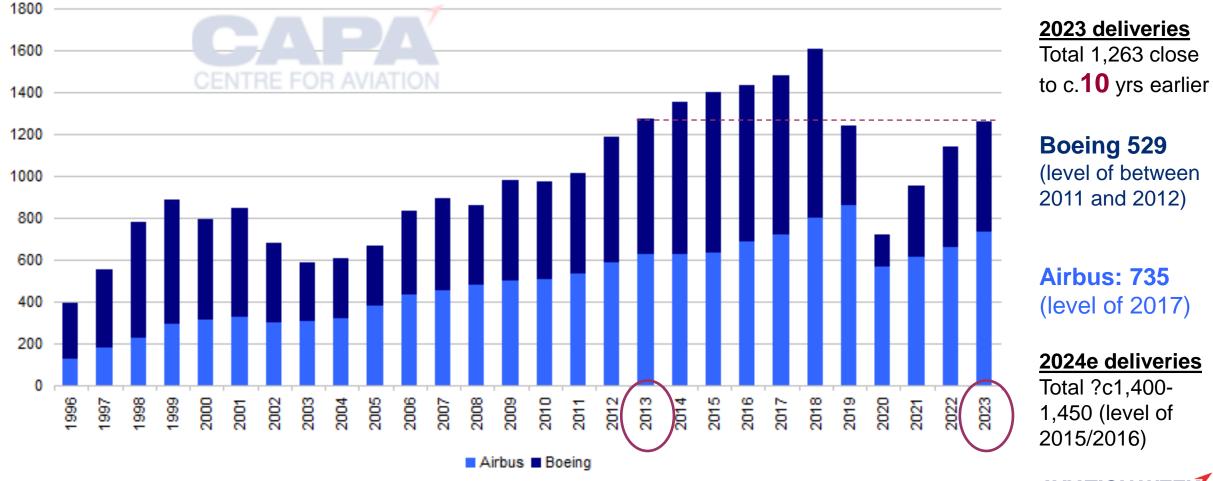
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Boeing, Airbus deliveries: **10** years lost

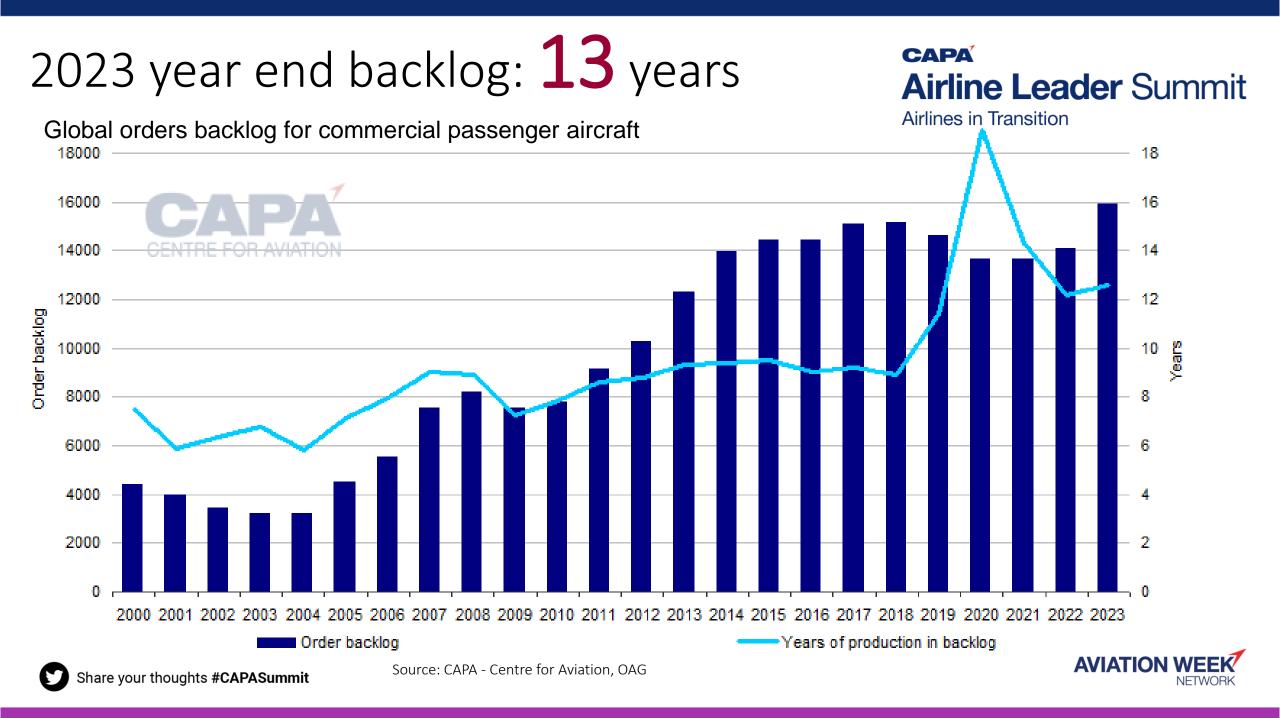
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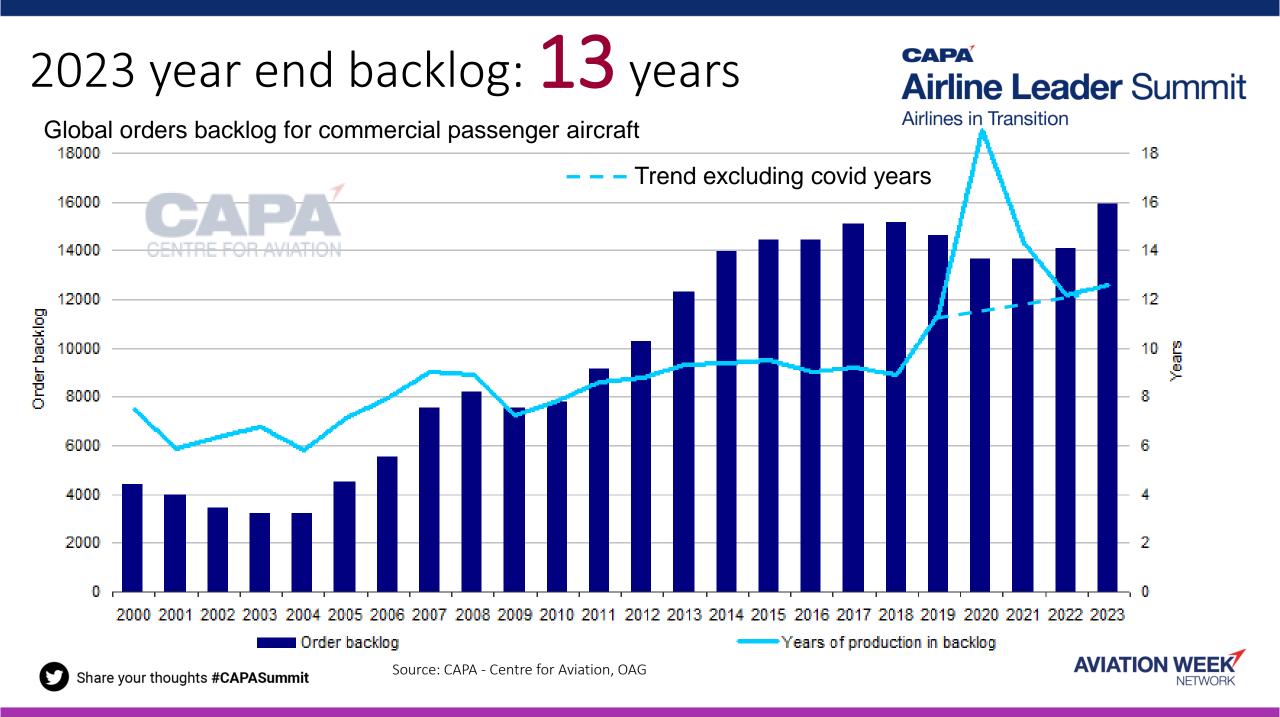
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Source: Boeing, Airbus, CAPA - Centre for Aviation



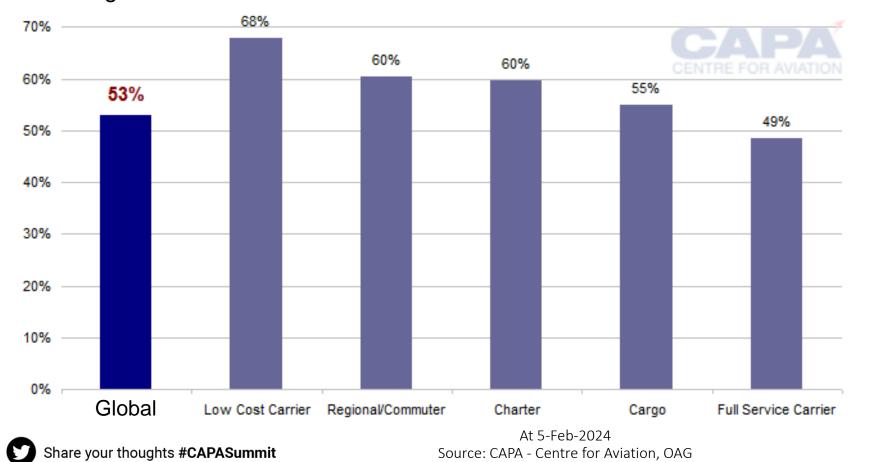




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Percentage of aircraft that are leased



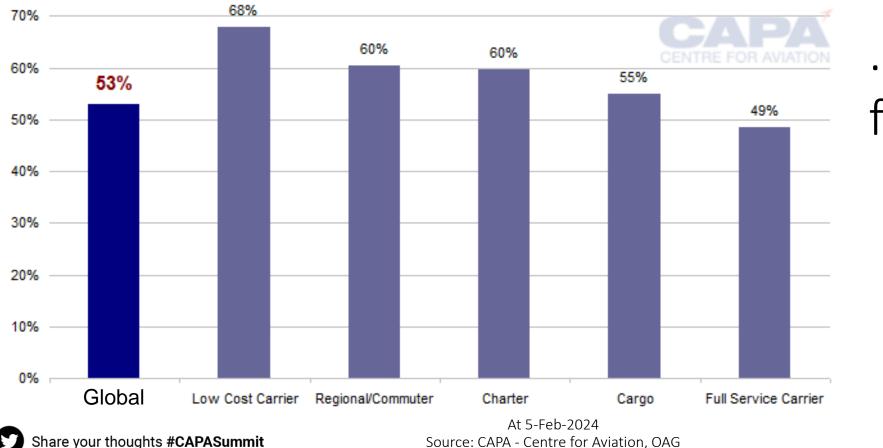




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Percentage of aircraft that are leased



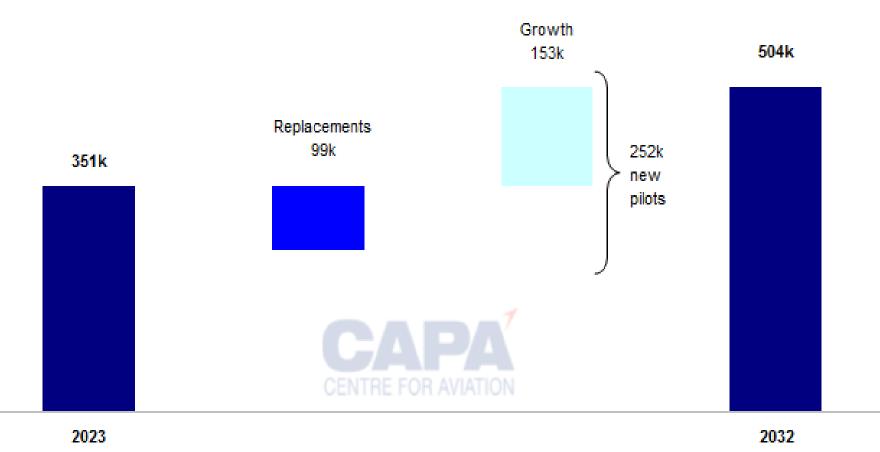
...**68%** of LCC fleet

AVIATION V

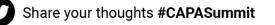
Pilot growth needs to be **4.1%** pa globally to 2032...

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Source: CAE Aviation Talent Forecast (Jun-2023), CAPA - Centre for Aviation





Pilot growth needs to be **4.1%** pa globally to 2032...



Growth 504k 153k Replacements 99k 252k 351k new pilots

...compared with 1.4% pa in 10yrs to 2022 in the US

2023

2032

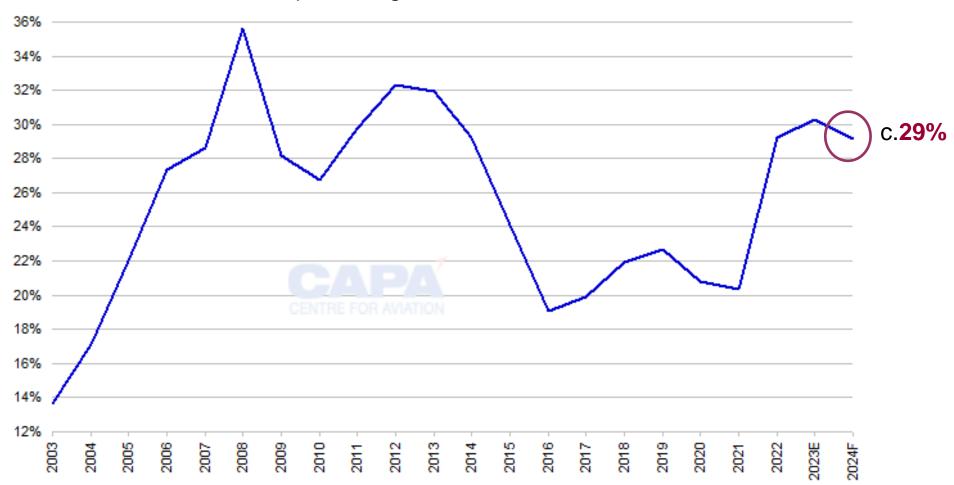
Source: CAE Aviation Talent Forecast (Jun-2023), CAPA - Centre for Aviation



Fuel cost c29% of revenue

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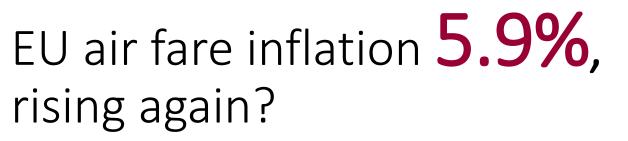
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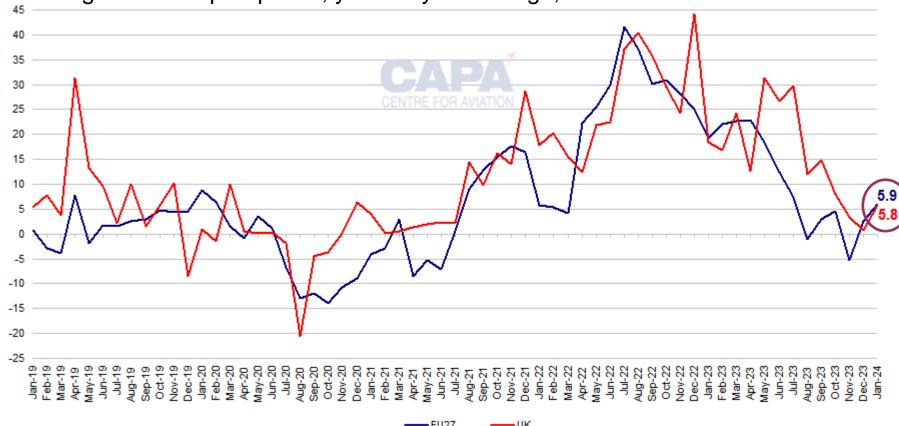
World airline fuel cost as a percentage of revenue, 2003 to 2024F

Share your thoughts #CAPASummit Source: CAPA - Centre for Aviation, IATA





Passenger air transport prices, year on year change, %



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Jan-2024 price increase **+5.9%** y-o-y in EU-27

Double digit rates of increase for much of 2021, 2022 & 2023.

Slowed in recent months. Rising once more?

Similar pattern in UK.

<u>Jan-24 vs Jan-19 prices</u> EU: +39% UK: +55%

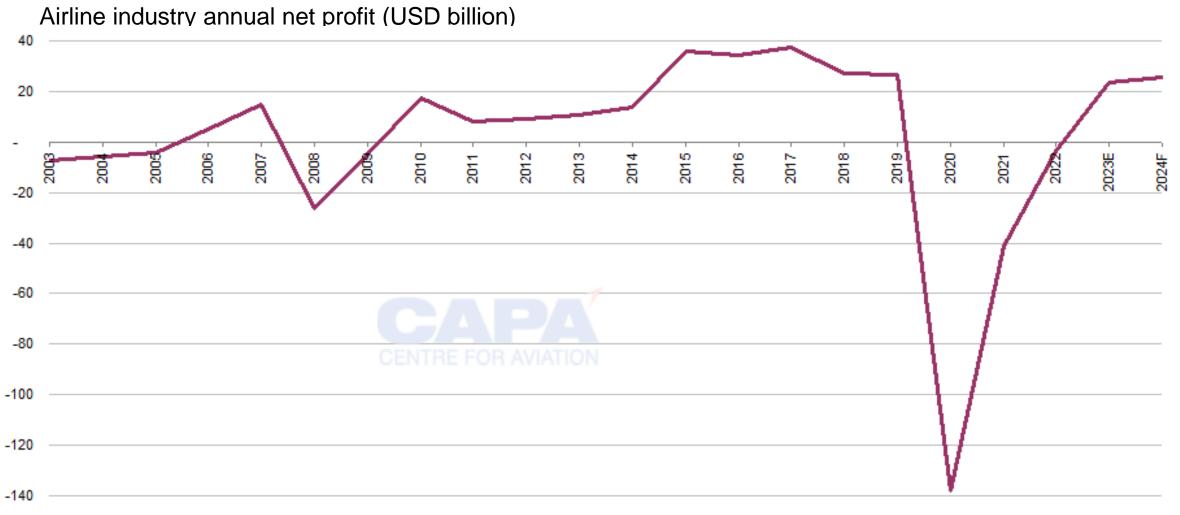
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Source: Eurostat, Office for National Statistics, CAPA - Centre for Aviation



USD**25.7bn** net profit forecast 2024 Airline Leader Summit

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But Return on Invested Capital is below the Cost of Capital ...

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Airline industry Return on Invested Capital (%) and Weighted Average Cost of Capital (%)

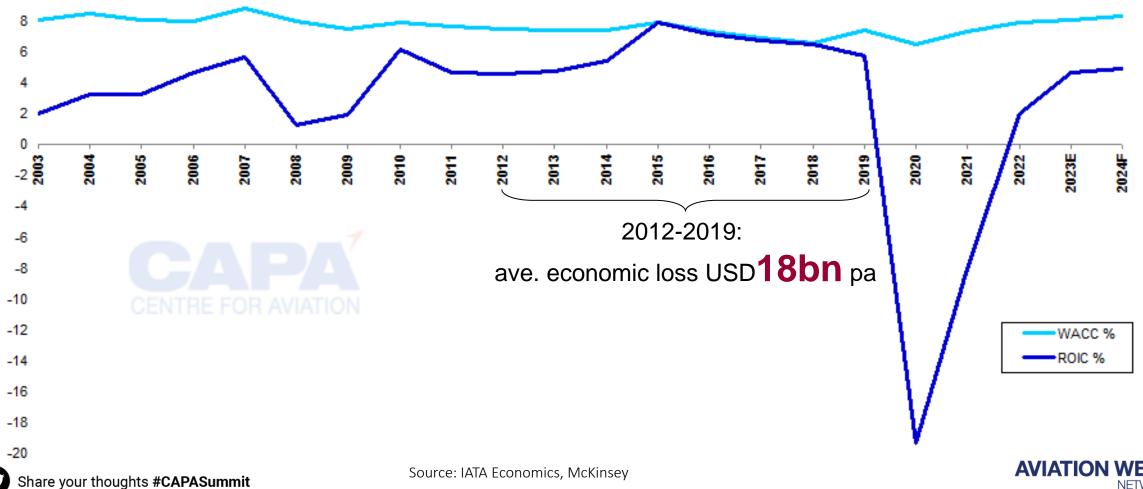


Ave USD**18bn** pa economic loss *in the good years*

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Airline industry Return on Invested Capital (%) and Weighted Average Cost of Capital (%)



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Market structure and profitability



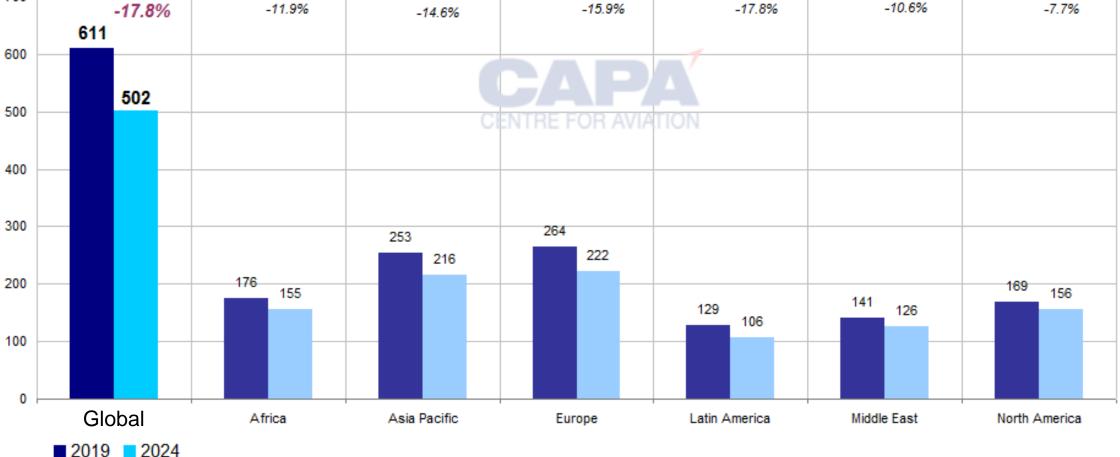
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No. of airline groups -18% vs 2019

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Number of airline groups, first week of Jul-2019 and first week of Jul-2024



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Source: CAPA - Centre for Aviation Centre for Aviation, OAG



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Measuring market concentration

Herfindahl-Hirschman Index (HHI): range zero to 10,000



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Measuring market concentration

Herfindahl-Hirschman Index (HHI): range zero to 10,000

Sum of the squares of the market share of all participants

- Example: 10 participants, each with 10% share: HHI = 1,000

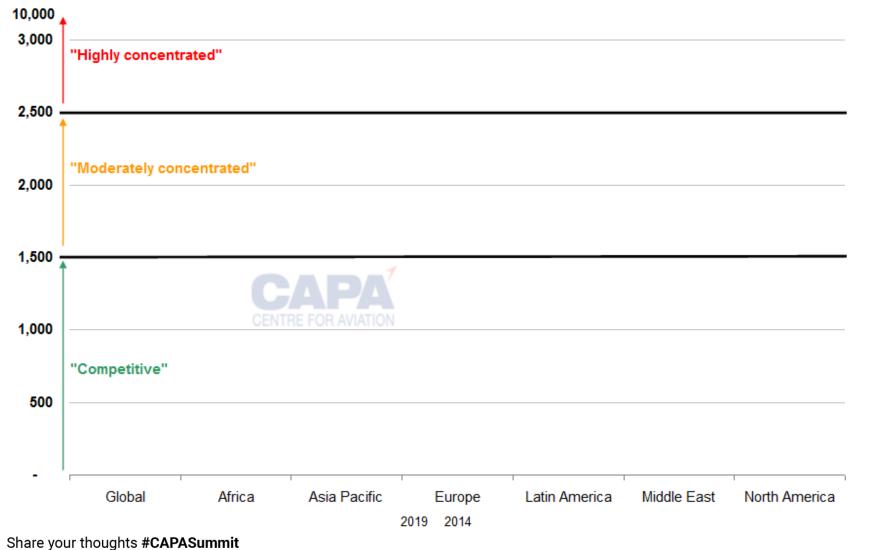
- Example: 1 participant with 100% share: HHI = 10,000



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Airline regions: Herfindahl-Hirschman Index (HHI) first week of July, 2019 & 2024

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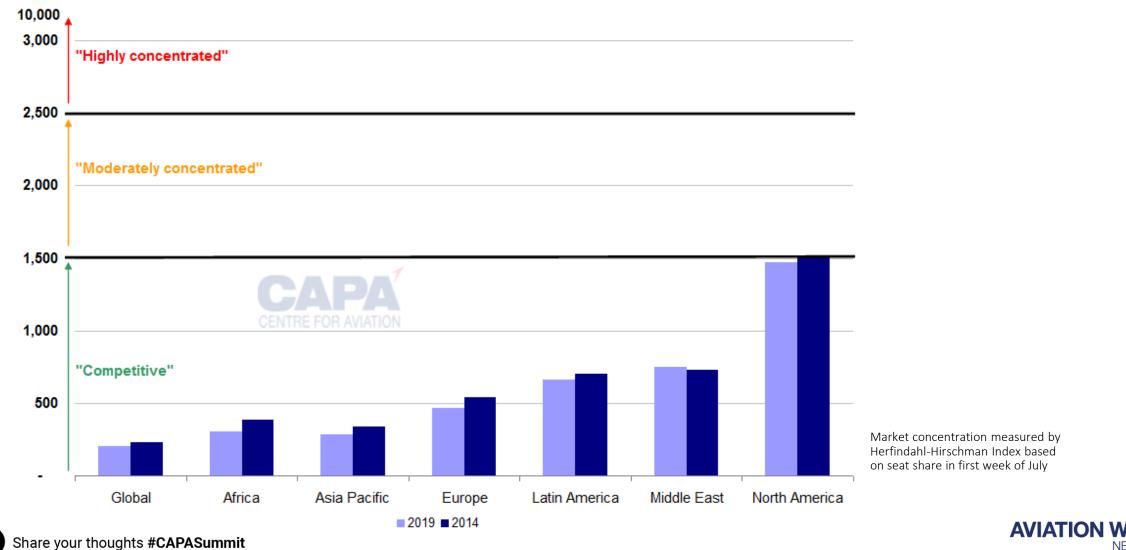


Airline regions: Herfindahl-Hirschman Index (HHI) first week of July, 2019 & 2024



NETWORK

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5 regions are "highly competitive"

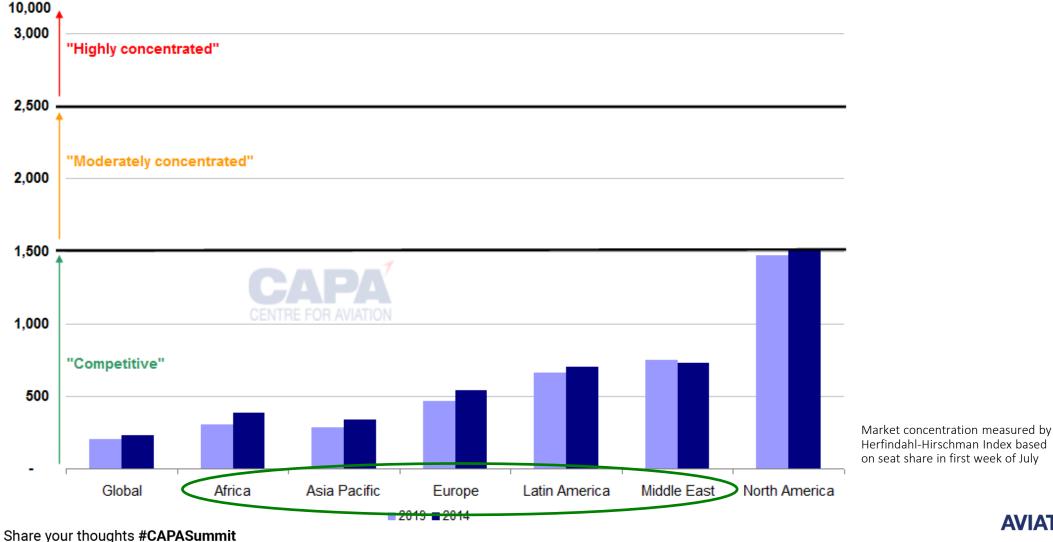
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AVIATION W

NETWORK

Airline regions: Herfindahl-Hirschman Index (HHI) first week of July, 2019 & 2024





b regions are "highly competitive" CAPA **Airline Leader Summit Airlines in Transition** Airline regions: Herfindahl-Hirschman Index (HHI) first week of July, 2019 & 2024 10,000 3.000 "Highly concentrated" Only **1** region 2,500 is "moderately "Moderately concentrated" 2.000 concentrated" 1,500 1.000 "Competitive" 500 Market concentration measured by Herfindahl-Hirschman Index based on seat share in first week of July Asia Pacific Middle East Global Africa Latin America North America Europe 2019 2014 **AVIATION V**

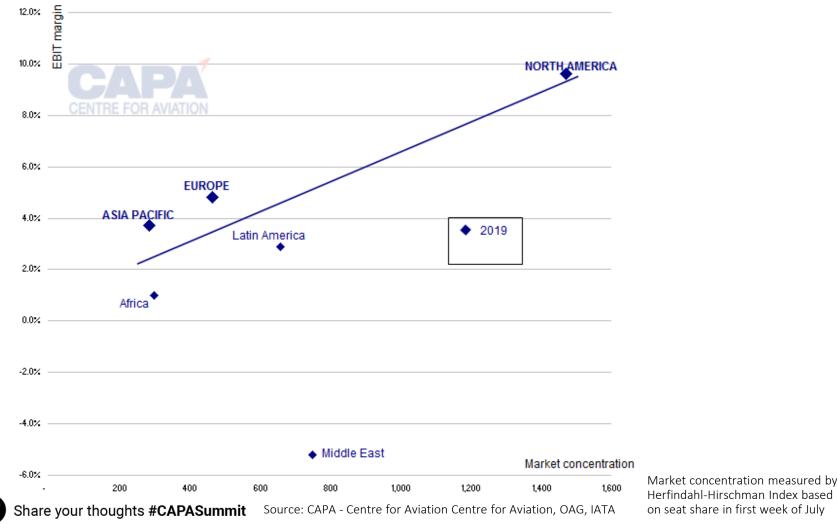
NFTWORK

Market concentration affects airline margins

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Airline EBIT margin (vertical axis) versus market concentration (horizontal axis)



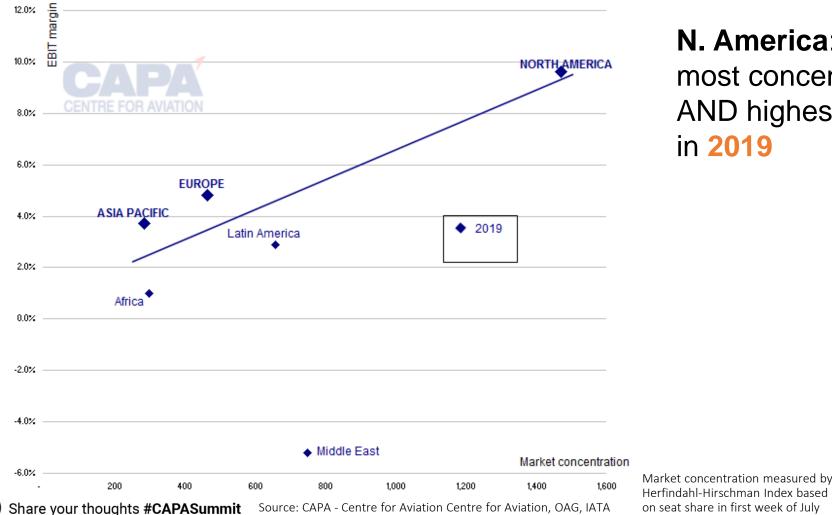


Market concentration affects airline margins

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Airline EBIT margin (vertical axis) versus market concentration (horizontal axis)



N. America: most concentrated AND highest margin in 2019

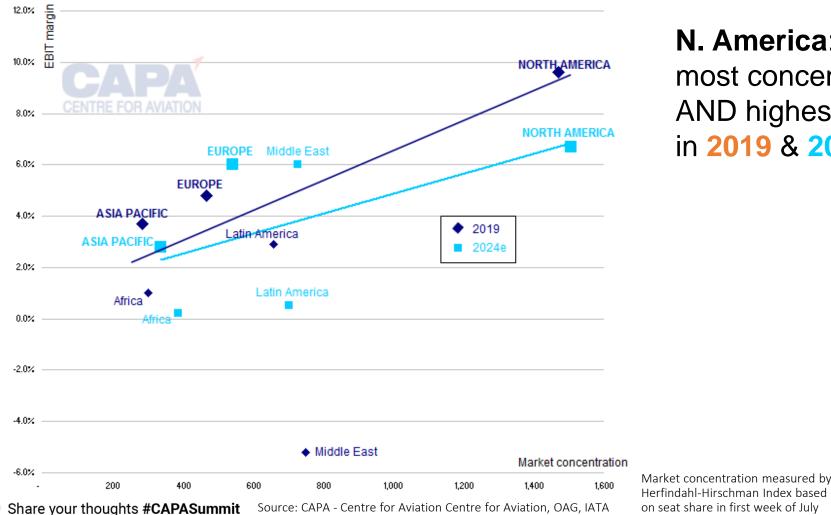


Market concentration affects airline margins

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Airline EBIT margin (vertical axis) versus market concentration (horizontal axis)



N. America: most concentrated AND highest margin in 2019 & 2024e



The **20** numbers A recap:

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- 26 years to achieve net zero
- Jets in service at **105%** of 2019 levels
- Seat capacity at **105%**
- Cargo traffic at **102.8%**, RPKs at **99.6%**
- LCC seat share 33%
- Boeing, Airbus deliveries: **10** years lost
- Aircraft order backlog equates to **13** years of production
- Leasing accounts for 53% of global fleet, 68% for LCCs

- Pilot growth needed **4.1%** pa vs historic **1.4%** pa
- Fuel cost at **c29%** of revenue in 2023
- EU air fare inflation Jan-2024 at **5.9%**
- Airline industry USD25.7bn net profit forecast in 2024e
- Average USD18bn pa economic loss in the good years
- **18%** drop in no. airline groups vs 2019
- **5** global airline regions are "highly competitive"...
- ...and only **1** is "moderately concentrated"





Further observations and conclusions





Low return on invested capital



• Indicates too much competition in the airline industry



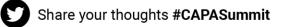


Low return on invested capital



- Indicates too much competition in the airline industry
- Consolidation has increased, but not enough to drive up returns





Low return on invested capital



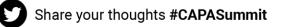
- Indicates too much competition in the airline industry
- Consolidation has increased, but not enough to drive up returns
- Additional factor: for some airline investors, ROIC is not prime motive
 - Eg Some governments
 - Eg "Hobbyists", "Brand Builders"



• Barriers to entry are low







• Barriers to entry are low

• Barriers to exit are high

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- Barriers to entry are low
 - Aircraft, labour
 - Technical, safety regulation
- Barriers to exit are high

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 - Obstacles to mergers and acquisitions
 - Competition authorities
 - Foreign ownership limits





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Governments/regulators



Airlines in transition: challenges



- Green transition: existential challenge
- "Infrastructure": airport, ATC, surface access, labour, aircraft
- Digitalisation





Airlines in transition: challenges



- Green transition: existential challenge
- "Infrastructure": airport, ATC, surface access, labour, aircraft
- Digitalisation

All require massive investment, BUT low return on capital and highly competitive market structure may deter investors



Airlines in transition: Conclusions

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Governments must find ways to lower barriers to exit to allow consolidation and higher returns.



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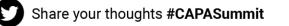
Airlines in transition: Conclusions

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Governments must find ways to lower barriers to exit to allow consolidation and higher returns.

As a consequence **fares** may **rise** for consumers.





Airlines in transition: Conclusions

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Governments must find ways to lower barriers to exit to allow consolidation and higher returns.

As a consequence **fares** may **rise** for consumers.

It is time to **start** the **debate**!





Return to long term growth?

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World revenue passenger kilometres 1970-2023

