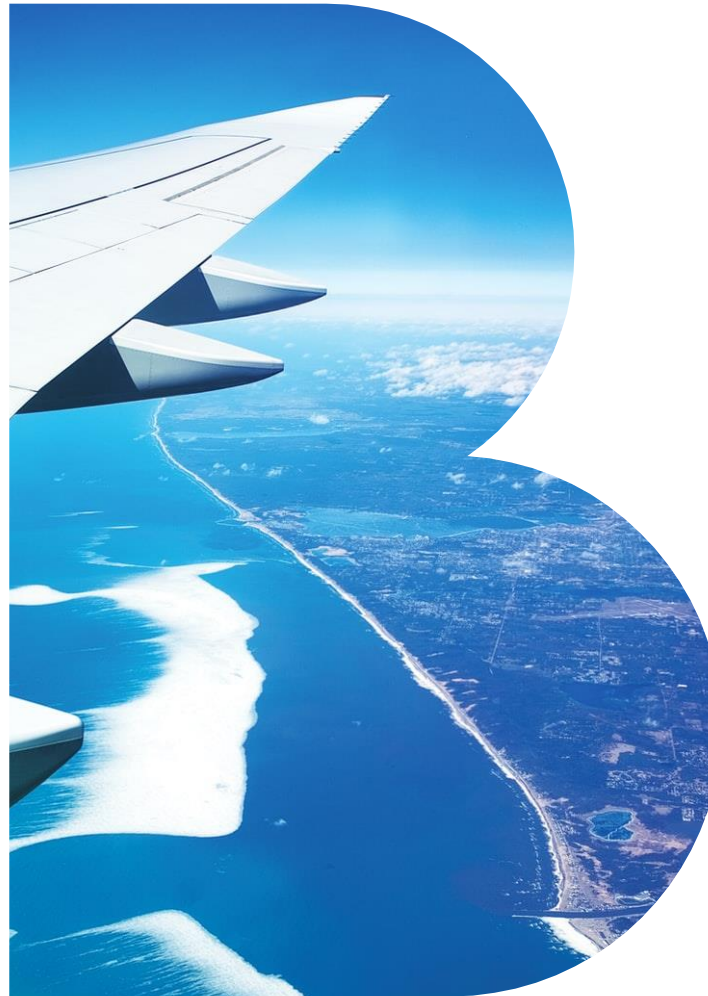


La Situation Economique du Transport Aérien, zoom sur l'Afrique et l'Océan Indien

Association de Transporteurs Aériens
Francophones
– 127^{ème} Assemblée Générale de l'ATAF

Didier Bréchemier

Head of Roland Berger Transportation



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Agenda



A Presentation of Roland Berger



B Roland Berger air traffic recovery scenario – **Global analysis**



C Roland Berger air traffic recovery scenario – **Focus on Africa**

A. Presentation of Roland Berger



Founded in Germany in 1967, Roland Berger is the only global tier 1 management consulting firm with European roots

Our profile

Founded in **1967** in Germany by Roland Berger

51 offices in **34** countries, with around **2,400** employees

Nearly **220** RB Partners currently serving

~1,000 international clients



Roland Berger has worked for airlines and airports around the globe (1/2)

Roland Berger clients – Airlines [Selection]

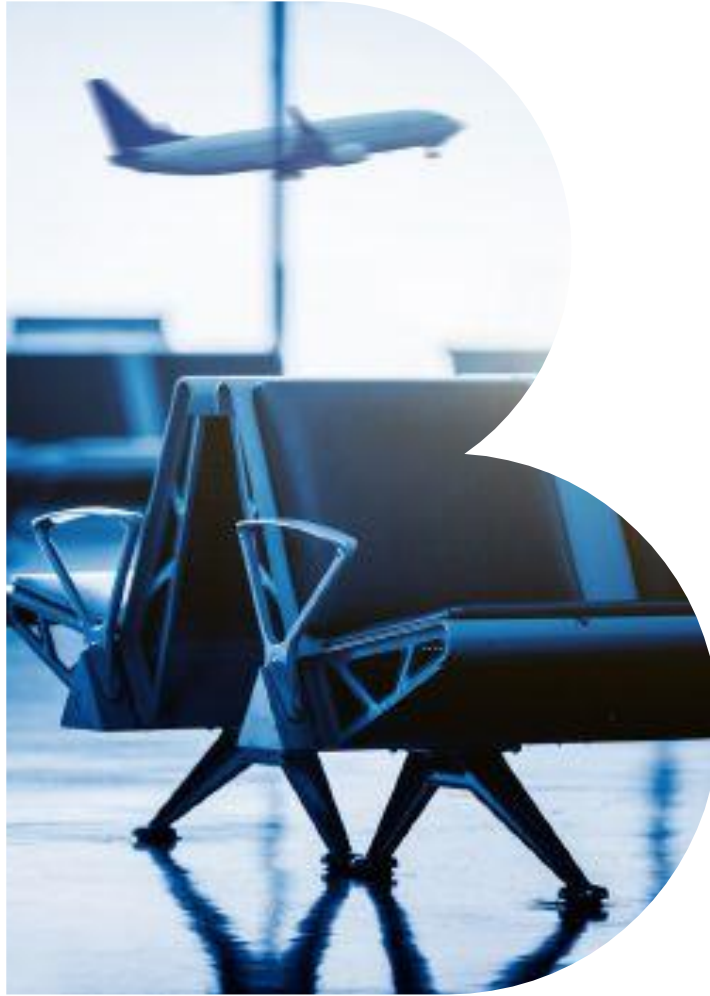


Roland Berger has worked for airlines and airports around the globe (2/2)

Roland Berger clients – Airlines [Selection]

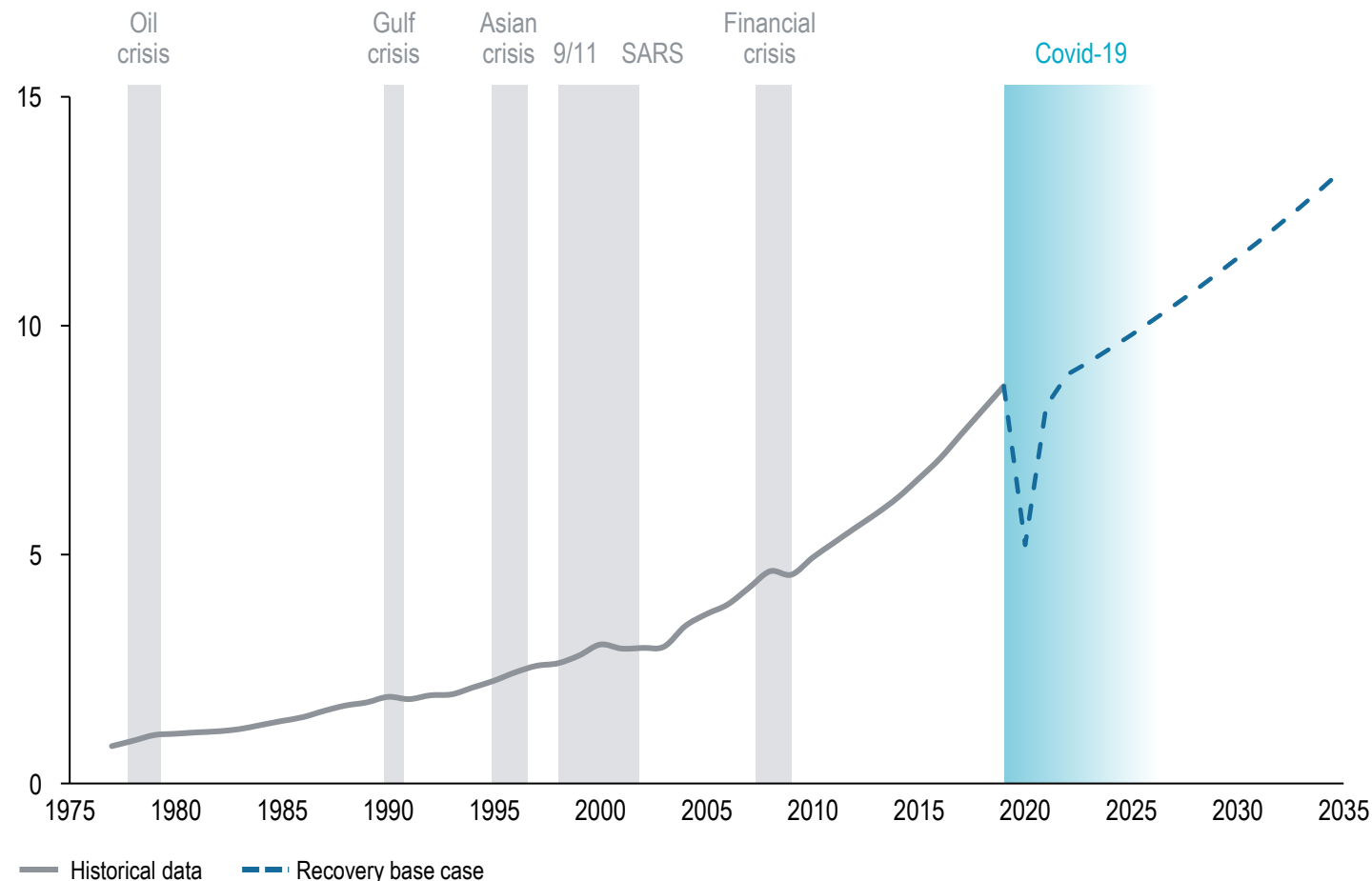


B. Roland Berger air traffic
recovery scenario –
Global analysis



The aviation industry has historically been exposed to crises and always recovered – Covid merely reinforced pre-existing trends

Global air transport revenue passenger kilometer [trillion km]



Insights & observations

- > The airline market **has survived several crises** and has always **rebounded shortly thereafter**
- > While the pandemic has been and still is an **unprecedented external shock**, IATA forecasts a return to **pre-Covid levels around 2023-2024**, followed by subsequently constant growth rates
- > Several **pre-existing trends** have, at least temporarily, been reinforced (e.g. cost pressure), while others will remain for long-term (e.g. sustainability)
- > The overall **business of the aviation industry** is though still a **growing sector**



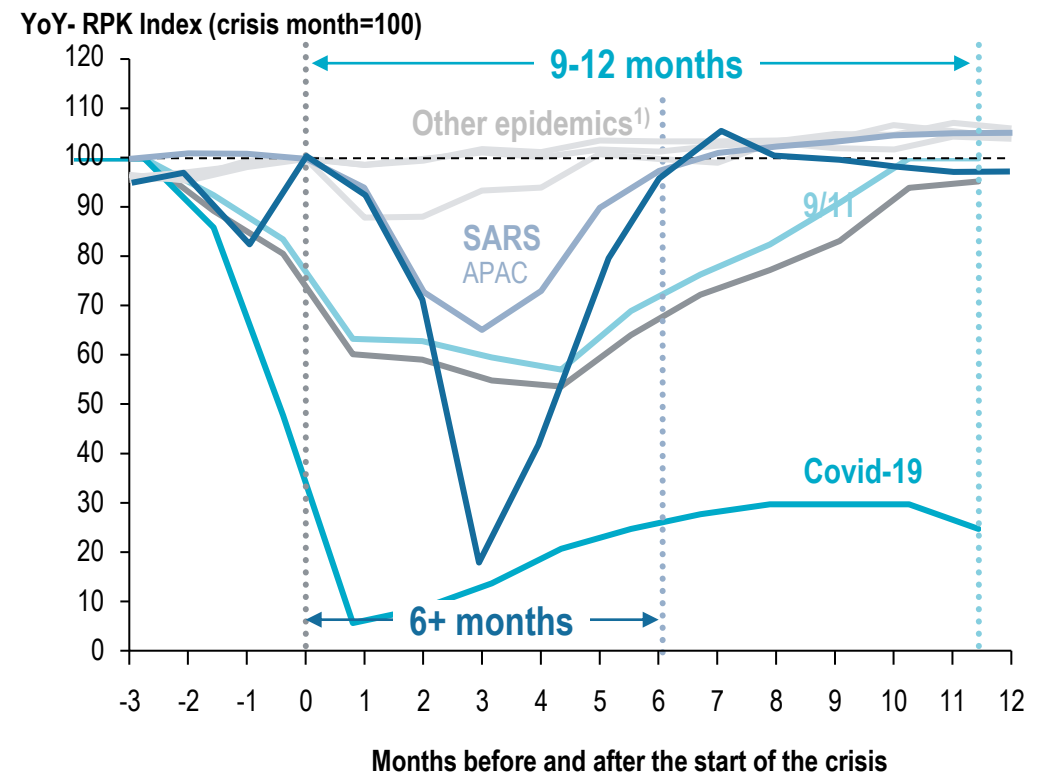
The characteristics of Covid-19 are more severe and have a longer impact on the market than previous crisis

Comparison between Covid-19 and former crises impacting long distance mobility

Factors impacting demand for long distance in previous crises

	Economic downturn	Fear	Health risk	Travel restrictions	Geography
First oil shock	✓	✓			Global
1980s oil crisis	✓				Global
First Gulf War	✓	✓			Global
9/11		✓			Global
Financial crisis (2008/09)	✓				Global
SARS		✓	✓	✓	Regional
Covid-19	✓	✓	✓	✓	Global

Previous crises long distance mobility [YoY changes in aviation RPK by month after crisis start]



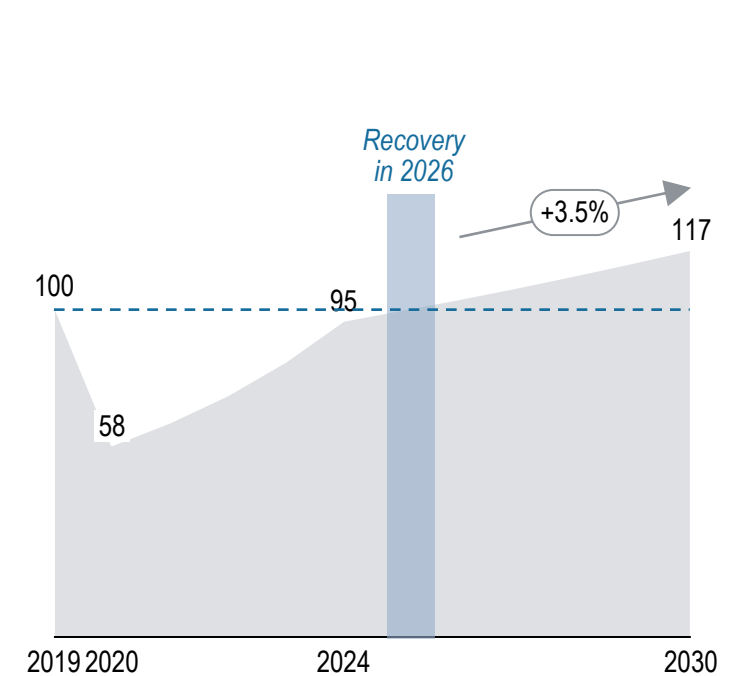
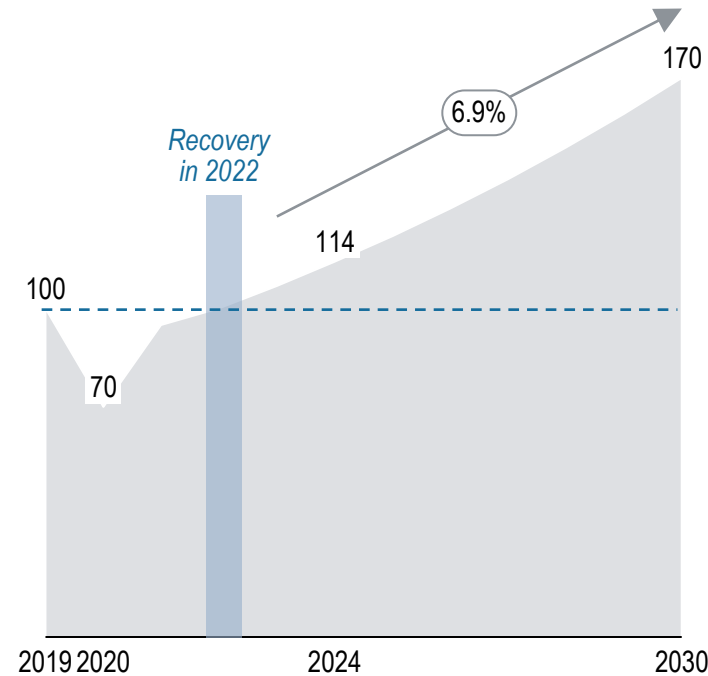
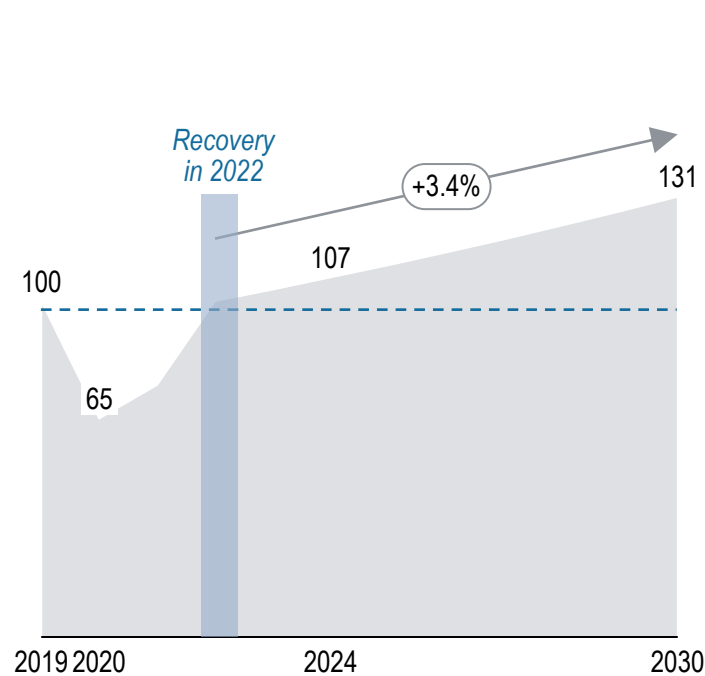
Long-distance demand is expected to recover the fastest in China driven by stronger market growth – slower recovery for USA and notably EU

Long-distance Mobility demand index– Overview by country [index based on 2019 demand] – ALL MODES

 **United States**

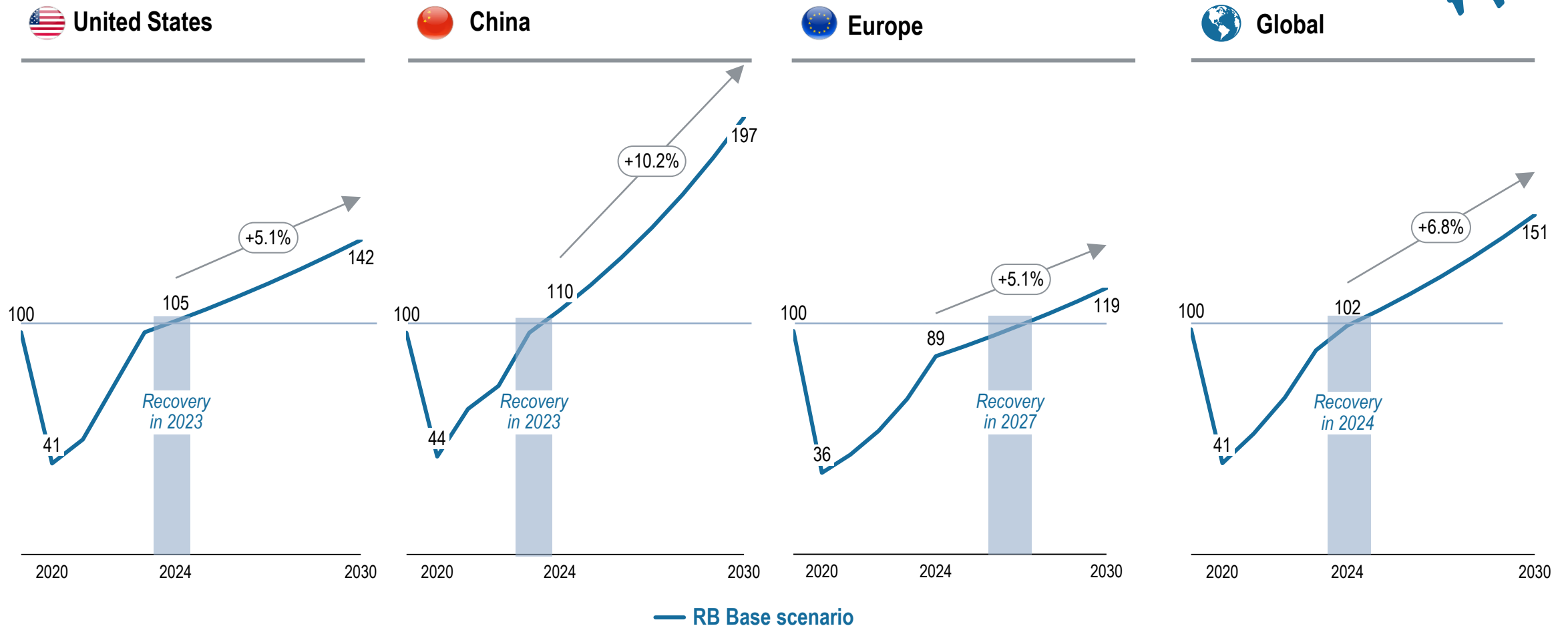
 **China**

 **Europe**



Air traffic demand is not expected to have fully recovered before 2027 in Europe – fastest recovery in China driven by a stronger market growth

Long-distance Mobility demand index – Zoom on Air traffic [index based on 2019 demand]



Some Airlines confirm the IATA industry outlook – Recovery to 2019 levels is expected by 2023/24 globally

Expected recovery

Airline

-  AIR CANADA

-  AIRFRANCE

-  American Airlines

-  BRITISH AIRWAYS

-  KOREAN AIR ¹⁾
ASIANA AIRLINES

-  Lufthansa

-  norwegian

-  UNITED

-  virgin atlantic

-  الخطوط الملكية المغربية
royal air maroc

-  SOUTH AFRICAN AIRWAYS

Selected press releases

-  "The airline [...] does not expect its operations to return to pre-pandemic levels before 2023." CBC, Sep 12, 2021

-  "The Group expects capacity in Available Seat Kilometers back to the 2019 levels in 2024" Air France, Q2 2021 financial report

-  "[...] but the rest of the year and 2022 should see a gradual recovery for American Airlines." NASDAQ, Aug 5, 2021

-  " The group doesn't expect passenger demand to return to pre-pandemic levels until 2023 [...]" BBC News, Jul 30, 2021

-  "Korean Air's business to be normalized in late 2023 or early 2024" The Korea Economic Daily, Sep 21, 2021

-  ""We do not expect demand to return to pre-crisis level before 2024." LH Group CEO Carsten Spohr, Aug 6, 2020

-  "Norwegian [...] expects demand to pick up in the second quarter of 2022 for holiday travel."²⁾ Reuters, Aug 31, 2021

-  "[...] United expects continued gains as more businesses return by the end of summer and into 2022, with a full recovery in demand anticipated by 2023." United Airlines Newsroom, Jul 20, 2021

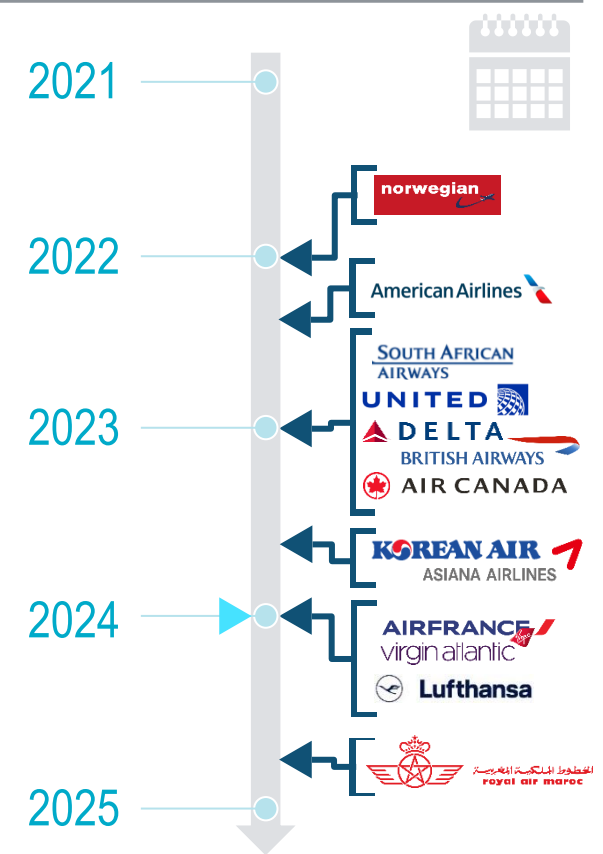
-  "We do believe it will return to 2019 levels but most likely not until 2024." Virgin Atlantic CCO Juha Jarvinen, Sep 23, 2021

-  "It will be necessary to wait until 2024 or even 2025 to hope to find the activity figures of the reference year which is 2019." Medias24, Jul 8, 2021

-  "It's going to be well into 2022, if not 2023, before we see any global normalizing of leisure long-haul travel demand." CCO Simon Newton-Smith, Oct 21, 2021



Recovery expectancy IATA vs. airlines




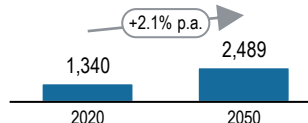
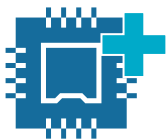

1) Korean Air is acquiring and integrating Asiana by 2024 (today only Asiana as gg customer) 2) Norwegian ceased long-haul operations during the pandemic until further notice
Source: Company information; Press articles, IATA

▼ = Airline full recovery forecast ▲ = IATA full recovery forecast

Long-term growth of the aviation industry is supported by factors such as an increasing population, a rise in GDP or governmental policy support

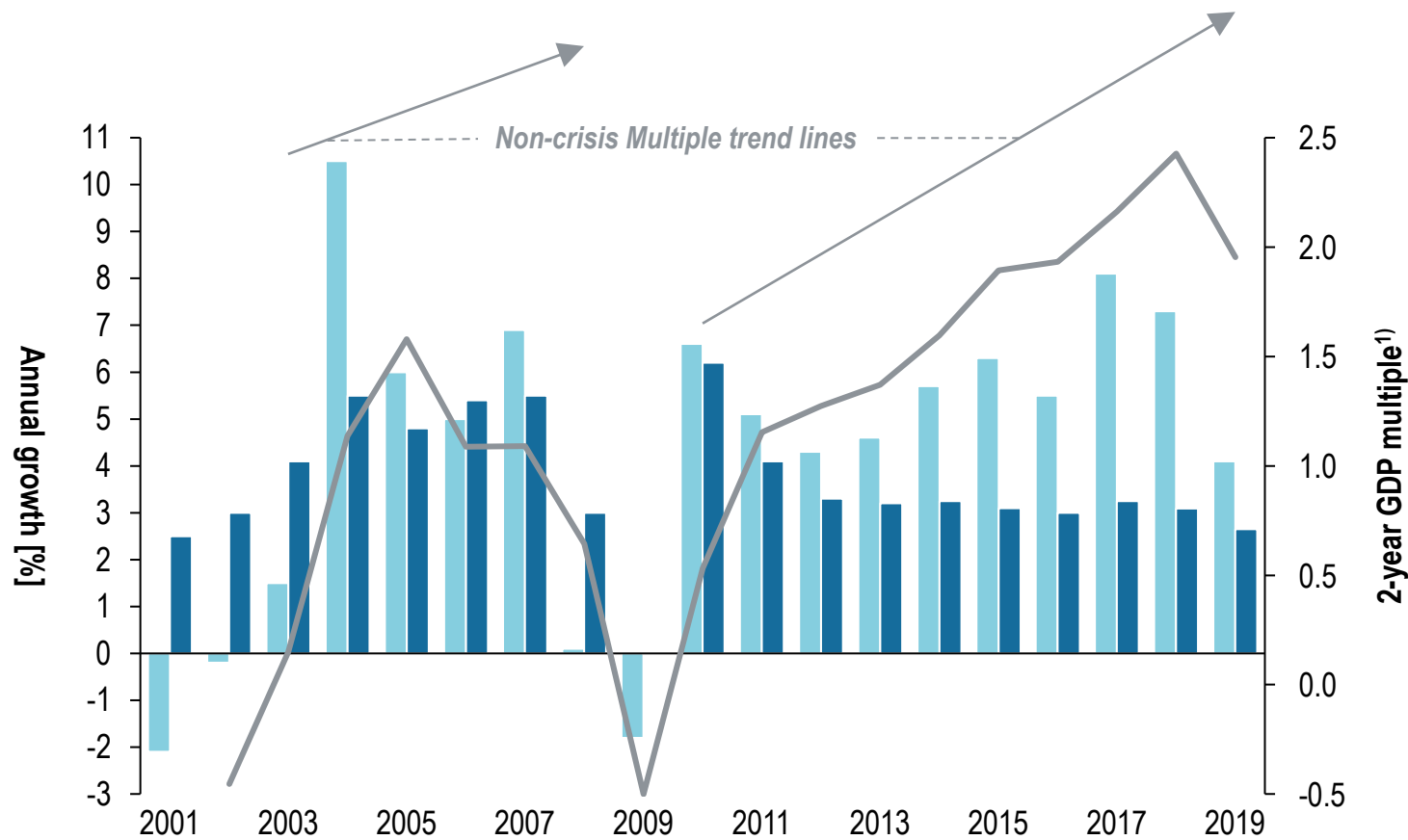
Driving factors of the aviation industry (selection)



<p>Demographic changes</p> <ul style="list-style-type: none"> > Global population is expected to grow further, with a statistically proven correlation between population growth and air travel demand, also given a larger addressable market > Rising tertiary education levels further fuel air travel demand (0.0018 air trips per capita per increase of 1 unit) 	<p>African population [m]</p> 				
<p>Increase in GDP</p> <ul style="list-style-type: none"> > Global GDP is expected to grow further, while a 1% in GDP growth equates to an approximately 0.0042 air trips per capita increase in passenger air travel due to increased trade as well as average wealth of people > Outside of crises, a clear correlation between correlation between GDP and PAX growth in the long-term 	<table border="1"> <thead> <tr> <th>GDP [USD bn; 2020]</th> <th>GDP/capita (PPP) [USD; 2020]</th> </tr> </thead> <tbody> <tr> <td>2,420</td> <td>5,402</td> </tr> </tbody> </table>	GDP [USD bn; 2020]	GDP/capita (PPP) [USD; 2020]	2,420	5,402
GDP [USD bn; 2020]	GDP/capita (PPP) [USD; 2020]				
2,420	5,402				
<p>Technology</p> <ul style="list-style-type: none"> > Several efficiency gains enabled by technology allow the industry to unlock more capacities through optimization (e.g., in Air Traffic Management, MRO, etc.) and make air travel more accessible/affordable to people 					
<p>Governmental policy support</p> <ul style="list-style-type: none"> > Mandates such as the "Digital European Sky" or the Aviation section of the "Made in China 2025" plan highlight that aviation, due to its capital intensity, greatly benefits from policy support by the government or other agencies that can give subsidies 					
<ul style="list-style-type: none"> > Sustainability: Complex sustainability initiatives, esp. in Europe and NA, force a reduction of air travel to reduce CO₂ > Substitute goods: Digital meetings allow people to partly replace travel, as well as new transport modes (e.g. hyperloop) 		<p>! Counter effects</p>			

GDP vs. passenger growth developments over the past two decades show a resilient air travel industry that has been recovering quickly after crises

GDP growth vs. passenger air travel growth worldwide, 2001-2019 [%]



Insights & observations

- > 2-year GDP multiple indicates that **as GDP grows and trade intensifies, so does passenger air travel**
- > Passenger growth is **increasingly outperforming GDP growth** as crises are left behind
- > While post-crisis growth (e.g. 9/11 and financial crisis) picked up relatively quickly, **recovery from Covid-19 is expected to take longer** (, given more significant shock to societal norms than previously) – Nevertheless, IATA, CAPA and airlines are confident towards a **full recovery by 2024**
- > Relationship between GDP per capita vs. trips per capita further indicate, that **after GDP per capita²⁾ of USD 20,000 is reached, growth in trips per capita starts to flatten**, so that additional ground is likely linked to geographies such as China and India

1) 2-year GDP multiple calculated as average of 2 years of PAX growth/ GDP growth 2) African GDP 2020 : USD 2,420 bn ; Average GDP/capita 2020 PPP : USD 5,402

Overall demand is expected to decline notably for business market – Europe being the most impacted region for business and private trips

Number of trips per person pre-Covid-19 vs. post-Covid-19 – **Total market** [basis 100]

Before the pandemic, how many trips did you make for different travel purposes?

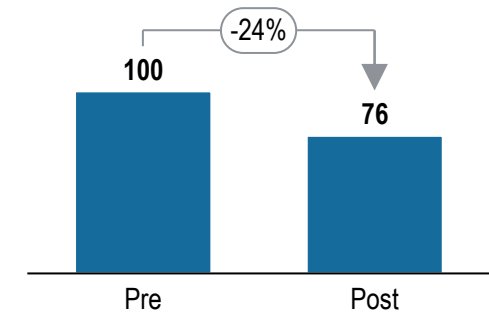
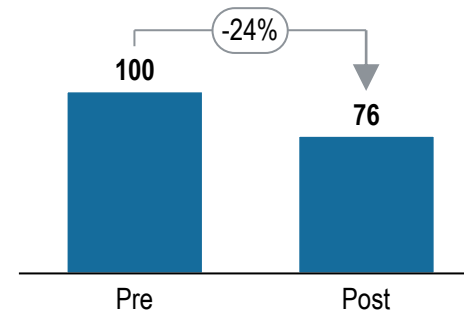
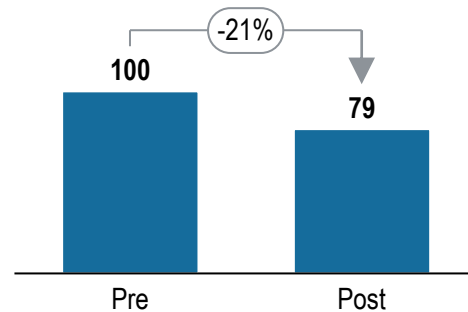
Once all Covid-19 related restrictions are lifted, how many trips do you intend to make for different travel purposes?

 **China**

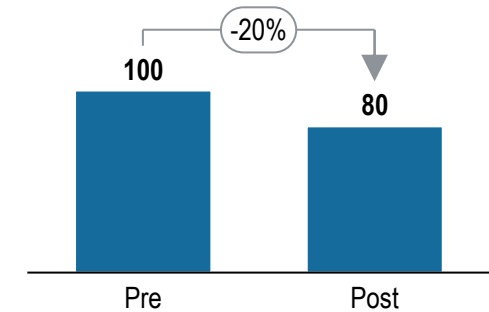
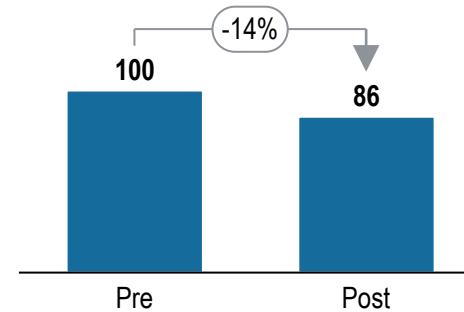
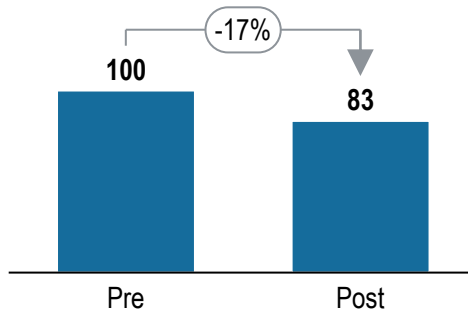
 **United States**

 **Europe**

Business



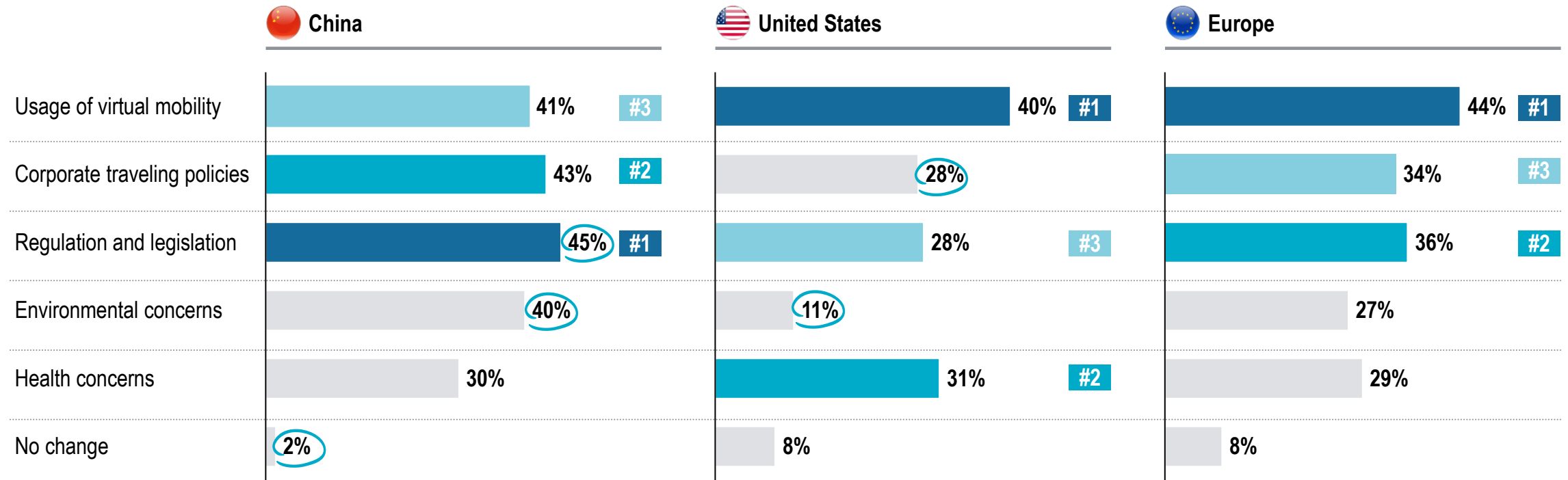
Private



Overall, usage of virtual mobility is a key driver for changing business traveling habits - Environmental concerns are less important in the USA

Reasons for changed traveling habits – Business traveling

What are the reasons for your changed mobility behavior in Business travel, once all Covid-19 related restrictions are lifted? (multiple choice possible)

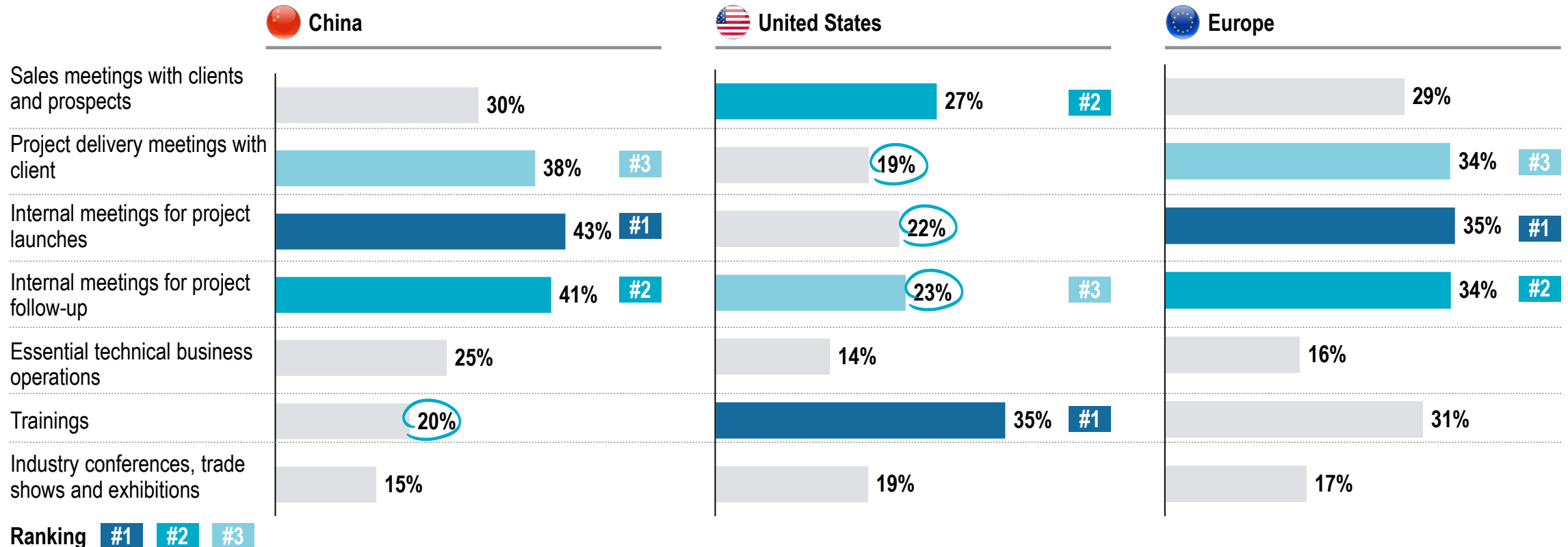


Ranking **#1** **#2** **#3**

Internal meetings are more likely to be replaced by virtual communication – sales meetings, industry conferences and technical ops are more resilient

Purposes most likely to be replaced by virtual communication – Business traveling

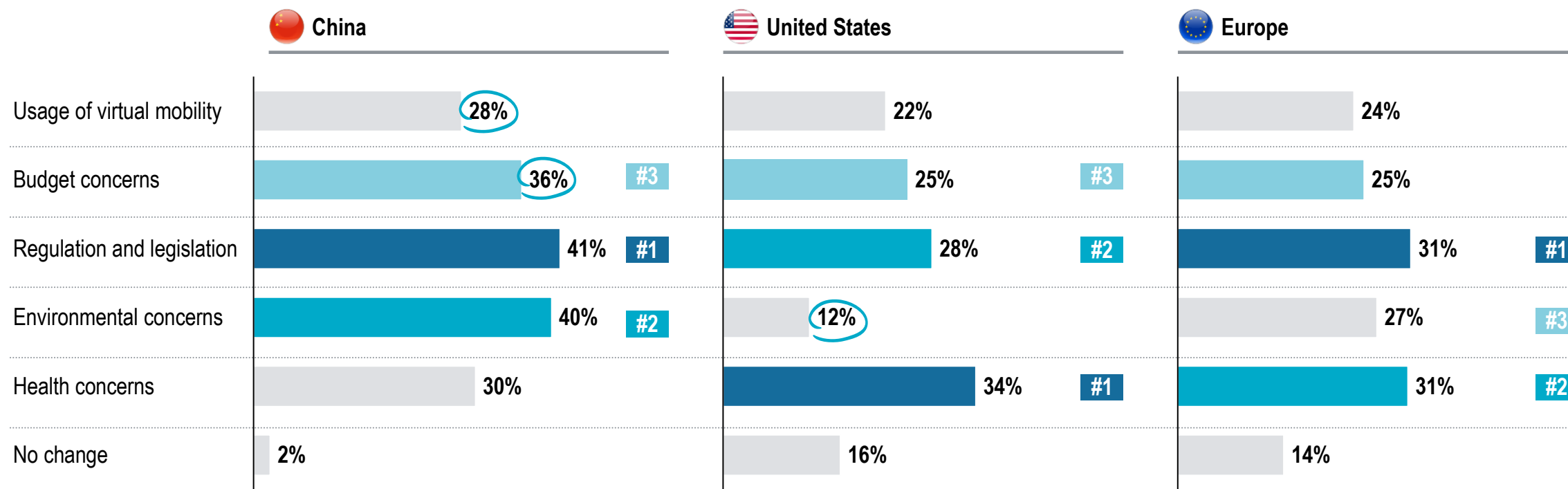
What are the types of business travel purposes that you are most likely to replace by virtual communication? (Multiple choice)



For private traveling, environmental concerns are less important in the USA whereas budget & regulation concerns are more important in China

Reasons for changed traveling habits – Private traveling

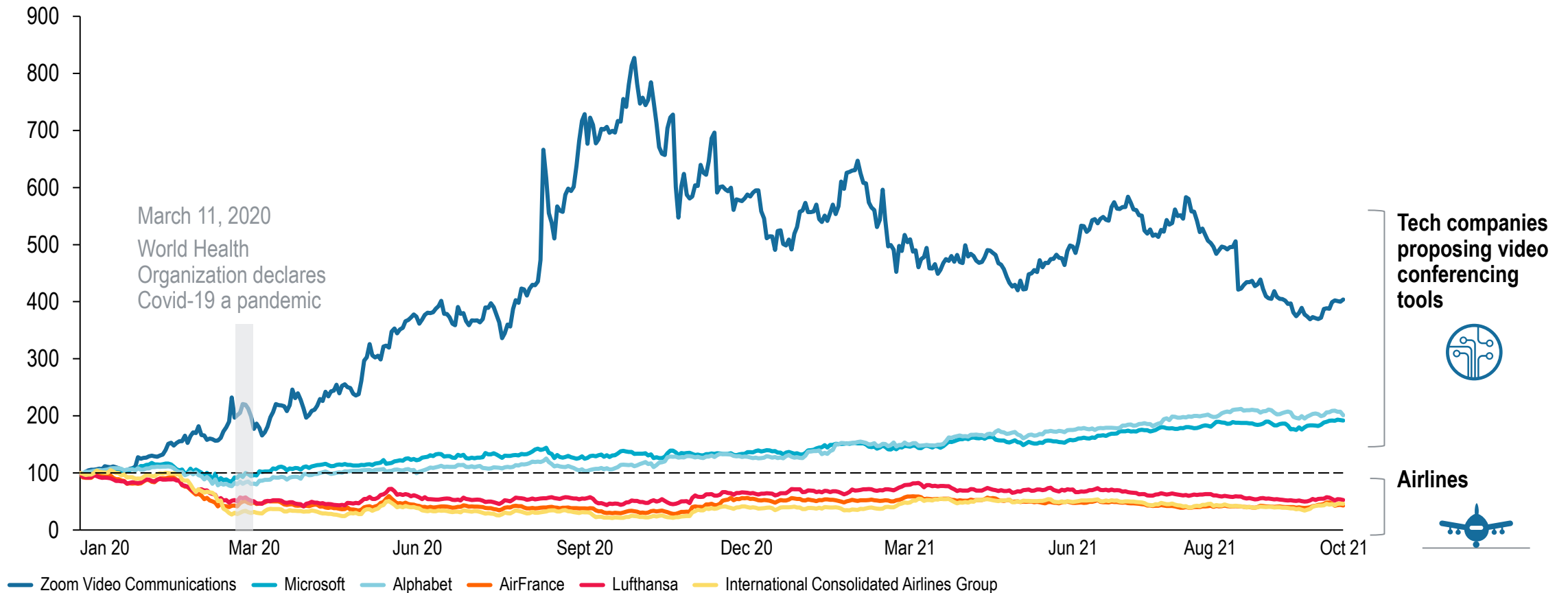
What are the reasons for your changed mobility behavior in Private travel, once all Covid-19 related restrictions are lifted? (multiple choice possible)



Ranking #1 #2 #3

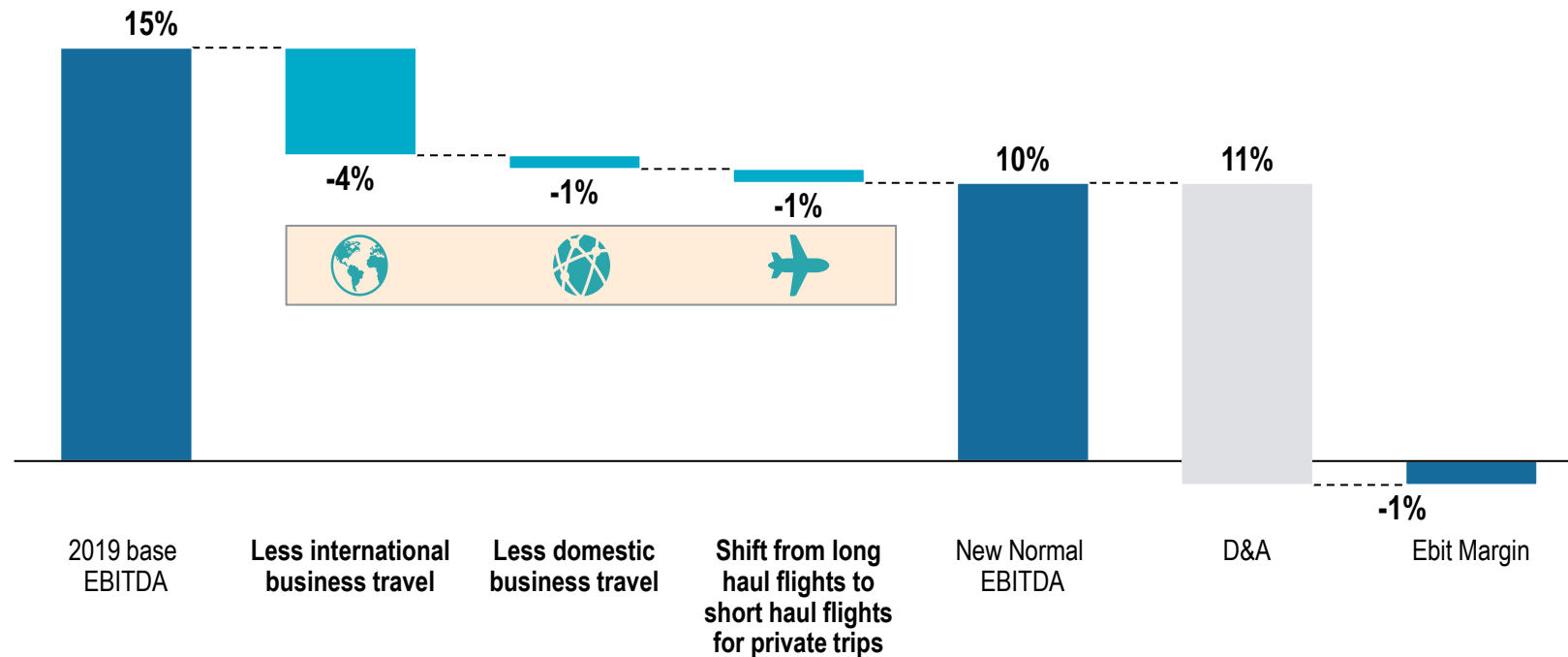
Investors are increasingly betting on video conferencing to substitute a significant part of business travel post Covid-19

Stock prices evolution for selected airlines and tech companies [Jan 20 – June 21 ; basis 100]



For legacy airline companies, the new normal translates into an EBITDA gap of c.6%-pts. vs. pre-crisis state

Overview of the profitability changes for an exemplary legacy airline company



Key assumptions

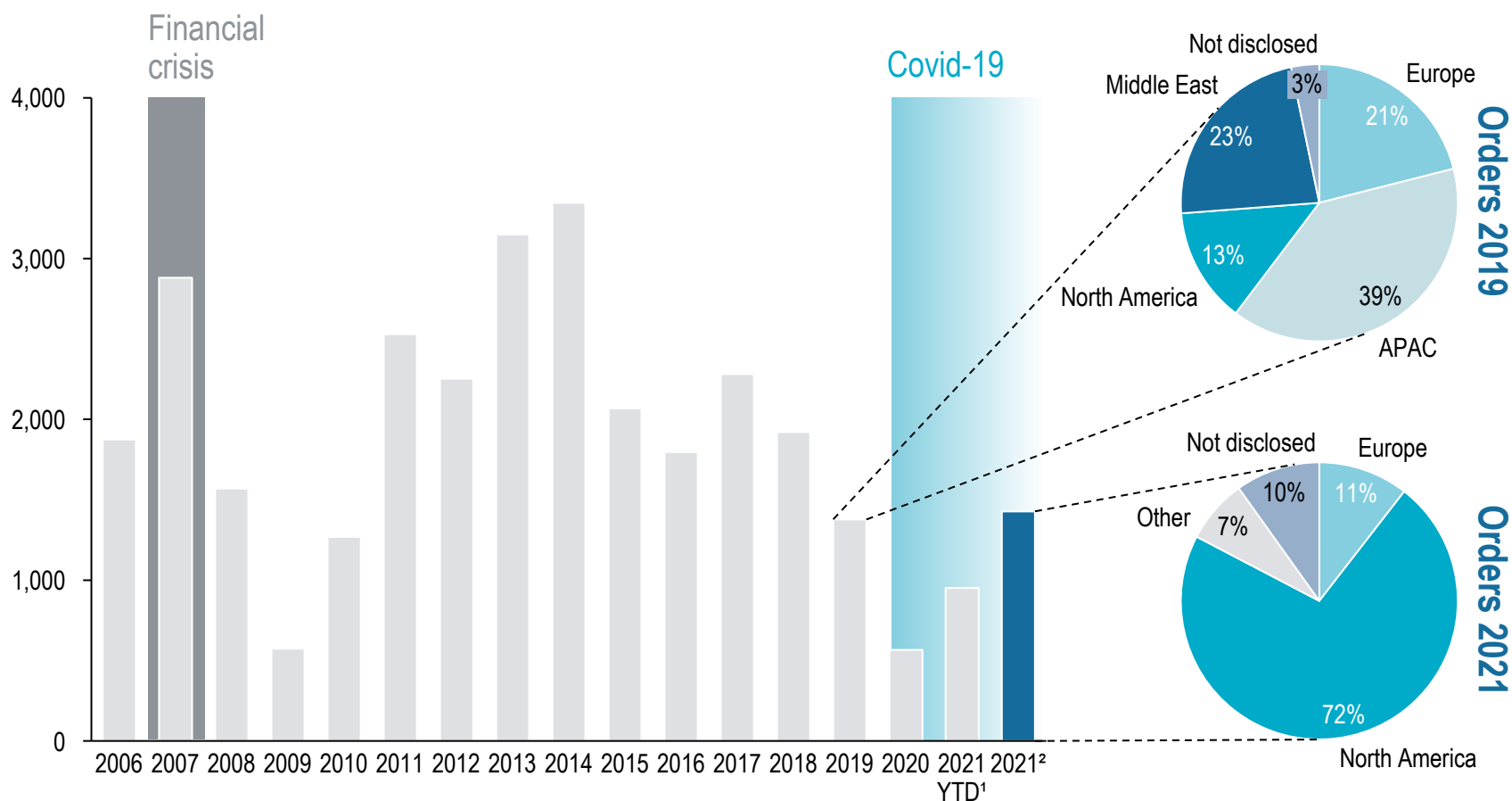
- > A -35% drop in demand for **business flights** resulting in a 7% drop in total travel demand
- > 20% of private travelers choose to stay in their country and **fly domestically** instead of taking international planes
- > Business flights represented **80% of EBITDA margin** pre-Covid
- > International flights are **twice as profitable** as domestic flights
- > The only variable cost considered is **catering** (4% of total costs) as the drop in demand if no action is taken by airline companies will impact **the fill rate** and not the number of planes in service

Approx. EUR 70 m loss per year upon reaching new normal for an exemplary legacy airline company¹⁾ (vs c.EUR 1 bn EBIT levels pre-Covid)

1) Based on AirFrance–KLM, Lufthansa and International Airline Group financial data in 2019

Increasing aircraft orders in 2021, primarily driven by North America, indicate a rising confidence of airlines for the future

Global commercial aircraft orders per year (Airbus and Boeing), 2006-2021 [#; %]



Insights & observations

- > Most orders in 2019 came out of **ME** and **APAC**, emphasizing the **importance of these regions for international air travel** before Covid
- > The **growth in 2021 is mainly driven by NA**, based on the suspension of Covid restrictions and the rise in demand for air travel
- > Most orders in **2021** were **single-aisle aircrafts**, whereas the majority of orders in **2019** was **wide-body aircrafts**, emphasizing the **current focus on short haul flights**
- > In **2019** orders mainly included **larger orders (>20 aircrafts)** by fewer airlines, whereas the majority of **orders in 2021 were small**
- > Some orders in both years **include replacement** orders due to the trend towards sustainability

1) 2021 YTD orders include orders until August 2021 2) Orders for the full years 2021 were calculated by us by extrapolating average monthly sales until August

Four key stakeholders demand increased sustainability efforts from companies as environmental awareness increases

Key stakeholders driving sustainability concerns and green mobility

Governments

Pressure from governments and regulators

Carbon emissions goals have been set by several bodies, with net-zero target years ranging between 2030-50

Target

UK Net-zero by 2050

EU Net-zero by 2050

UN 45% reduction in CO₂ levels by 2030, net-zero by 2050

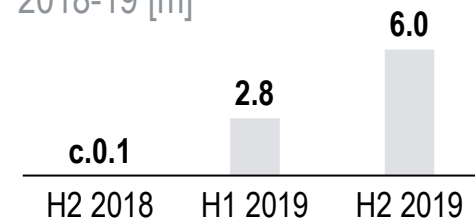
€1 trillion

Investment over the next 10 years
The European Green Deal

Customers

Increased climate protest frequency and changes in purchasing behaviour

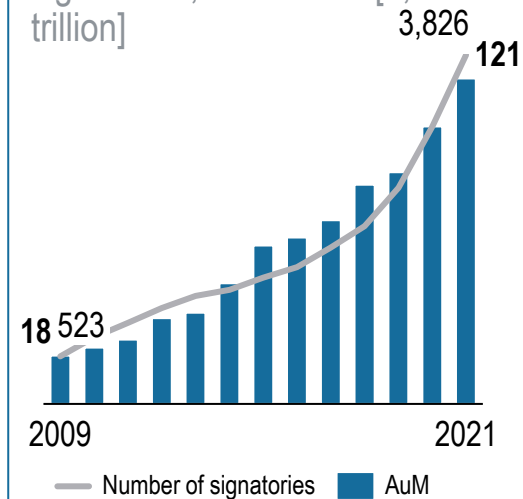
Cumulative # of participants in protests for climate action, 2018-19 [m]



Investors

Growing ESG¹⁾ concerns of the investment community

Number and AuM of UN PRI²⁾ signatories, 2009-2020 [# , USD trillion]



Employees

Increased pressure from (younger) employees



According to a survey performed on 1.6 m UK employee, **85%** of employees' comments in 2019 mentioned environment related issues .

1) Environmental, Social and Governance; 2) United Nations Principles for Responsible Investment are 6 voluntary commitments that incorporate environment, social, and governance issues into investment practice

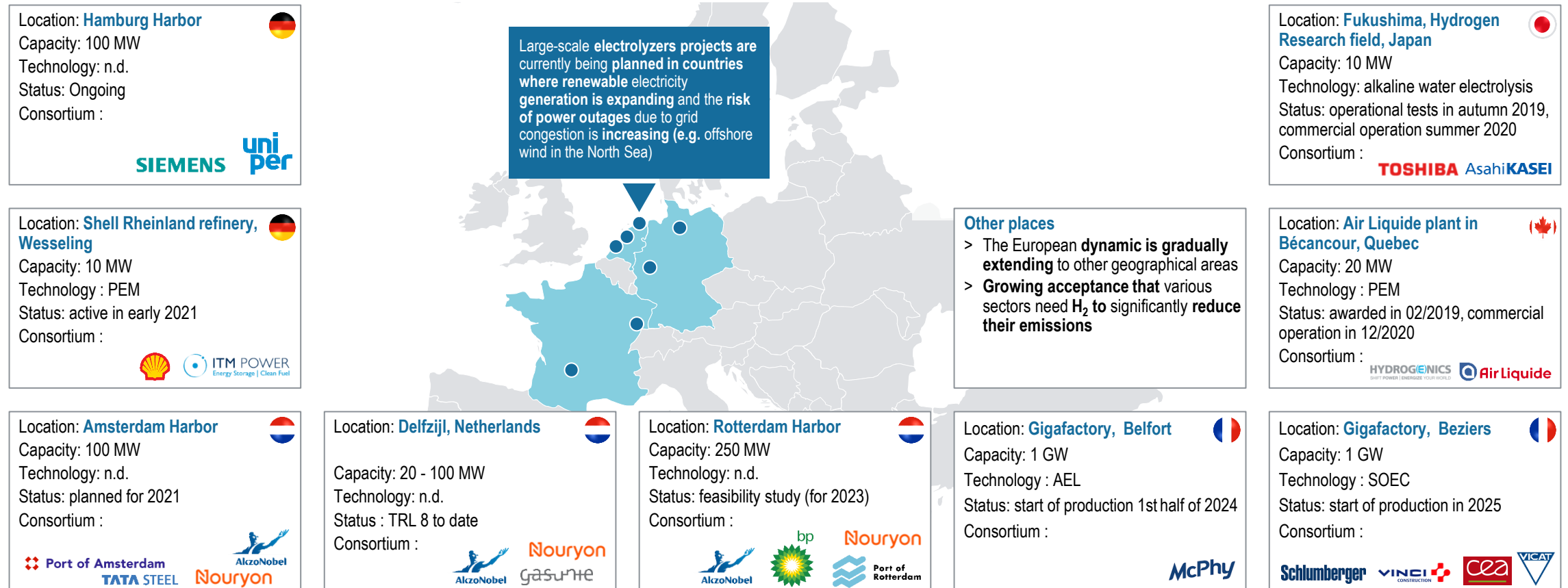
By 2050, global and European organizations foresee ambitious sustainable aviation fuels incorporation mandates over 60%

SAFs incorporation ambitions of different organizations [%; 2025-2050]

Organizations		Ambitions					
		2025	2030	2035	2040	2045	2050
EU	ReFuel EU	2%	5% <i>of which 4.3% biofuels</i>	20% <i>of which 15% biofuels</i>	32% <i>of which 24% are biofuels</i>	38% <i>of which 27% biofuels</i>	63% <i>of which 35% biofuels</i>
	IATA	2% <i>97% carbon offset 1% improvement in aircraft efficiency</i>	5% <i>93% carbon offset 2% improvement in aircraft efficiency</i>	17,5% <i>77.5% carbon offset 3% efficiency improvement 2% carbon capture and storage</i>	40% <i>44.5% carbon offset 7.5% non "drop-in" fuel (e.g. H₂) 5% carbon capture and storage 3% efficiency improvement</i>	55% <i>24% carbon offset 10% non "drop-in" fuel 8% carbon capture and storage 3% efficiency improvement</i>	65% <i>13% non "drop-in" fuel 11% carbon capture and storage 8% carbon offset 3% efficiency improvement</i>
	ICAO	2%	-	-	32%	-	63% SAF <i>with Net Zero target in 2050</i>
	BOEING AIRBUS	<i>Delivery of the first aircraft with 100% SAFs (compared to a maximum of 50% today)</i>					
World	CORSIA	<ul style="list-style-type: none"> > ICAO-ratified program to offset the share of CO emissions₂ from international flights above their levels from 2019 and 2020 > Mechanism requiring airlines to purchase credits generated by international low-carbon projects > Implementation in 2021, becoming mandatory for all airlines in 2027 					
	COP 26	To be completed					

Thanks to a growing political momentum (notably in Europe, Asia and North America), large-scale electrolyzer projects are under development

Selection of major planned electrolyzers > 10 MW [2020]



European projects

C. Roland Berger air traffic
recovery scenario –
Focus on Africa



Africa air transport industry is expected to grow drastically in the medium to long term being driven by exponential drivers (population, economic boom ...)

Market figures and drivers of Airline transport industry in Africa

Market figures



78 m passengers transiting per year in Africa (post-COVID)

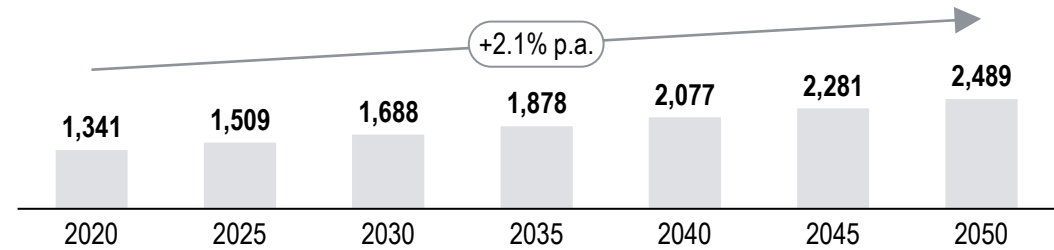


10++ USD as average cost to travel 100 km by Air in Africa¹⁾

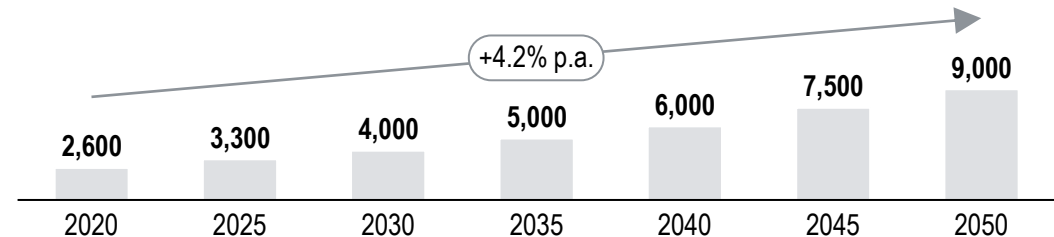


Evolution drivers

Africa population growth (in m)



Africa economic boom (in USD 000' bn)



Emergence of new affluent superpowers

"China-Africa relations have today reached a stage of growth unmatched in history. [...] Let us join hands, pool the vision and strength of the 2.4 billion Chinese and Africans and open a new era of China-Africa win-win cooperation and common development."

Xi Jinping

"The United States stands ready now to be your partner in solidarity, support and mutual respect."

Joe Biden, in its address to African Union

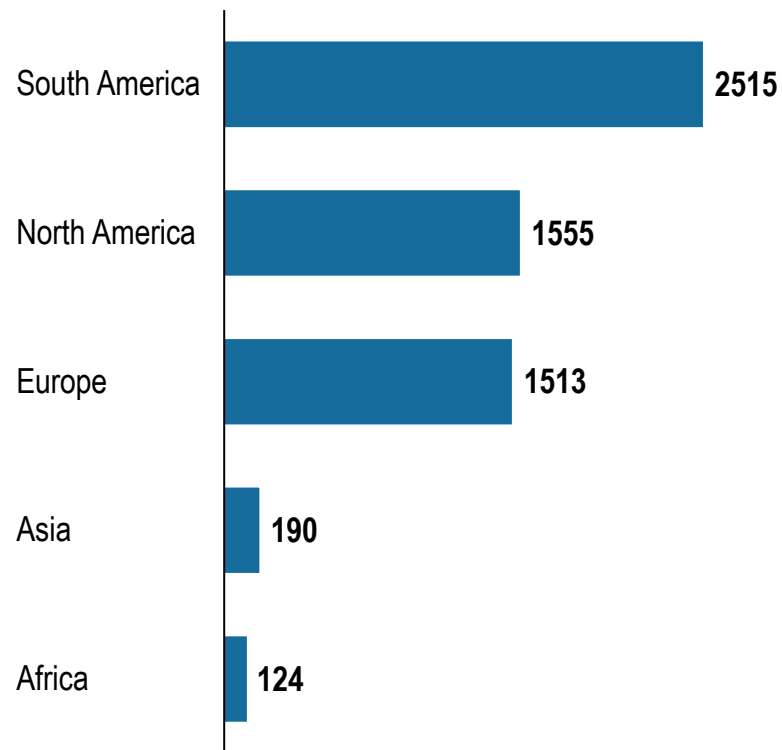
1) based on a South African benchmark provided by Kiwi.com

Compared to other continents, Africa has been less impacted by the COVID19 pandemic from both health and activity standpoints

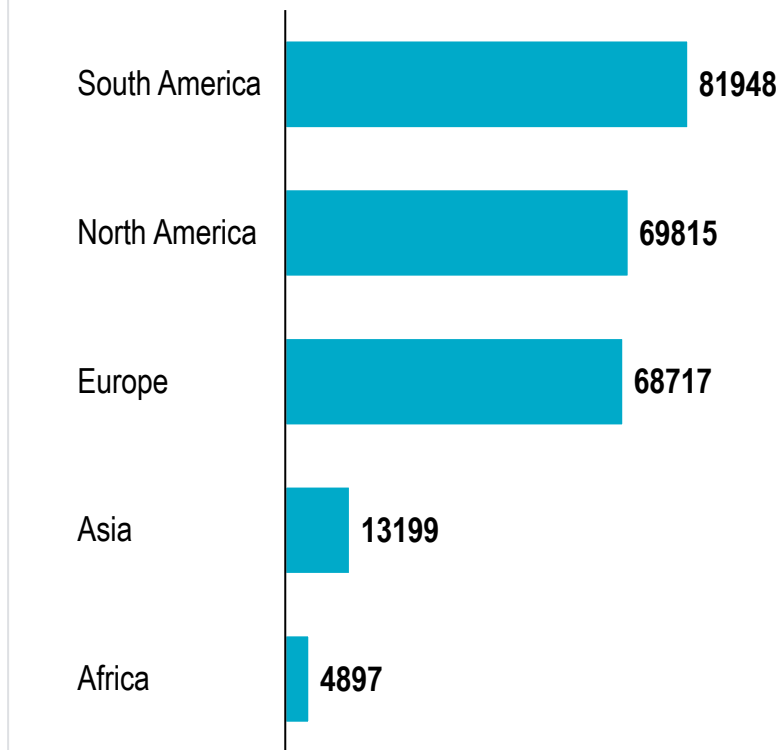
Key COVID19 statistics [# per million people]



Cumulated Covid-19 deaths per m ppl [July 2021]

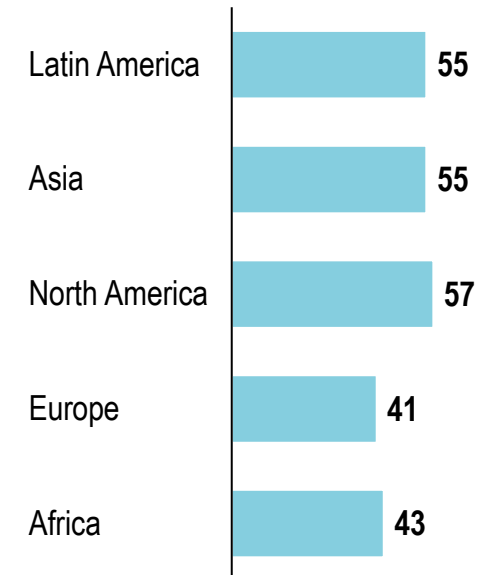


Cumulated Covid-19 cases per m ppl [July 2021]



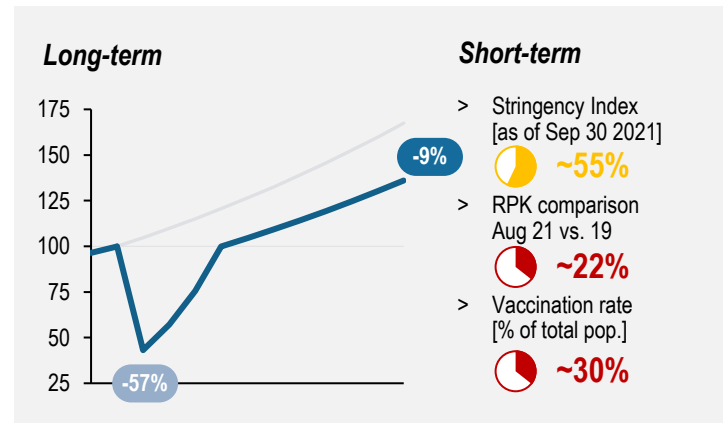
Zoom on Covid-19 stringency index [Sept. 2021]

> **Methodology** : composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest)

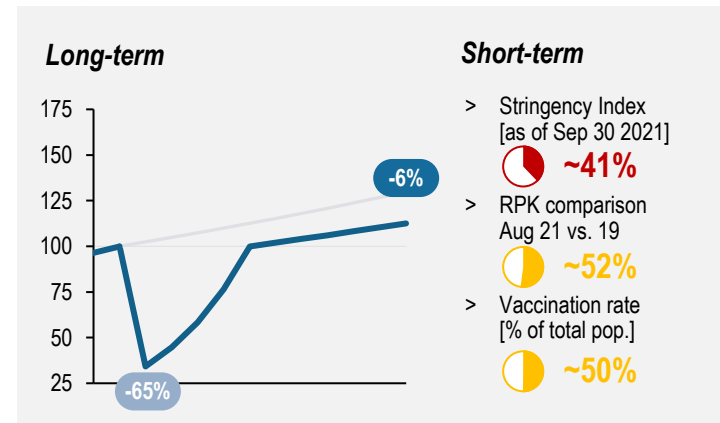


While similar recovery patterns can be observed across the regions, different "short-term" developments can be observed

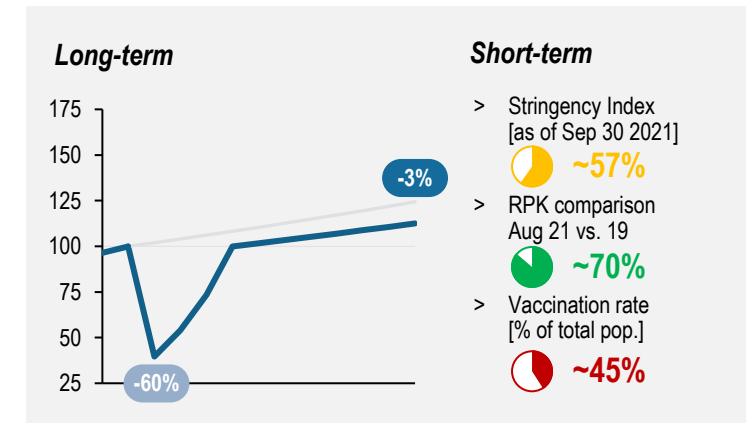
Asia-Pacific



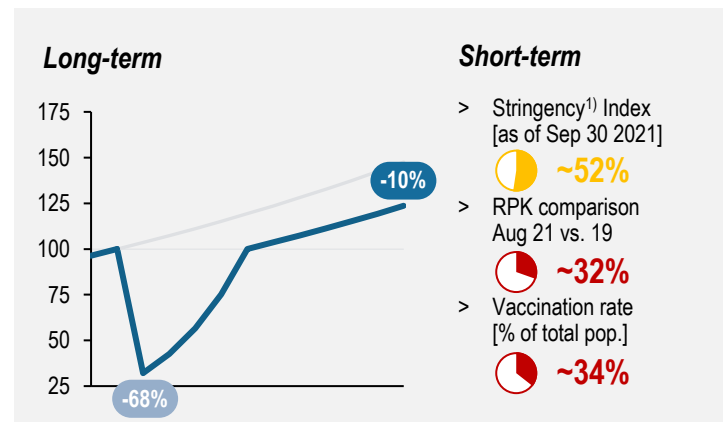
Europe



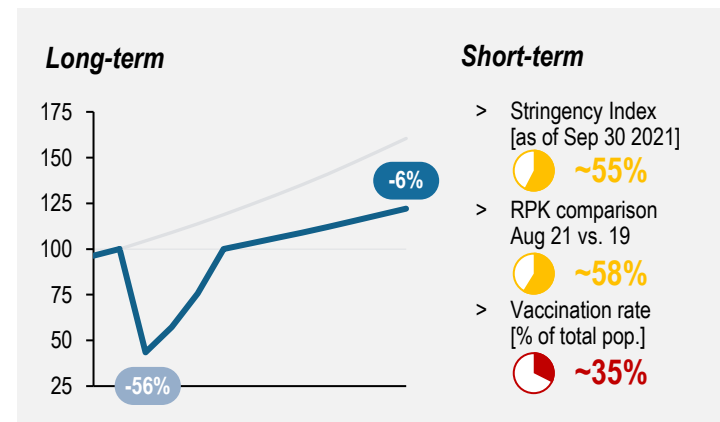
North America



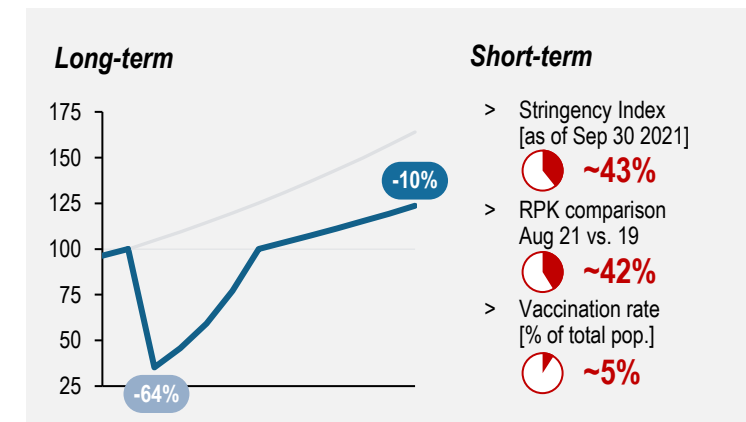
Middle East



Latin America



Africa



Note: Indexed passenger development **xx** = Max. decline of passenger development **xx** = Est. CAGR 2021-2039 (Baseline – weighted avg. 7.03%)

Source: IATA, Boeing, ICAO, Roland Berger

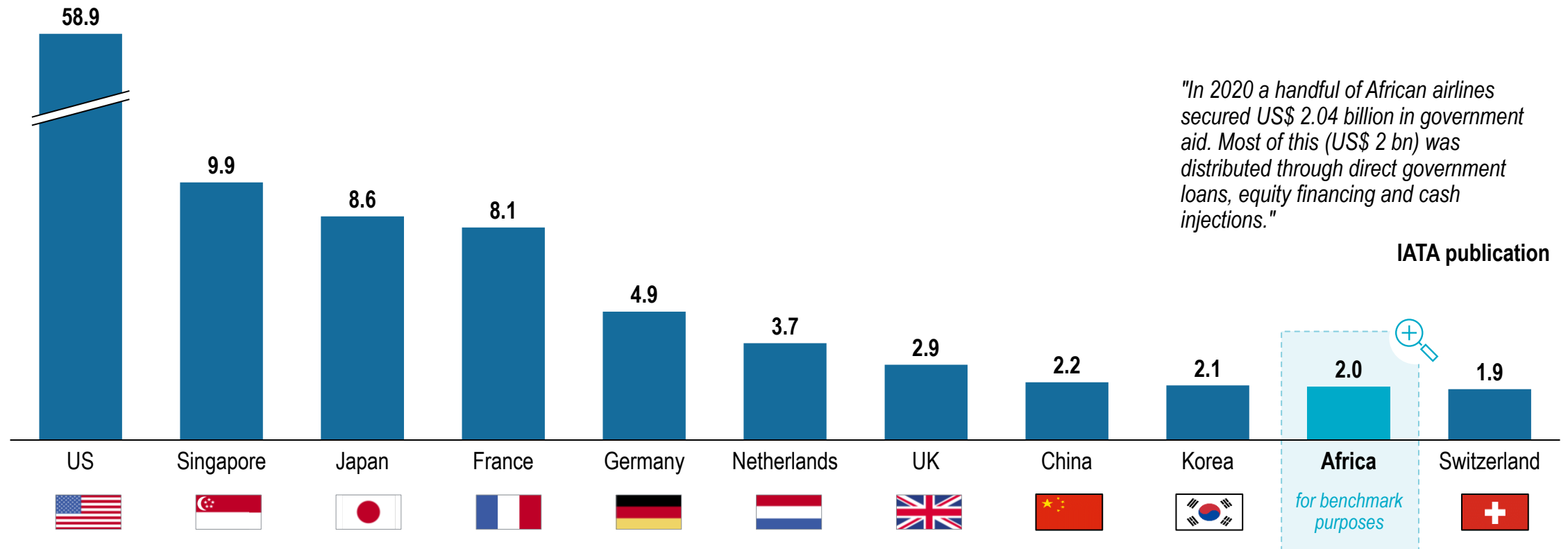
1) **Stringency index**: composite measure based on 9 indicators incl. school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest)

Major global airlines already estimate the need for state support to meet immediate liquidity needs...

Overview of State support to the aviation sector

Non-exhaustive

Financial support granted / planned [2020; Bn€]



... which are being addressed using a set of models based on debt, equity and mixed instruments

Distinct support mechanisms being activated

A Public credit guarantees

> Prevailing model, with the State providing loan guarantees with certain conditions (e.g. no layoffs; energy transition, minimum *equity* reinforcement requirement)

B State loans

> State grants directly or through entities of its direct sphere (e.g. Treasury / Development Bank) a loan to cover the treasury needs of airlines

SA Government granted USD 346 m to SAA to help the firm in its rescue plan

C Mixed models (debt and equity)

> 50% equity and 50% convertible bonds

> Percentage non-repayable and 10-year loan with convertible rights

> German government's negotiating position (Lufthansa) favours mixed model - convertible securities

D Nationalisations

> Resolution of strategic airlines to the economy of the states, which do not offer prospects of meeting forward financial obligations

Kenya Airways *The Pride of Africa* current nationalization plan ongoing

(Nationalisation under discussion)

E General State Support

The sector had been benefitting from State financial support (credit lines, *layoff* co-participation) included in the general COVID19 packages, as well as general or specific tax incentives for the sector's recovery

 : Focus on Africa

To recover from COVID19, African airlines rely on state support to meet immediate liquidity needs

Overview of public aids, nationalizations and M&A transactions in the Air travel industry in Africa



Government aids, direct government loans, equity financing and cash injections

In 2020, a **handful of African airlines secured US\$ 2.04 billion** in government aid including :

- > **Senegal** announced **USD 128 million in relief for the Tourism and Air Transport** sector (Avril 2020)
- > **Seychelles** has **waived all landing and parking fees for April to December 2020** (Avril 2020)
- > **Cote d'Ivoire** has waived its **Tourism Tax** for transit passengers
- > As part of its economic support intervention, **South Africa** is **deferring payroll, income and carbon taxes** across all industries, which will also benefit airlines domiciled in that country

Despite this, **8 airlines in Africa filed for bankruptcy¹⁾** or entered business administration over the past 12 months:

- > In addition, **over US\$ 30 bn has been pledged** for air transport and tourism in Africa by **International finance agencies** and other institutions including the African Development Bank, African Export Import Bank, African Union and the International Monetary Fund (IMF)
- > However, **most of this relief is yet to reach the airlines** and other aviation stakeholders in need

Focus on government bailouts / renationalization

- > **South African Airways** receives another Government Bailout worth **\$640 Million**
- > Current **nationalization plan for Kenya Airways**
- > **SA Express** has received another Government Bailout



M&A Activities

- > In February 2020, **Qatar Airways announced intentions to purchase a 49% stake in Rwanda's national carrier, RwandAir**. Today Talks on the exchange had reached the final stages.
- > **Qatar Airways actively involved in the construction of the Bugesera Airport** near the Rwandan capital Kigali (deal with the Rwandan government for 60% of the airport, valued at \$780 million at the time)
- > **South African Airways to relaunch with 51% controlled by the Takatso Consortium** (private ownership comprised of **Harith General Partners**, a pan-African investor in African infrastructure, as well as Global Aviation, leading South Africa based aviation company.)



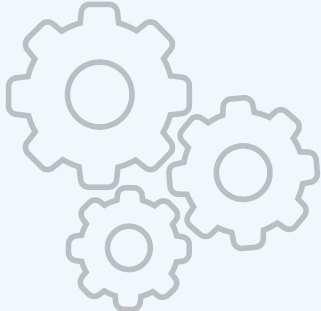
1) Including : Air Namibia, Air Mauritius, South Africa Airlines, Mango Airlines, Comair, South African Express....



Air transport in Africa is constrained by size of domestic airlines, complex traffic right environment, few intra-Africa lanes and the "strong" influence of states

Constraints to the development of air transport in Africa



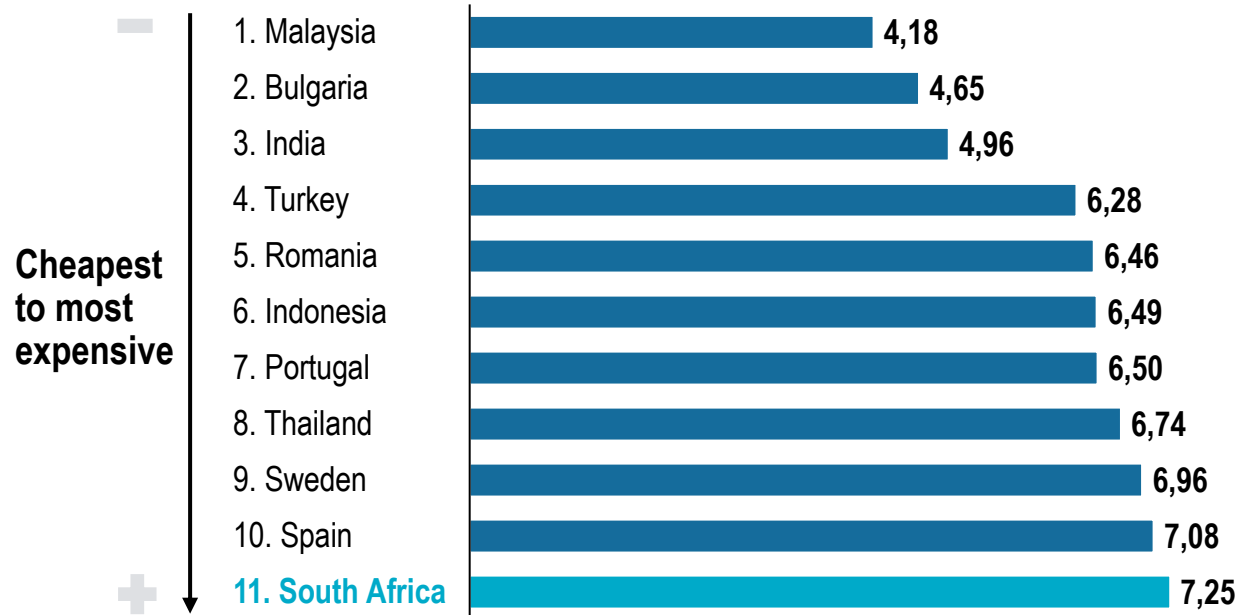
Constraints



African airlines size and reach 	<p>Critical size not reached by most African airlines: <i>Ethiopian Airlines</i> ranked 30th biggest airlines in terms of passenger-kilometres flown; <i>Egyptair</i> (#63); <i>Royal Air Maroc</i> (#77); <i>South African Airways</i> (#95) leading to high structure and logistics costs for most players, due to lack of economies of scale</p>
Relatively few intra-Africa lanes	<p>Little regional air traffic in Africa vs. Africa<->Europe flows notably</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px; text-align: right;"> <p><i>"A traveler from Kinshasa to Lagos, Nigeria, is likely to spend up to \$1,200 on a trip that can take more than 12 hours, with one or more stop-overs."</i></p> <p>Agence Ecofin</p> </div>
Preponderance of States in airlines mgt	<p>Significant influence of African States on their domestic airlines; impacting also indirectly African airlines size, as each independent country must have its own domestic airline</p>
"Complex" traffic rights 	<p>Air service operations in Africa is based on a complex regime of air service agreements within the framework of Yammousoukro traffic rights, which could potentiall be optimized</p>

Due to taxes and protectionism, African countries are where the cost of flying is the highest – South Africa is the only exception

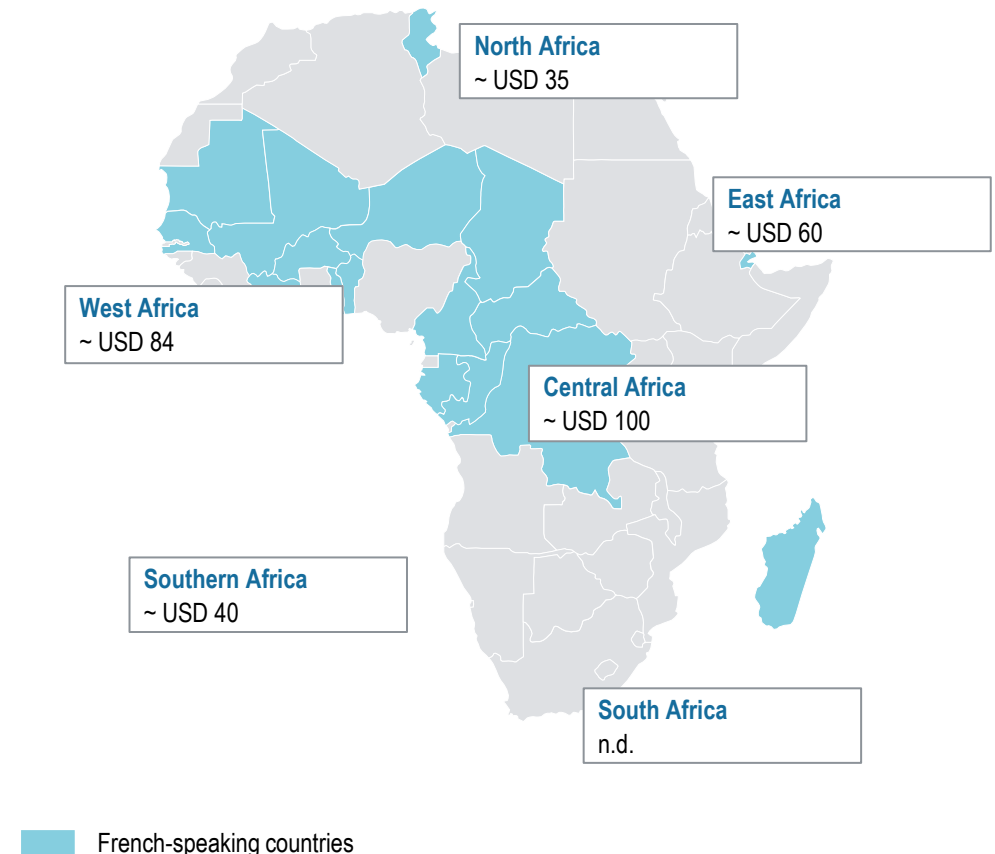
Top cheapest countries to air travel [USD Average cost / 100 km; Pre-Covid]



> No African country in the 25 cheapest countries to air travel except South Africa in 11th position

> African continent with an average cost of more than USD 10 / 100 km, combining short and long-haul flights

Average taxes per plane ticket depending on the African region



Intra-African flights are the most expensive, with many stopovers and many additional km travelled, compared to international same-distance flights

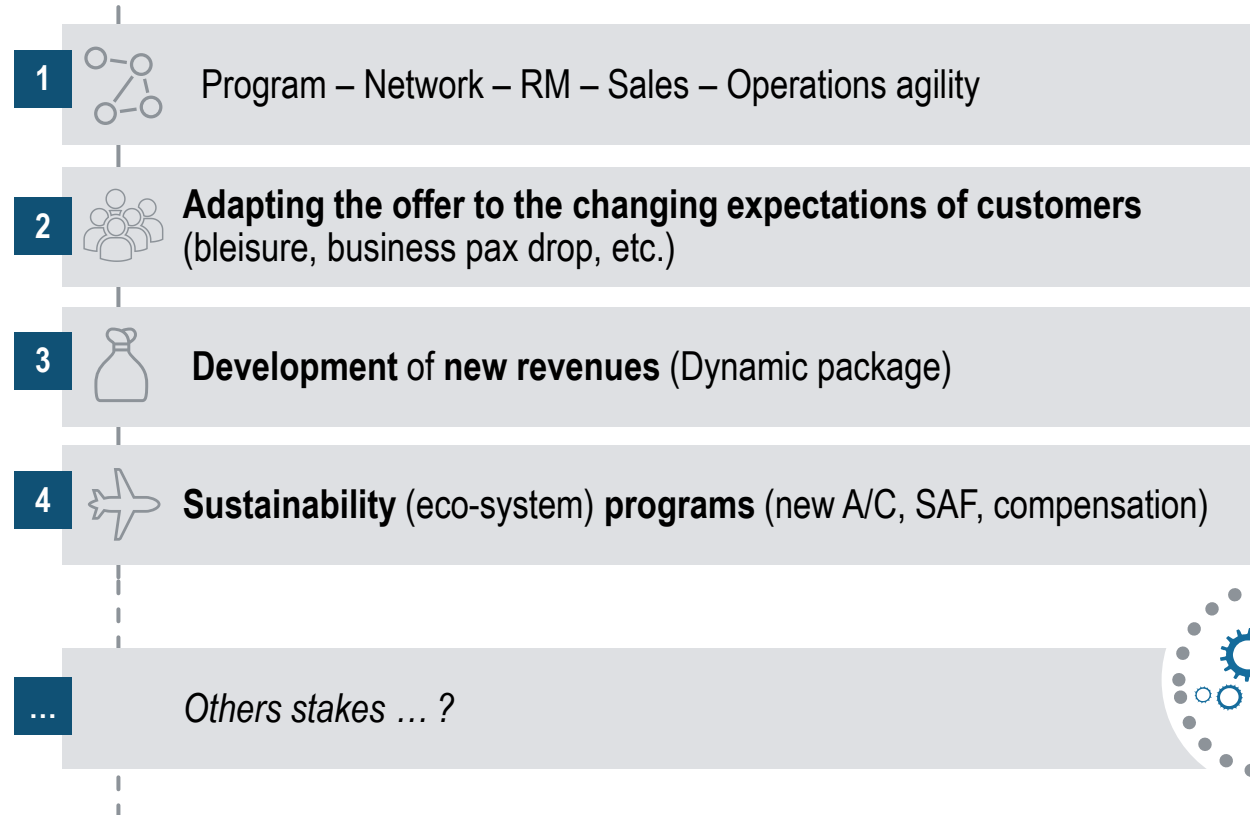


To accelerate its transformation and development, African airlines could implement some solutions

Overview of key stakes for the African airline industry

For discussion

Like other airlines



Specific topics for airlines in Africa



More network cooperation between airlines (regional and international)



More technical cooperation (maintenance, training, IS, etc.) and **associated synergies**



More optimization of the eco-system's economic performance (airport, handling, logistics, etc.)



More traffic rights managed as an asset



New access to international funding (lessors, financial vehicles)



Airline world – post-corona challenges ahead – new top-line concepts needed

Overall Airline Challenges in the Post-Covid era

FLEET RESTRUCTURING

- > High # of idle AC on the ground
- > Lease companies under pressure
- > OEMs pushing for higher market shares
- > Opportunities for airlines to reshape their fleet and respective underlying contracts

NEW BUSINESS MODEL & OPERATING MODELS

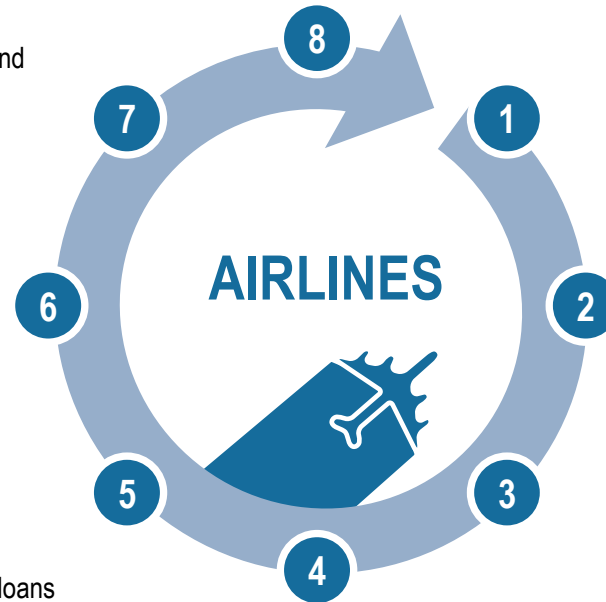
- > D2C enforcement; review commercialization set-up
- > Packaging as a new business model
- > Retailer in the sky
- > Airlines without aircraft
- > Service products as a key revenue source
- > Differentiation through service offerings on the ground

RE-FINANCING

- > Continuous cash-/ demand forecasting
- > Regulatory: Re-payment scenarios for state loans
- > Portfolio streamlining (sell/ buy)
- > Asset sizing, asset roll-over scenarios ...

SUSTAINABILITY

- > Regulatory: Understand/ quantify impact of environmental regulation
- > Safe-guard future 'Licence to Operate'
- > Define customer-tangible off-set mechanisms
- > Safe-guard investor ratings ...



MARKET/ SHIFTED DEMAND STRUCTURES

- > Insecurity about further development of pandemic dangers ...
- > Lower share of business travelers
- > Higher share of leisure travel (VFR, City Tours, Packages, ...)

COMPETITION CHALLENGE

- > Grab for market shares, especially by LCC
- > Generally: Grow faster than others
- > Jump into supply gaps
- > Seize for package business

OWN RAMP-UP MANAGEMENT

- > Slot-/ load factor-/ yield management
- > Careful crew upscale (inflight/ ground)
- > Target fleet rightsizing; new network management paradigms
- > Safe-guarding Corona savings into 'new normal'

UNIONS- & WORKERS COUNCIL MANAGEMENT

- > Refrain from short-term work
- > Re-visit CLA crisis concessions/ commitments
- > Rightsizing of the target employee mass size

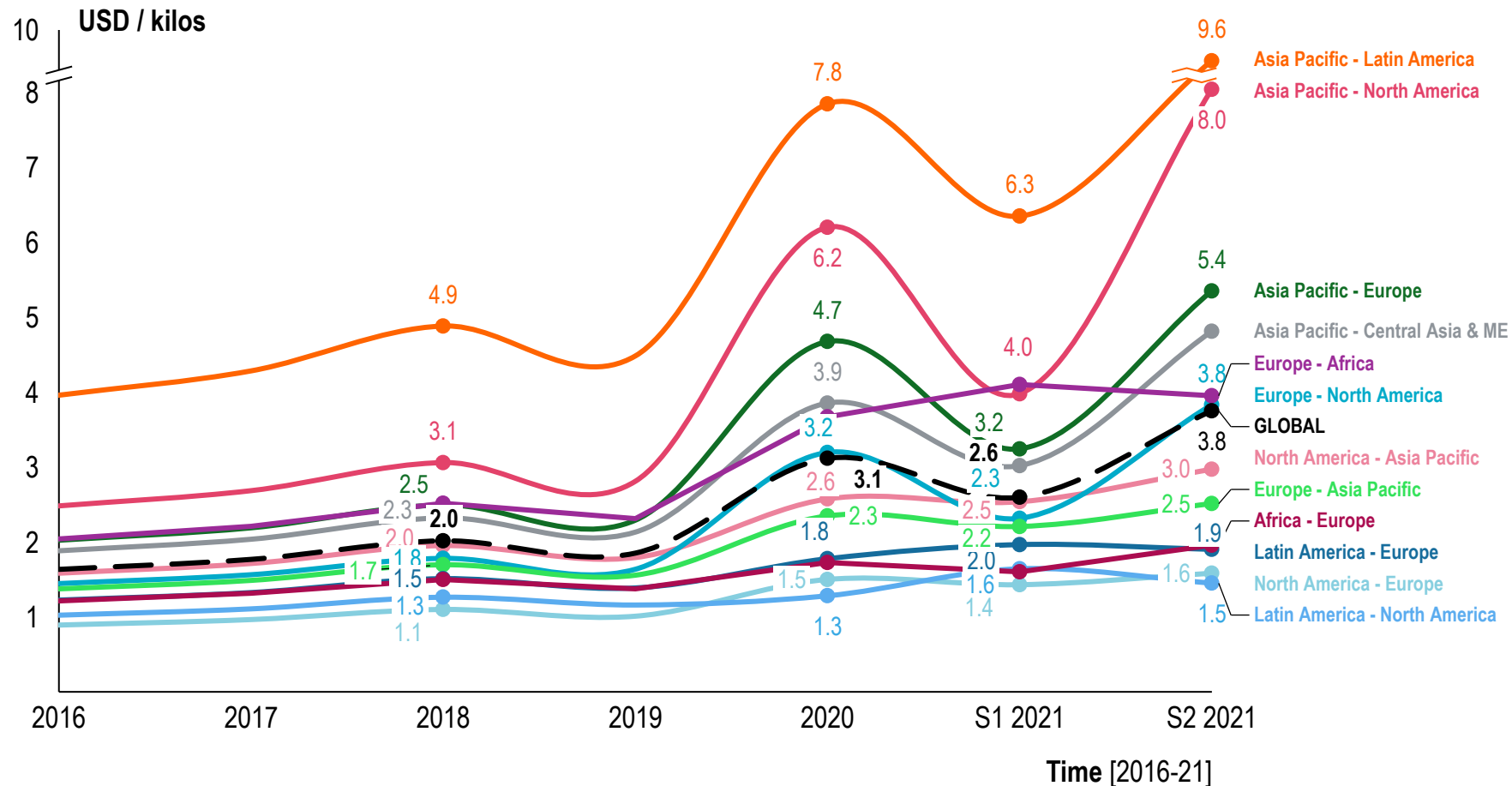
Roland
Berger

THINK:ACT



Major routes have significant yield differences due to different PAX capacity and freight demand – yields increased in S2 2021

Yields evolution by routes [2016; 2021].



Rationale

- > Average global yield up from ~2 USD / kilo to 2.5 - 3 USD post-COVID
- > Significant yields on High Volume routes
 - Routes from Asia
- > Lower Yields on routes with significant PAX aircraft capacity and/or less significant volumes
 - North America <> Europe: 57% of capacity provided by PAX aircraft
 - Routes from Europe and North America

Change of mix between business and leisure passengers should have multiple implications for the entire airline industry

Key impacts on cabin structures and network configuration

Trend	Description
Network	> Lower utilization of small routes (hubs to/from smaller airports) due to drop in business travel (main users of small routes)
Fleet	> Higher share of widebodies due to lower utilization of small routes and reduction of flight frequencies (leisure travelers less time sensitive)
Hubs	> Decrease of peak in airports' schedules due to leisure travelers less time sensitive > Increased utilization of hubs vs. smaller airports
Cabin configuration	> Decreased size of business class > Increased share of premium economy and additional services for economy passengers
Pricing	> Pricing gap should narrow between : – Non-stop and connection flights – Business and economy class > Increased competition of airlines to attract scarce PAX volumes

Covid-19 impact on aircraft mix gross orders [Illustration]

