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Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis

Montréal, Canada

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Air Transport Bureau



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Executive Summary: Economic Impact in Brief

Previous two (2) scenarios and six (6) different paths were restructured with new two (2) scenarios and four (4) different paths for scheduled passenger traffic till December 2020.

Figures and estimates herein are **subject to substantial changes**, and will be updated with the situation evolving and more information available.



The latest estimates indicate that the possible COVID-19 impact on world scheduled passenger traffic for the full year 2020, compared to Baseline (business as usual, originally-planned), would be:

- Overall reduction ranging from **42% to 52% of seats offered by airlines**
- Overall reduction of **2,344 to 2,978 million passengers**
- Approx. **USD 308 to 391 billion potential loss** of gross operating revenues of airlines

The impacts depend on duration and magnitude of the outbreak and containment measures, the degree of consumer confidence for air travel, and economic conditions, etc.

International passenger traffic for 2020, compared to Baseline

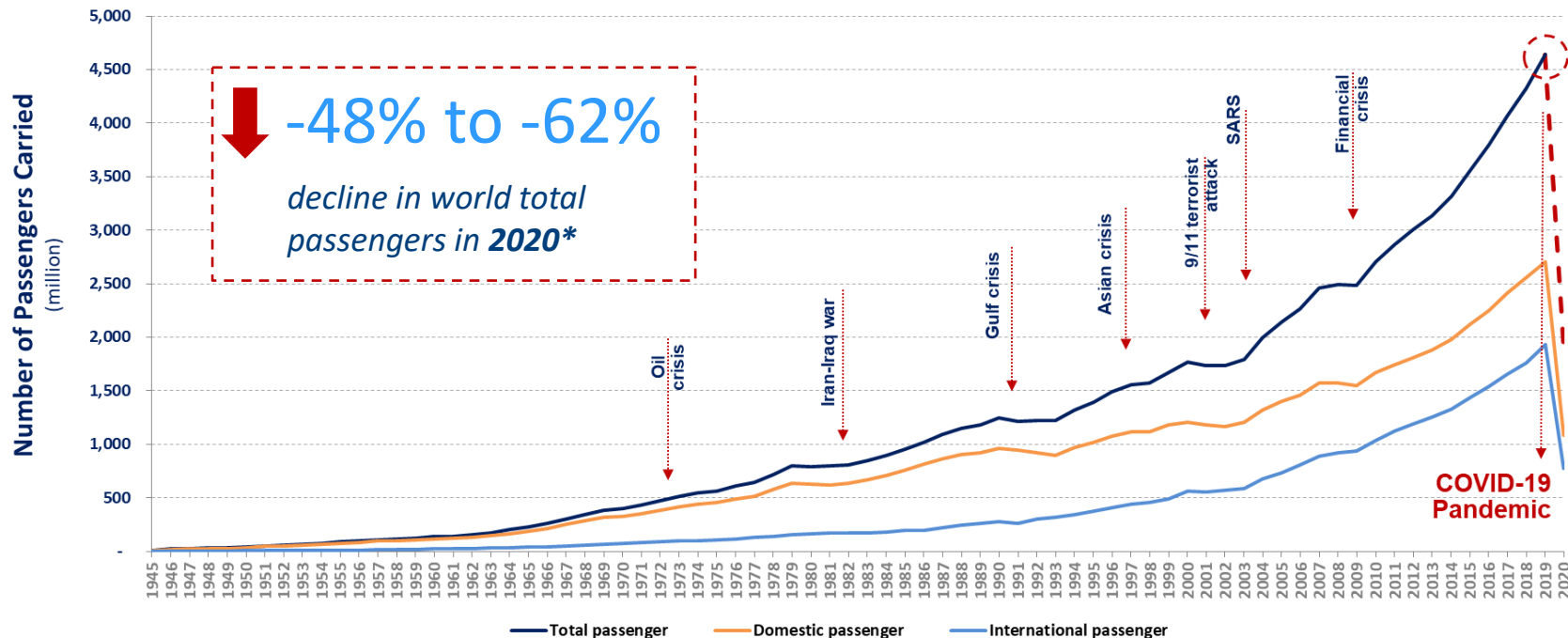
- Overall reduction ranging from **55% to 67% of seats offered by airlines**
- Overall reduction of **1,196 to 1,456 million passengers**
- Approx. **USD 208 to 256 billion potential loss** of gross operating revenues of airlines

Domestic passenger traffic for 2020, compared to Baseline

- Overall reduction ranging from **32% to 42% of seats offered by airlines**
- Overall reduction of **1,148 to 1,522 million passengers**
- Approx. **USD 101 to 135 billion potential loss** of gross operating revenues of airlines

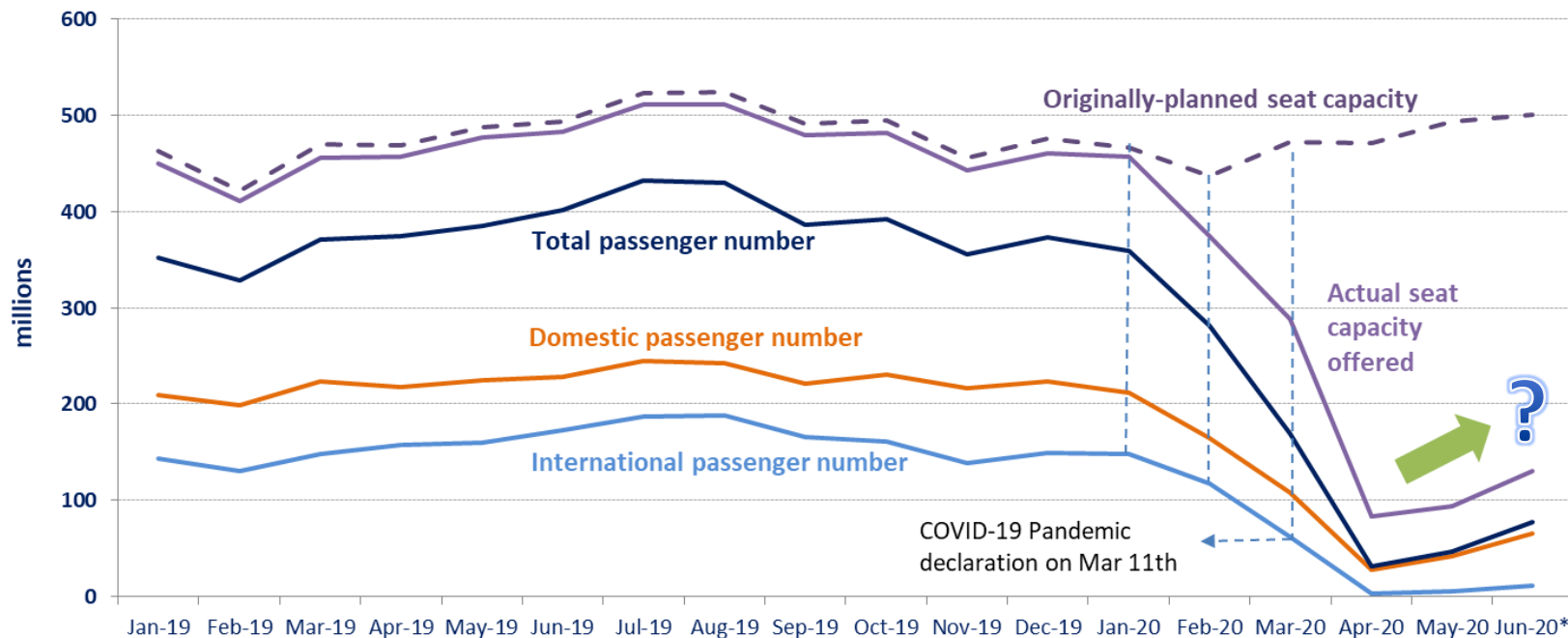
World passenger traffic collapses with unprecedented decline in history

World passenger traffic evolution 1945 – 2020*

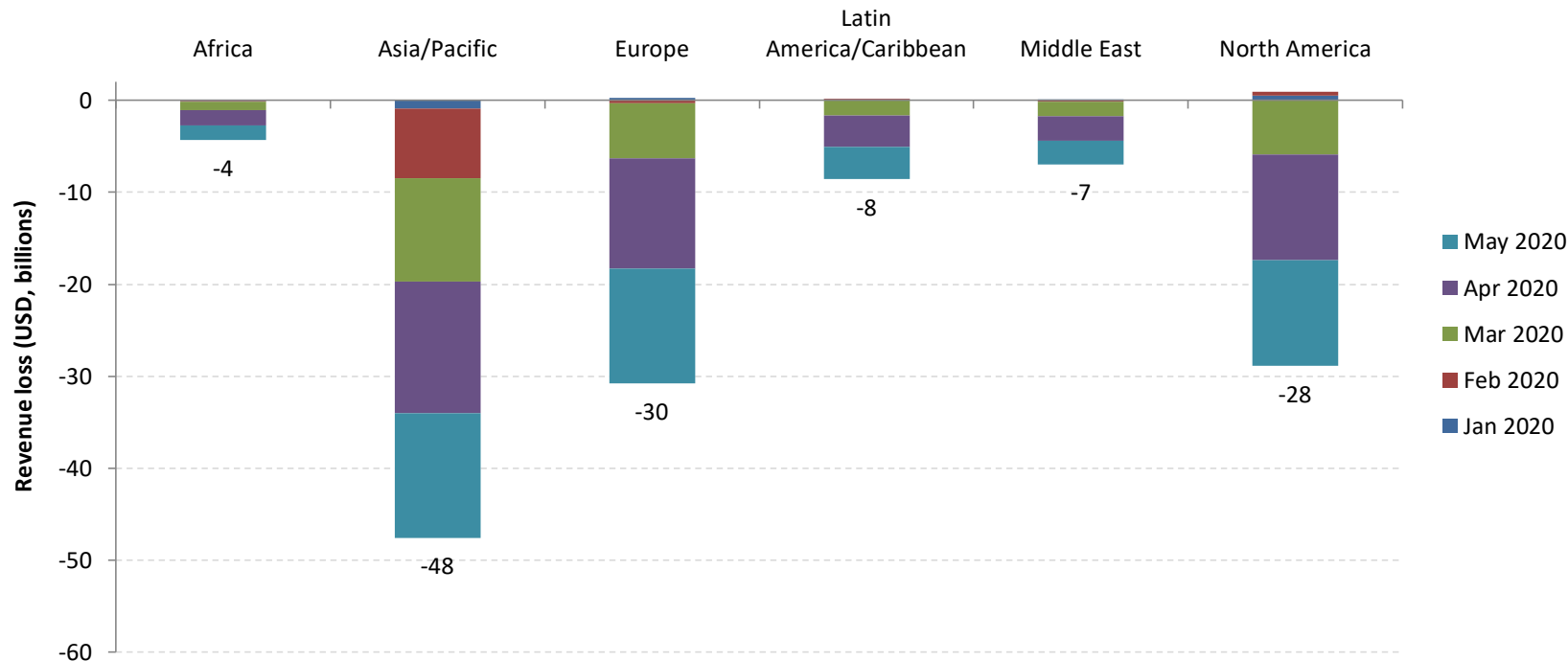


Drastic capacity cut along with dramatic drop in demand

Comparison of passenger numbers and capacity (Green shoot recovery for domestic while international remains stagnant)



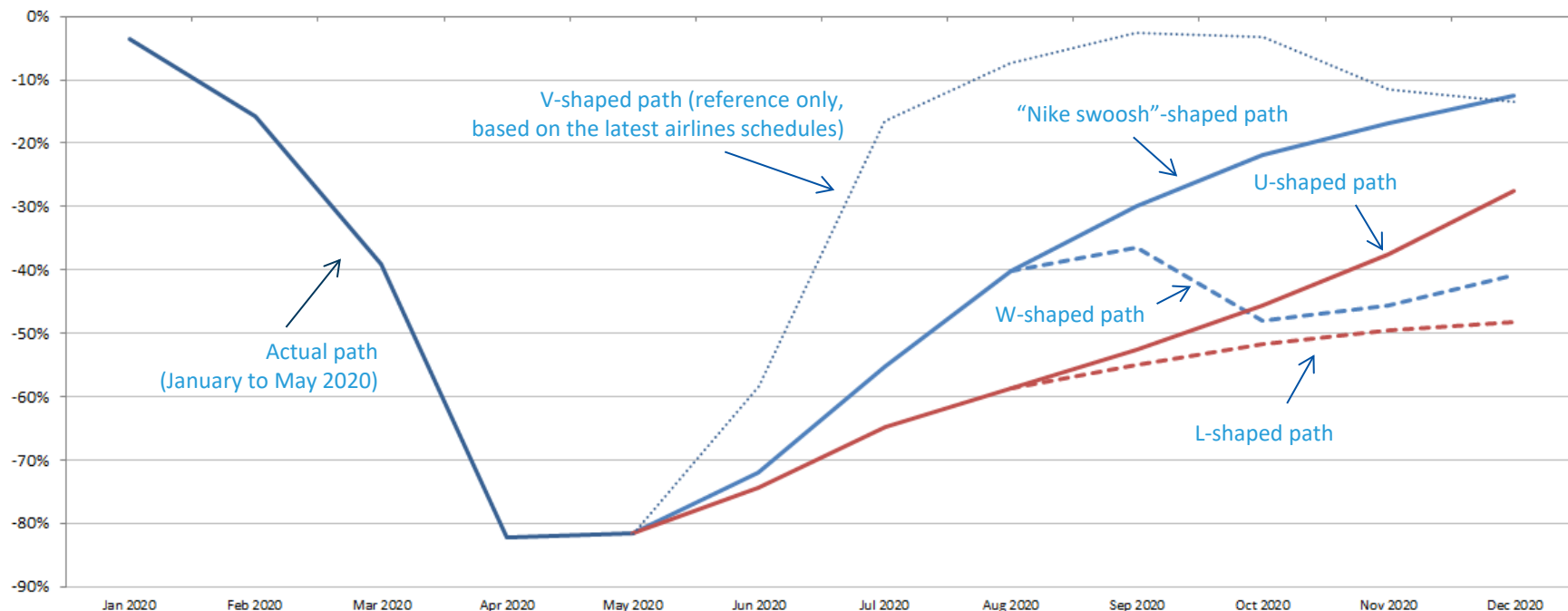
Approximately USD 126 billion passenger revenue loss from Jan to May 2020



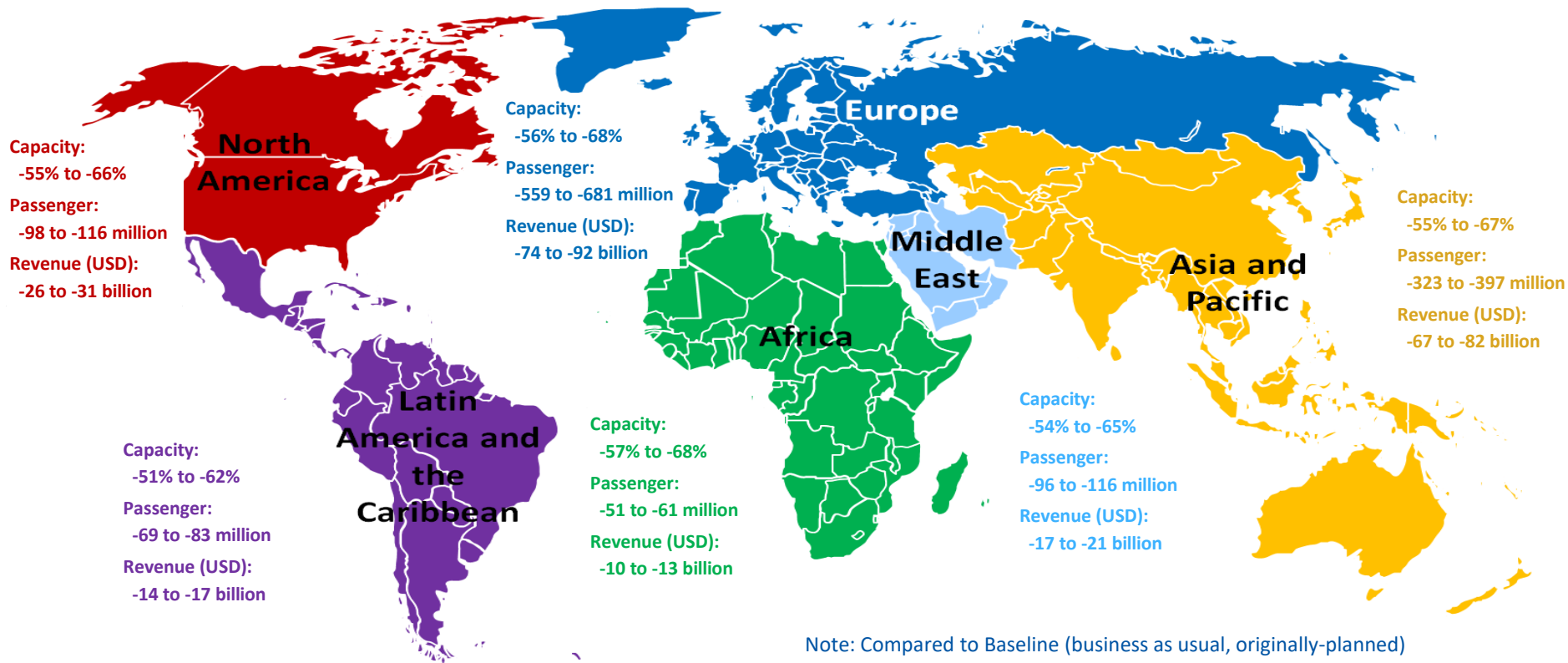
Note: Compared to Baseline (business as usual, originally-planned)

**Due to extreme uncertainty,
4 different paths are considered**

Scenarios for passenger seat capacity compared to Baseline (business as usual)



Estimated impact on international passenger traffic and revenues by region for 2020

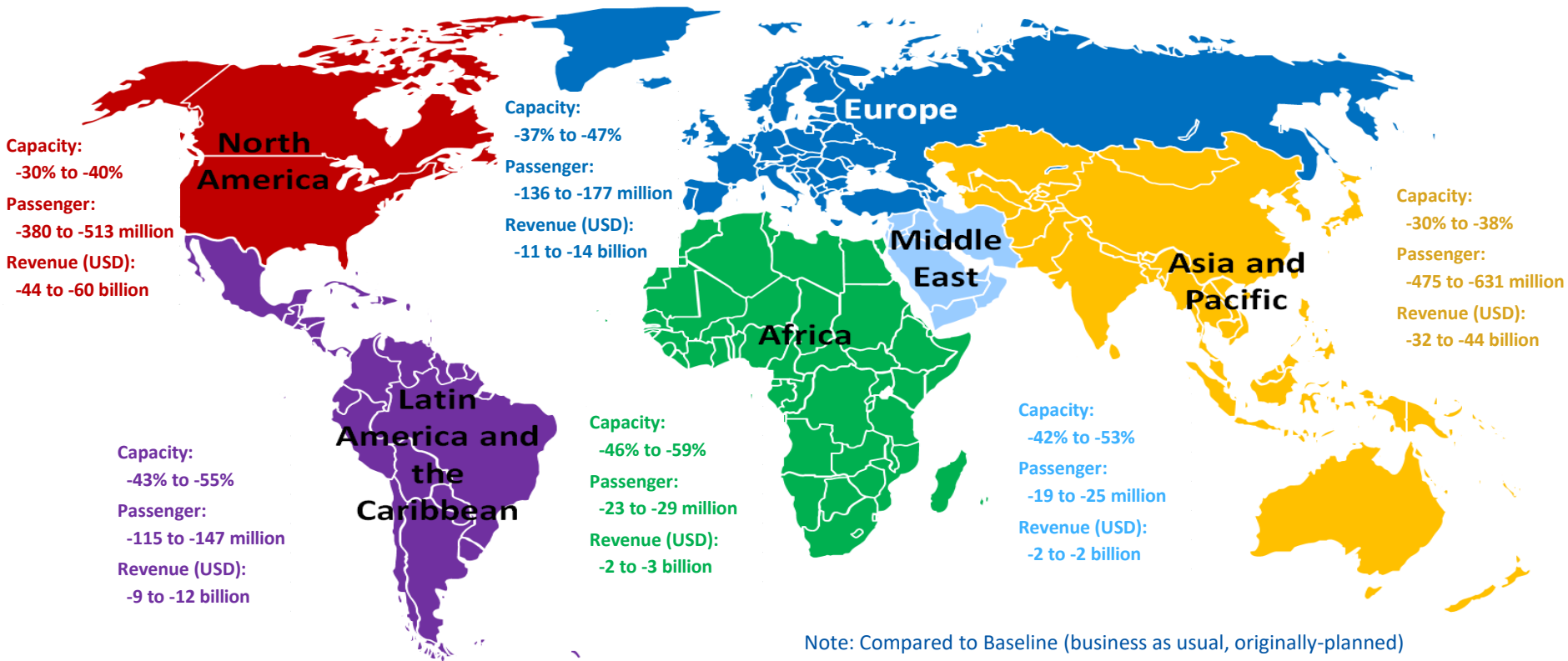




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Estimated impact on domestic passenger traffic and revenues by region for 2020





Global impact of COVID-19 on aviation, tourism, trade and economy

- **Air passenger traffic**: An overall reduction of air passengers (both international and domestic) ranging from 48% to 62% in 2020 compared to 2019 (by **ICAO**)
- **Airports**: An estimated loss of over 50% of passenger traffic and 57% or over USD 97 billion airport revenues in 2020 compared to business as usual (by **ACI**)
- **Airlines**: A 54.7% decline of revenue passenger kilometres (RPKs, both international and domestic) in 2020 compared to 2019 (by **IATA**)
- **Tourism**: A decline in international tourism receipts of between USD 910 to 1,170 billion in 2020, compared to the USD 1.5 trillion generated in 2019, with 100% of worldwide destinations having travel restrictions (by **UNWTO**)
- **Trade**: A fall of global merchandise trade volume by between 13% and 32% in 2020 compared to 2019 (by **WTO**)
- **Global economy**: A projected -3% to -5.2% contraction in world GDP in 2020, far worse than during the 2008–09 financial crisis (by **IMF and World Bank**)



Scenario Building

Previous two (2) scenarios and six (6) different paths were restructured with new two (2) scenarios and four (4) different paths for scheduled passenger traffic till December 2020.

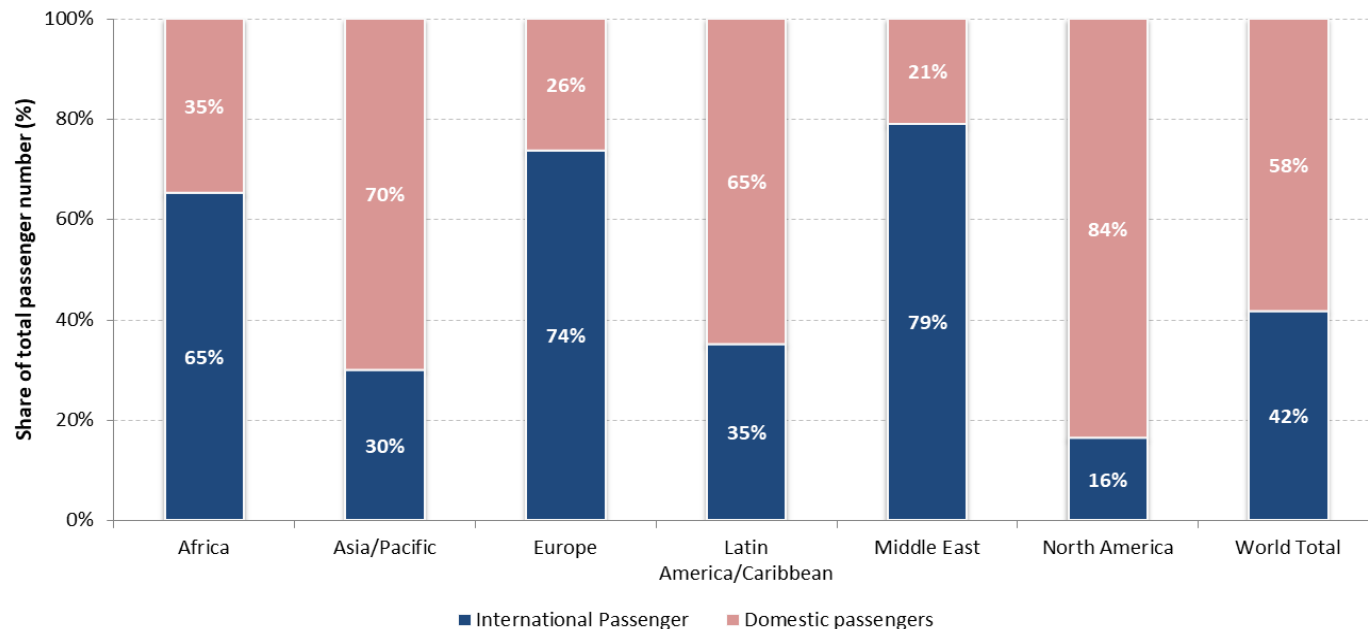
- Analysis focuses on simultaneous supply shock and drop in demand
 - in a near-term, i.e. monthly profile **from January to December 2020**
 - in terms of scheduled **passenger traffic** globally
- Taking into account the heterogeneity, distinction is made:
 - between international and domestic
 - by six (6) geographical region and/or 50 route groups used in ICAO's long-term traffic forecasts (LTF)
- Analysis is based on forward-looking scenarios, which will be continuously adjusted and updated

Analytical Consideration

- Geographical disparity of international-domestic passenger traffic mix
- Difference in market size among regions
- Potential difference in resilience and speed of recovery
- Outbreak timing that impacts when traffic would bottom out
- Gap between what is scheduled and actual operations

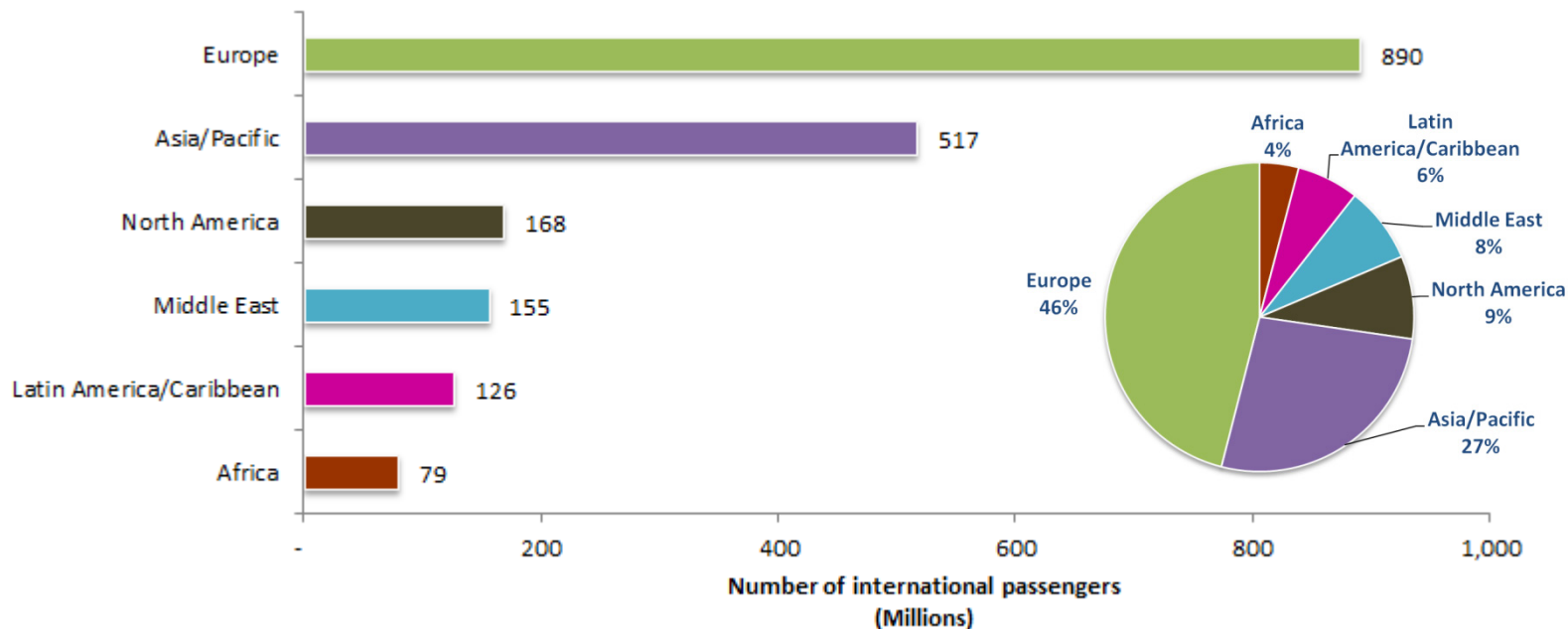
International-domestic passenger traffic mix exhibits significant geographical disparity

Share of international-domestic passenger traffic by region (2019)



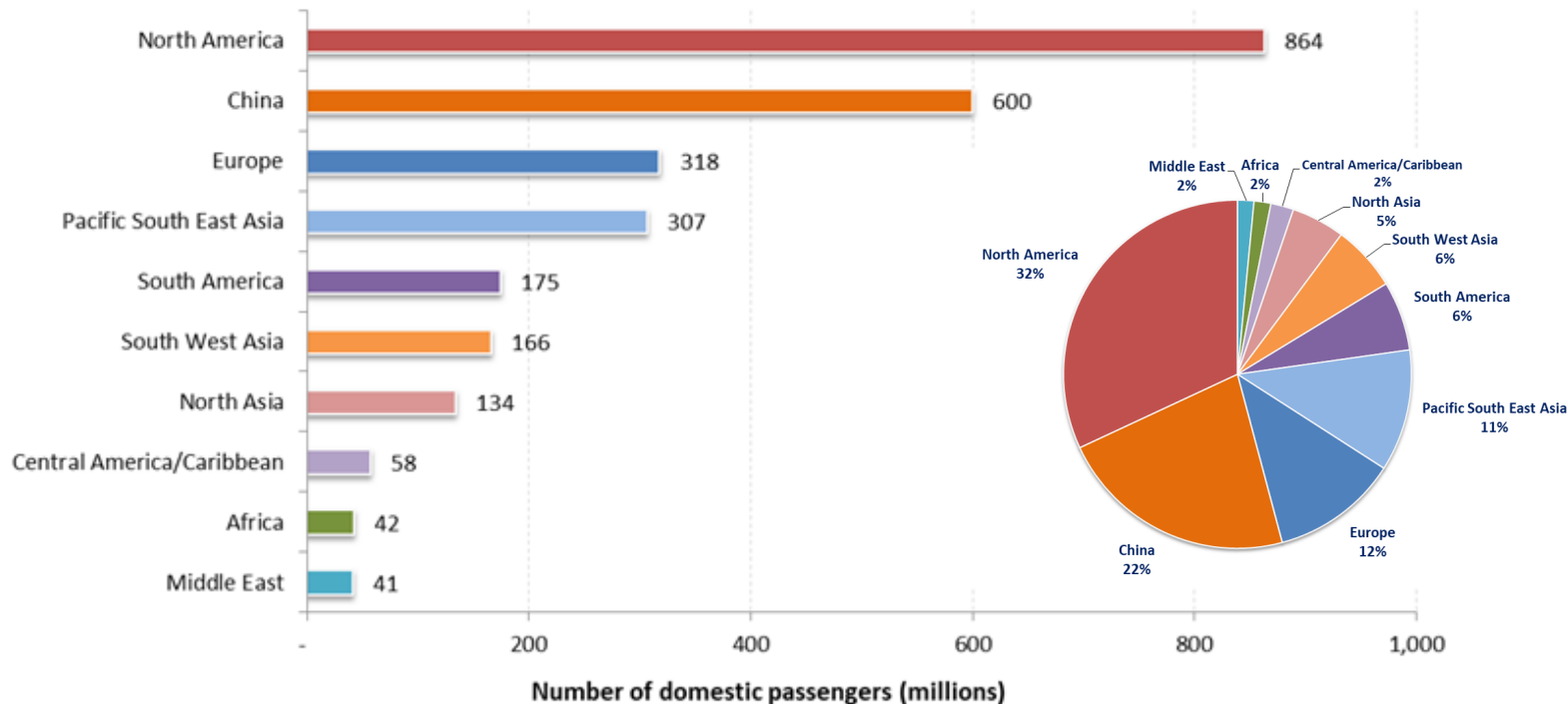
Europe and Asia/Pacific accounted for over 70% of the world international traffic pre-COVID-19

Number of International Passengers by Region (2019, based on from/to State)



North America and China account for over half of world domestic passenger traffic

Number of Domestic Passengers by Route Group (2019)



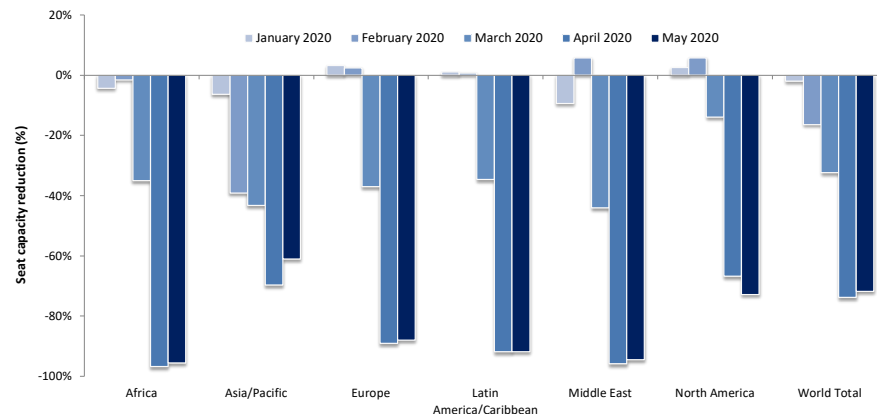
Domestic passenger traffic may be more resilient than international in some markets

Asia/Pacific and North America have experienced 20% to 25% less decline in domestic passenger traffic than international

**International seat capacity reduction
(compared to baseline)**

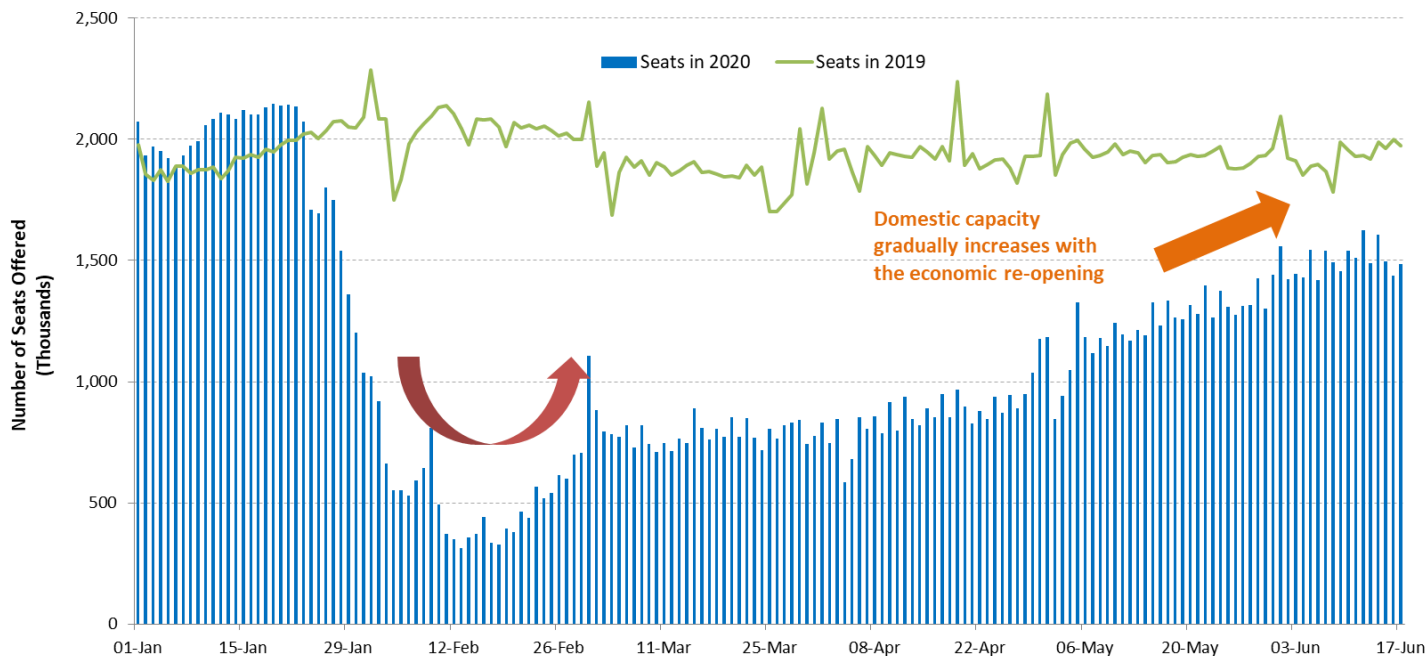


**Domestic seat capacity reduction
(compared to baseline)**



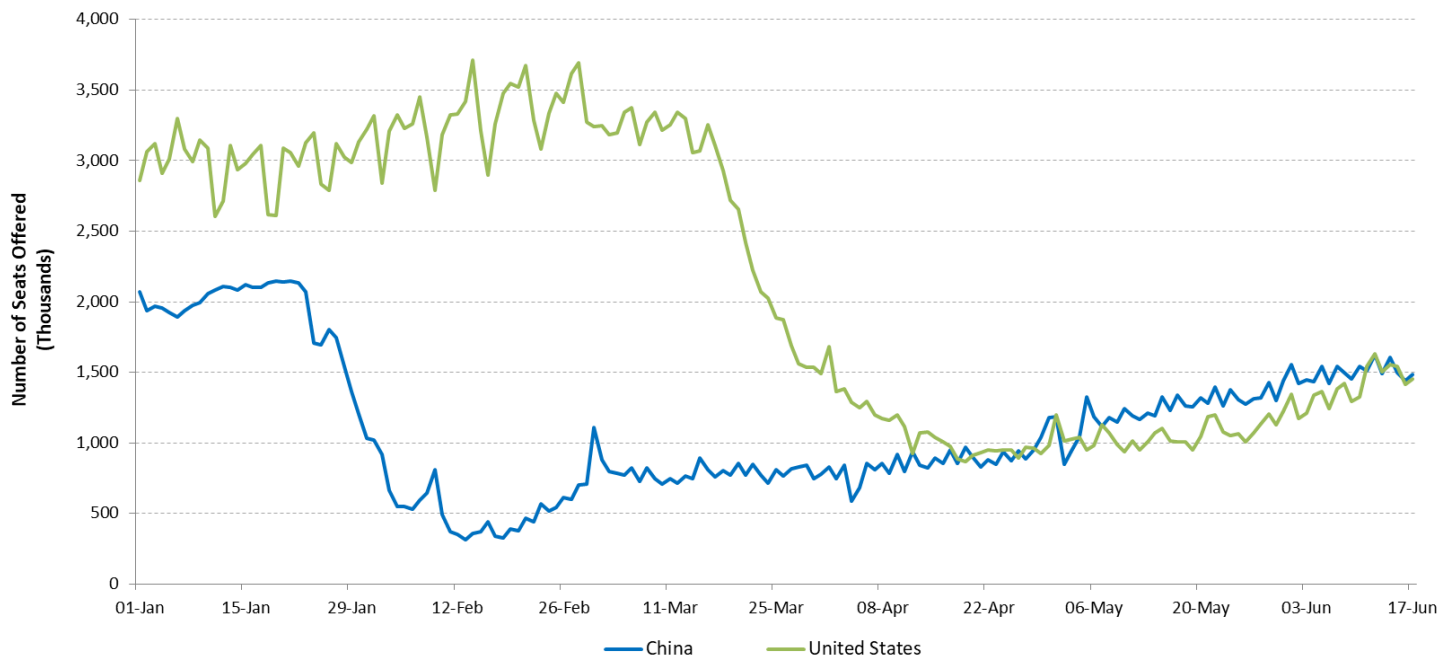
Domestic passenger traffic may recover ahead of international

Domestic passenger traffic in China already bottomed out in mid-February, and capacity offered in June was recovered to around 78% of last year



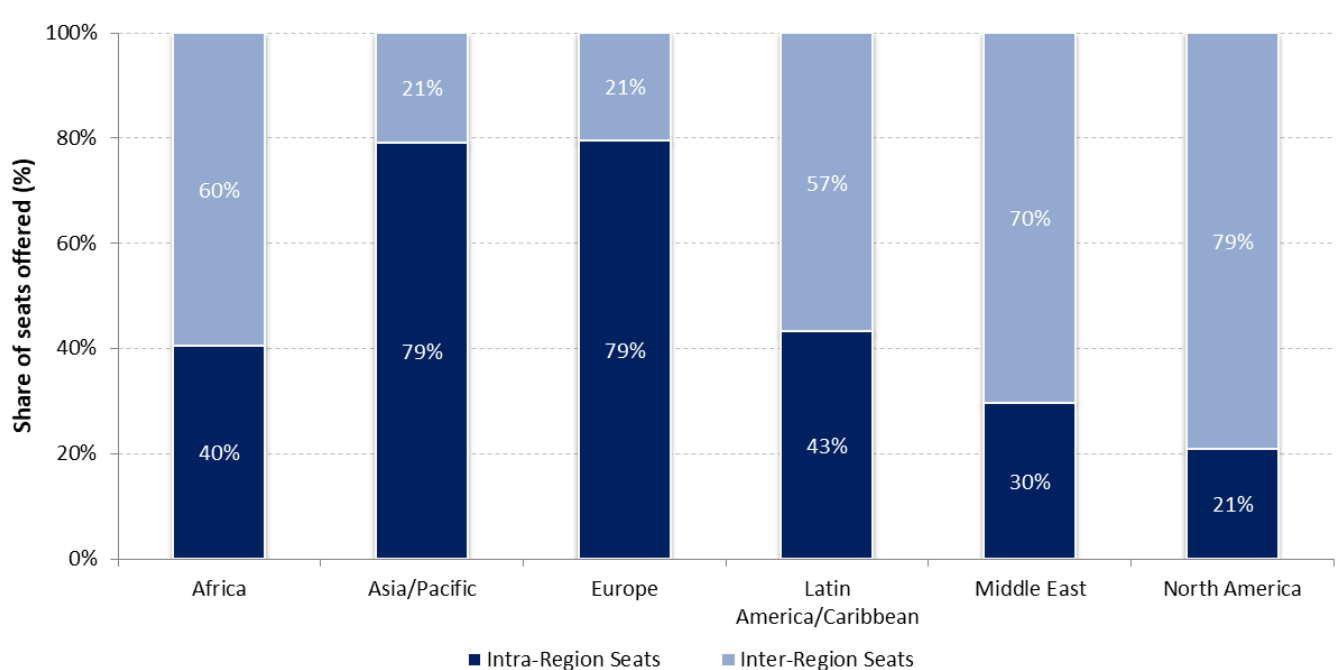
The outbreak timing impacts when domestic traffic would bottom out in each region

Capacity evolution of two largest domestic markets China and United States since January 2020



Regions with higher share of intra-region traffic are expected to recover faster

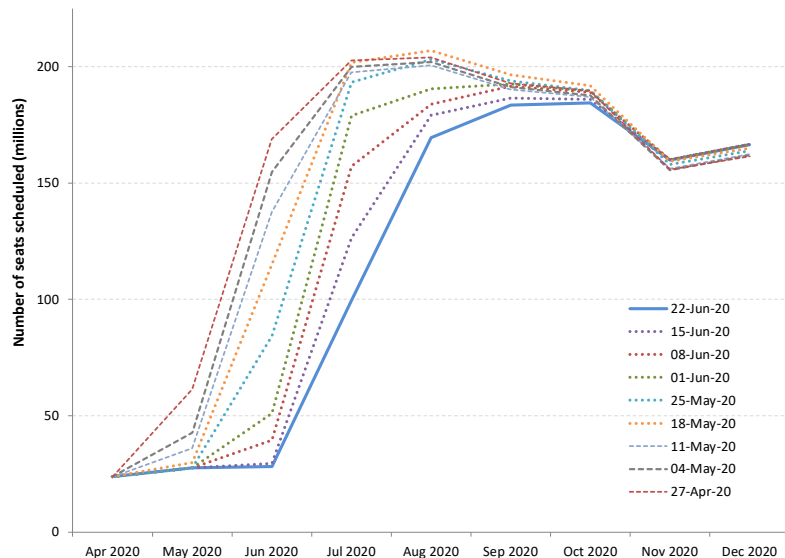
Almost 80% of international seats offered in Asia/Pacific and Europe were for intra-regional traffic (2019)



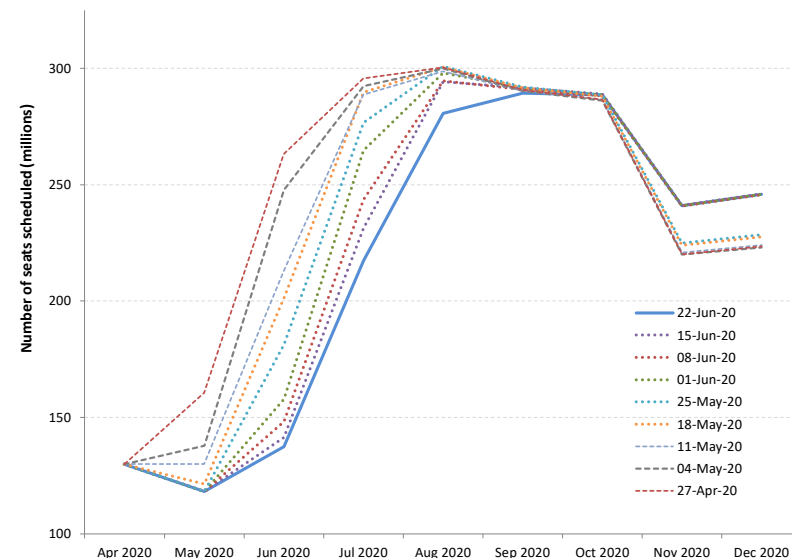
A gap exists between what is scheduled and actual operations

Airlines announced/planned resumption of flights in early May, however, over half of which were subsequently withdrawn

International schedules



Domestic schedules



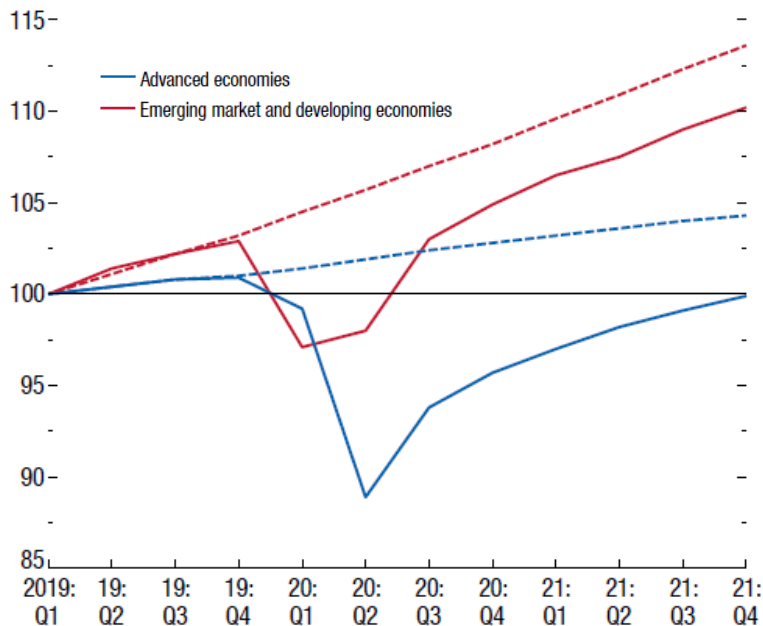
Shapes of Economic Recession and Recovery

Informal classification to describe different types of recessions:

- **V-shaped**: normal shape for recession, a brief period of sharp economic decline followed by quick/smooth recovery
- **U-shaped**: prolonged contraction and muted recovery to trend line growth
- **L-shaped (depression)**: long-term downturn in economic activity, steep drop followed by a flat line with possibility of not returning to trend line growth
- **W-shaped**: a double-dip recession, “down up down up” pattern before full recovery
- **“Nike swoosh”-shaped***: bounce back sharply but blunt quickly (* Brookings Institution/WEF)

What “recession shape” can be assumed given uncertainties surrounding the outlook?

World's GDP Projections (by IMF)



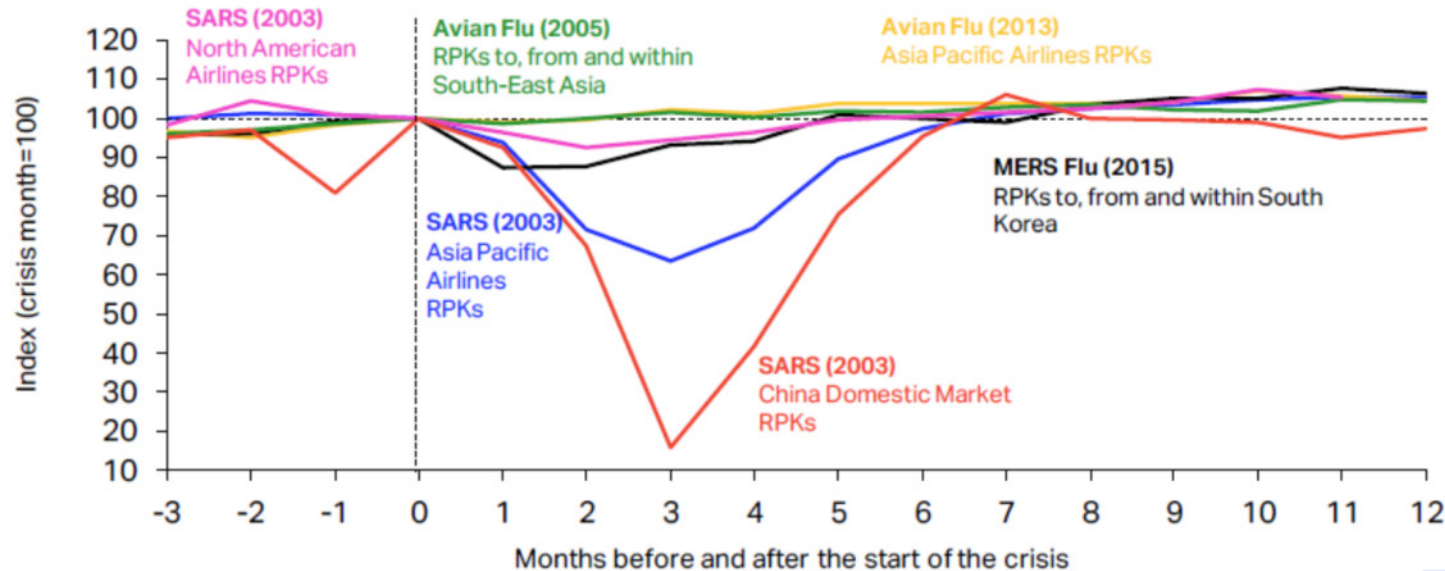
(2019:Q1 = 100; dashed lines indicate estimates from January 2020 World Economic Outlook Update)

<https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020>

- How long will the pandemic last and what will be the severity levels?
- How deep and how long will the global recession be?
- How long will lockdowns and travel restrictions continue?
- How fast will consumer confidence in air travel be restored?
- Will there be a structural shift in industry and consumers' behaviors?
- How long can the air transport industry withstand the financial adversity?

Previous outbreaks/pandemics had a V-shaped impact on air transport in Asia/Pacific

Impact of past disease outbreaks on aviation



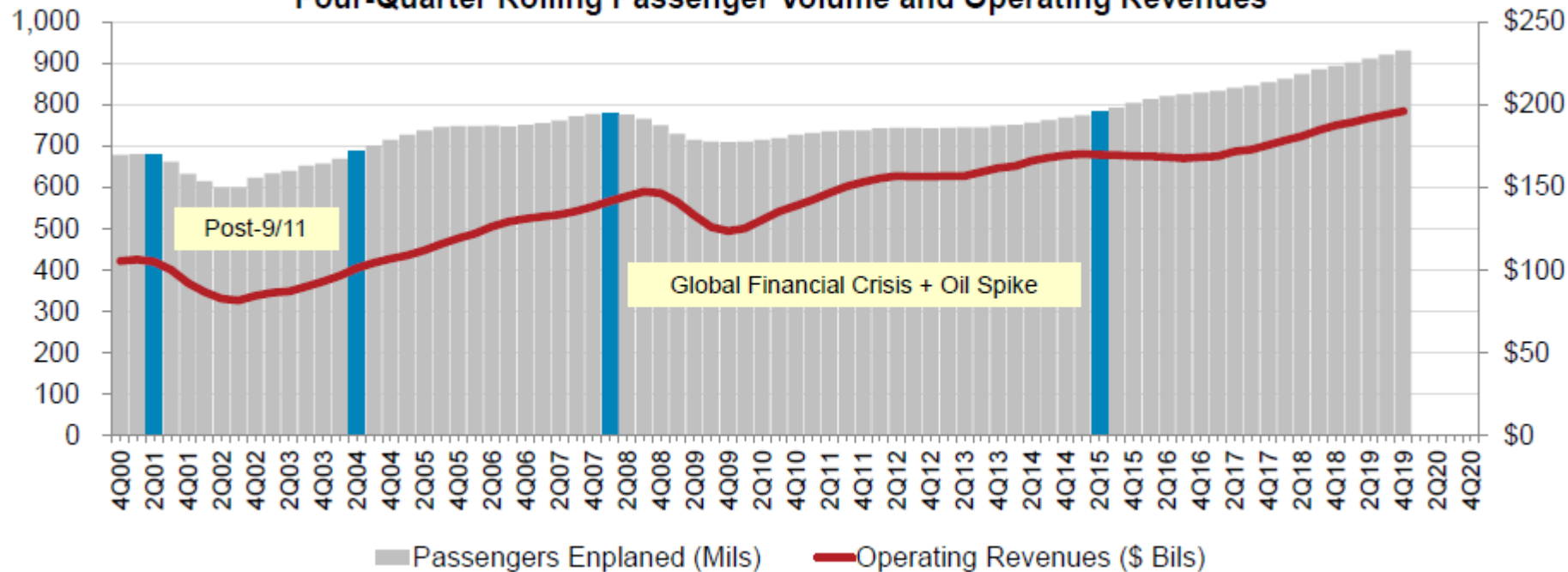
The impact of COVID-19 has already surpassed the 2003 SARS outbreak which had resulted in reduction of annual RPKs by 8% and USD 6 billion revenues for Asia/Pacific airlines. **The 6-month recovery path of SARS might not apply to today's situation.**

Source: IATA Economics using data from IATA Statistics

<https://www.iata.org/en/iata-repository/publications/economic-reports/third-impact-assessment/>

9/11 and global financial crisis had a U/L-shaped impact on air transport in United States

Four-Quarter Rolling Passenger Volume and Operating Revenues



* Passengers enplaned systemwide on U.S. airlines in scheduled and nonscheduled services

Source: A4A Passenger Airline Cost Index and Bureau of Transportation Statistics (Form 41 Schedule T1)

<https://www.airlines.org/dataset/impact-of-covid19-data-updates/>

Indicative Scenarios and Paths Forward

As overall severity and duration of the COVID-19 pandemic are still uncertain, four (4) different recovery paths under two (2) indicative scenarios are developed:

- **Baseline:** counterfactual scenario, in which the COVID-19 pandemic does not occur, that is, **originally-planned** or **business as usual**
- **Scenario 1:** two (2) different paths (similar to **Nike swoosh- and W-shaped**)
- **Scenario 2:** two (2) different paths (similar to **U- and L-shaped**)
- **Reference:** information only, based on latest airline schedules (similar to **V-shaped**)

- Notwithstanding the elevated uncertainty surrounding the outlook, a scenario analysis could help gauge potential economic implications of the COVID-19 pandemic
- Scenarios are **not forecasts** of what is most likely to happen. Given rapidly changing circumstances, they are merely indicative of **possible paths or consequential outcomes out of many**
- The exact path (depth, length and shape) will depend upon various factors, inter alia, duration and magnitude of the outbreak and containment measures, availability of government assistance, consumer confidence, and economic conditions
- With the situation evolving and more information available, scenarios will be adjusted as necessary

- International and domestic passenger traffic has separate scenarios/paths
- Scenarios/paths are differentiated in terms of supply and demand, i.e.
 - Scale of output or seat capacity change
 - Degree of consumer confidence that can be translated into demand or load factor as a proxy
- Supply and demand are influenced by:
 - Different timing and speed of recovery by region, international/domestic, and intra-/inter-region
 - Global economic contraction
- No consideration is made to social distancing requirements on aircraft, etc.
- Detailed scenario assumptions are summarized in **Appendix B**

- **Baseline: originally-planned or business as usual**
 - Counterfactual hypothesis that are expected to occur in the absence of COVID-19 pandemic
 - Supply: airlines' originally-planned schedules supplemented by trend line growth
 - Demand: trend line growth of demand from 2019 level
- **Reference: V-shaped**
 - Information-only scenario that reflects airlines' most recent expectation or a "signal" of airlines' plan to the market (not necessarily realistic)
 - Supply: based on latest update of airline schedules filed up to December, which are adjusted weekly by airlines according to the expectation of the evolving situation (quite often managing capacity for a short period due to the uncertainties)
 - Demand: quickly returning to Baseline level

Scenario 1: Nike swoosh- and W-shaped

- International
 - **Path 1:** Smooth capacity recovery to two thirds of Baseline level by December with pent-up demand
 - **Path 1a:** Capacity to start with smooth recovery but then turn back down due to over-capacity
- Domestic
 - **Path 1:** Swift capacity rebound to 93% of Baseline by December pushed by pent-up demand
 - **Path 1a:** Capacity to start with smooth recovery but then turn back down due to over-capacity

Scenario 2: U- and L-shaped

- International
 - **Path 2:** Slow progression of capacity recovery to 50%, picking up more demand in 4Q
 - **Path 2a:** Recovery to 30% at diminishing speed due to respite and continuous demand slump
- Domestic
 - **Path 2:** Gradual capacity recovery to 85%, picking up more demand in 4Q
 - **Path 2a:** Capacity recovery to two thirds at diminishing speed due to sluggish demand growth

In the following analysis, international and domestic scenarios having the same path number are linked with each other, although different combination of scenarios/paths would be possible



Scenario Estimates

Figures and estimates herein are subject to substantial changes, and will be updated with the situation evolving and more information available.

- Three (3) key impact indicators under four (4) paths of two (2) scenarios:
 - Impact on passenger seat capacity (supply, % change)
 - Impact on passenger numbers (demand)
 - Impact on gross passenger operating revenues of airlines
- Comparison to:
 - Baseline scenario
 - 2019 level (year-on-year)
 - Reference scenario
- Break-down by:
 - International and domestic
 - Six (6) geographical regions

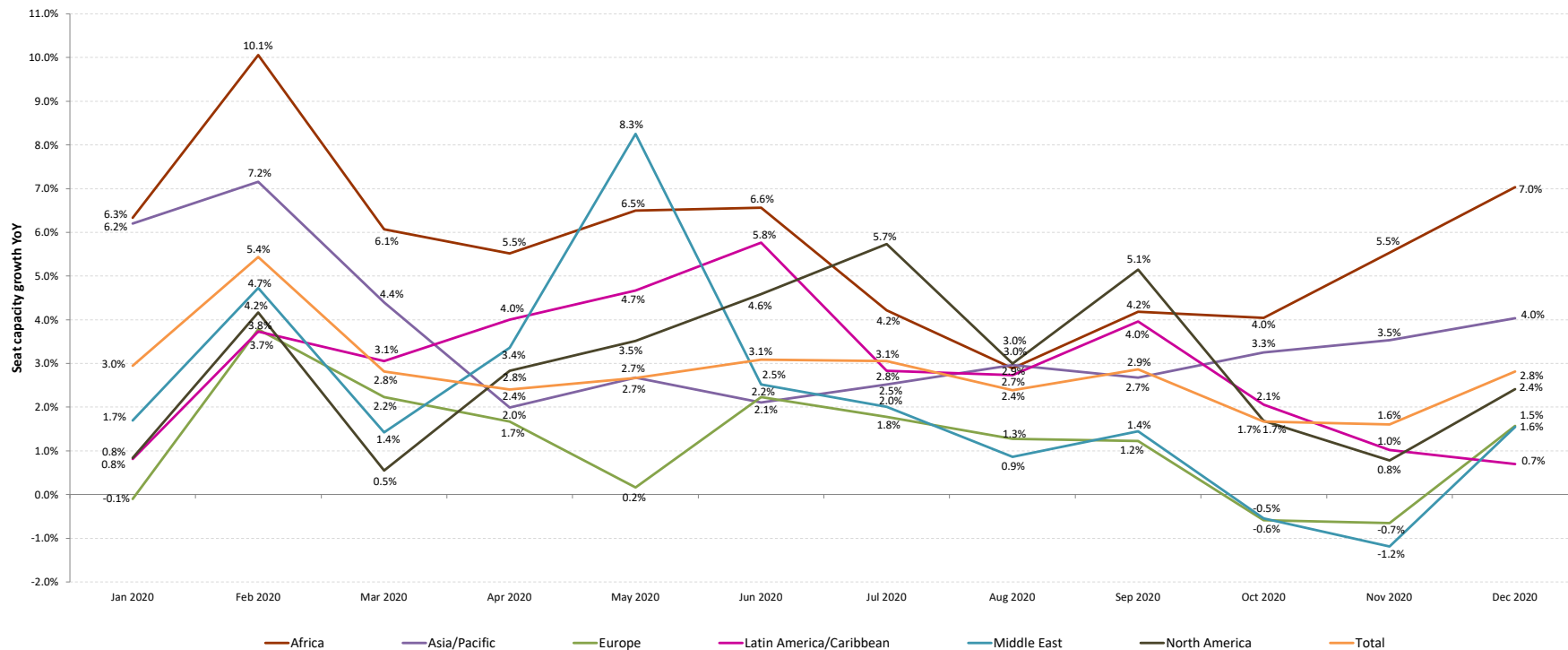
Estimation based on actual results of January to May 2020 are used for the key impact indicators.

Appendix C details the key impact indicators while **Appendix D** presents estimation based on actual results by route group.

Impact on Passenger Seat Capacity (Supply)

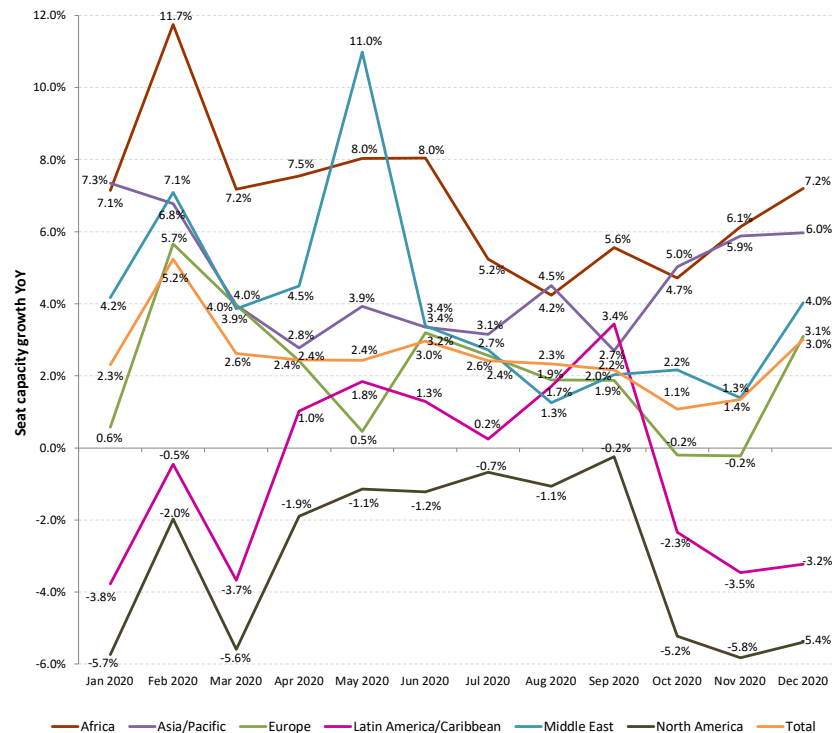
- Prior to the outbreak, airlines had planned to increase seat capacity in 2020 by **2.8%** (international by **2.5%** and domestic by **3.0%**), compared to 2019.
- According to the latest estimates, passenger seat capacity could instead drop from the above Baseline by **42% to 52%** (international by **55% to 67%** and domestic by **32% to 42%**).
- This capacity level would be **40% to 51%** (international **54% to 66%** and domestic **30% to 40%**) below the 2019 level.
- Biggest capacity reduction (%) is expected to be in Middle East, followed by Africa and Europe.

International + Domestic (+2.8% YoY)

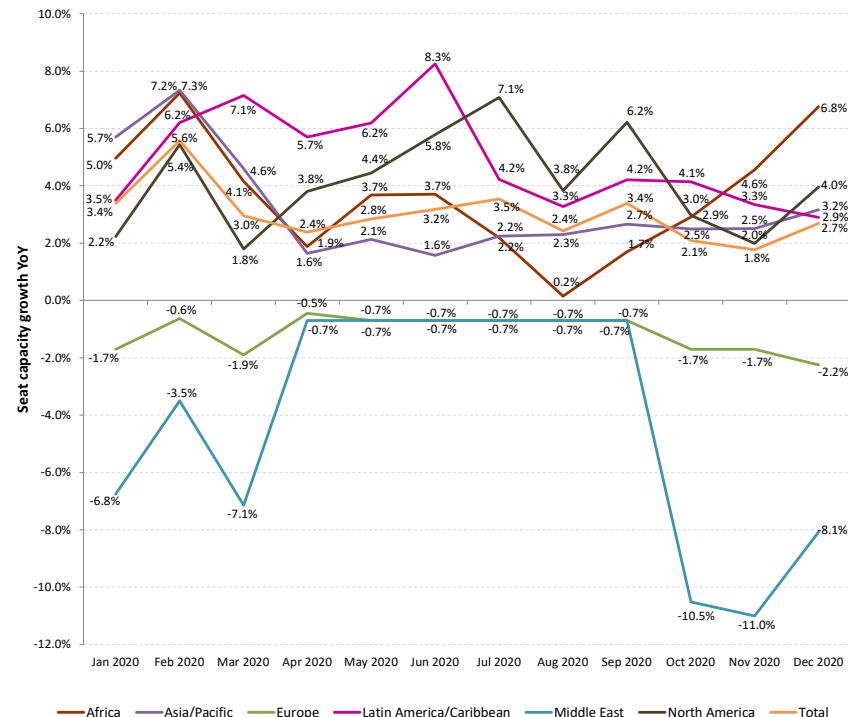


Baseline seat capacity compared to 2019

International (+2.5% YoY)



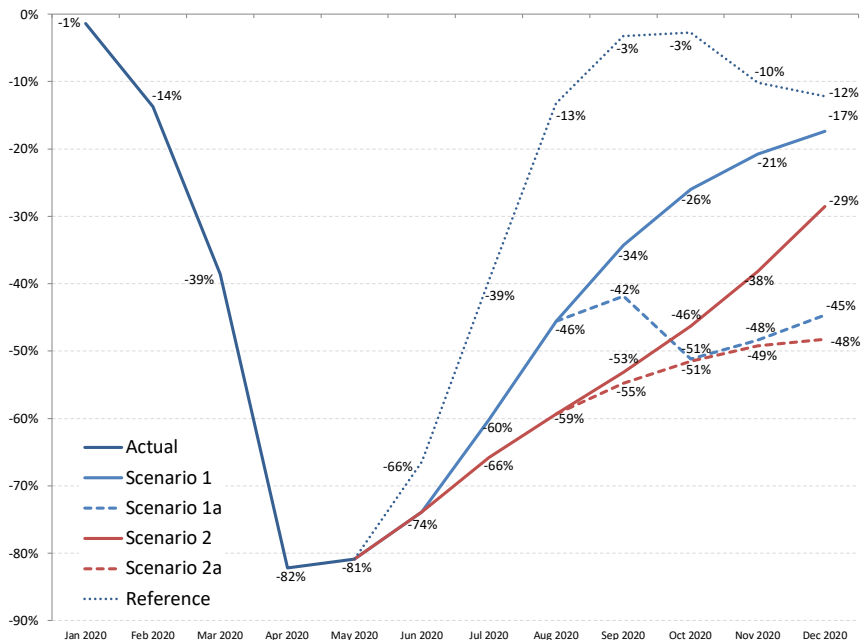
Domestic (+3.0% YoY)



Scenarios 1 & 2 (World total): Seat capacity change compared to Baseline & 2019

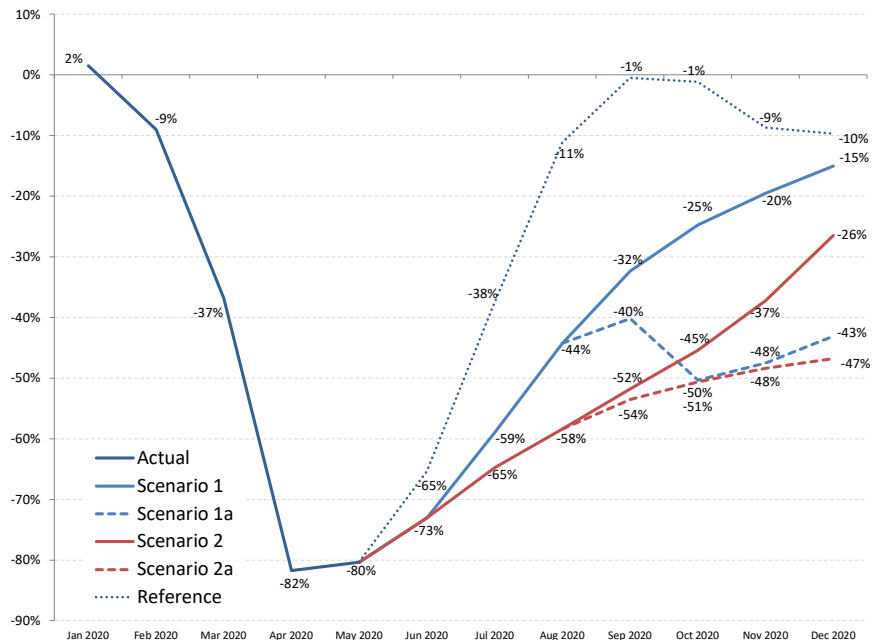
International + Domestic

(-42% to -52% from Baseline)



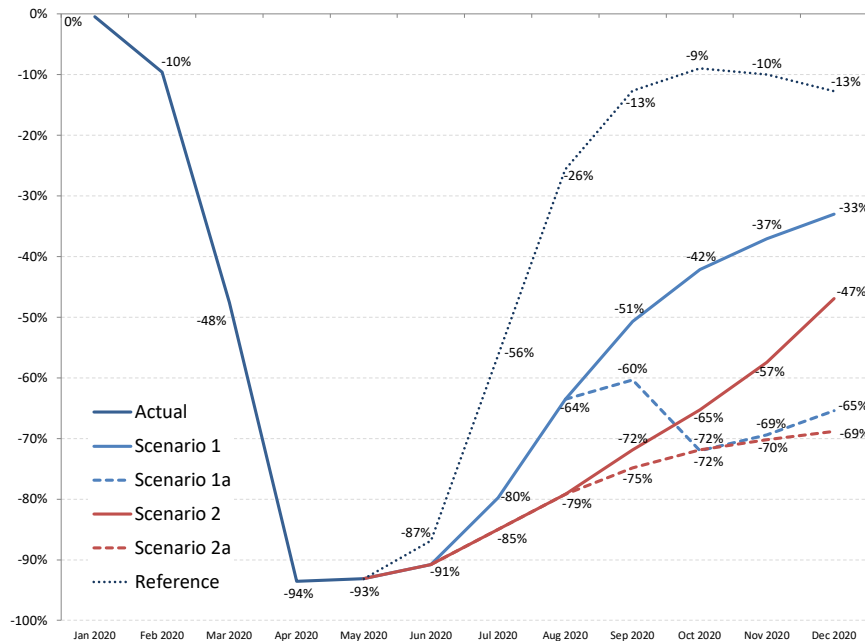
International + Domestic

(-40% to -51% YoY)

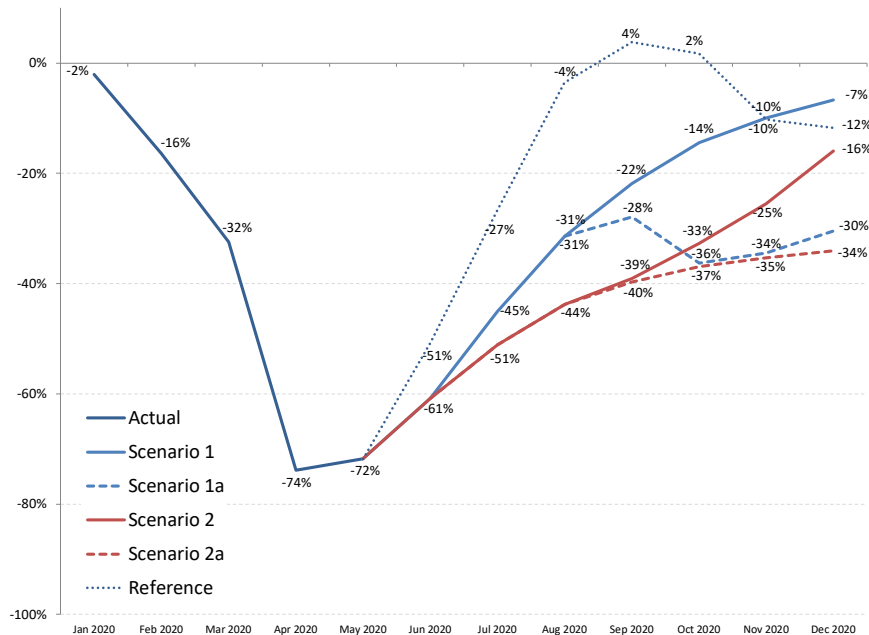


Scenarios 1 & 2 (World total): Seat capacity change compared to Baseline

International (-55% to -67% from Baseline)

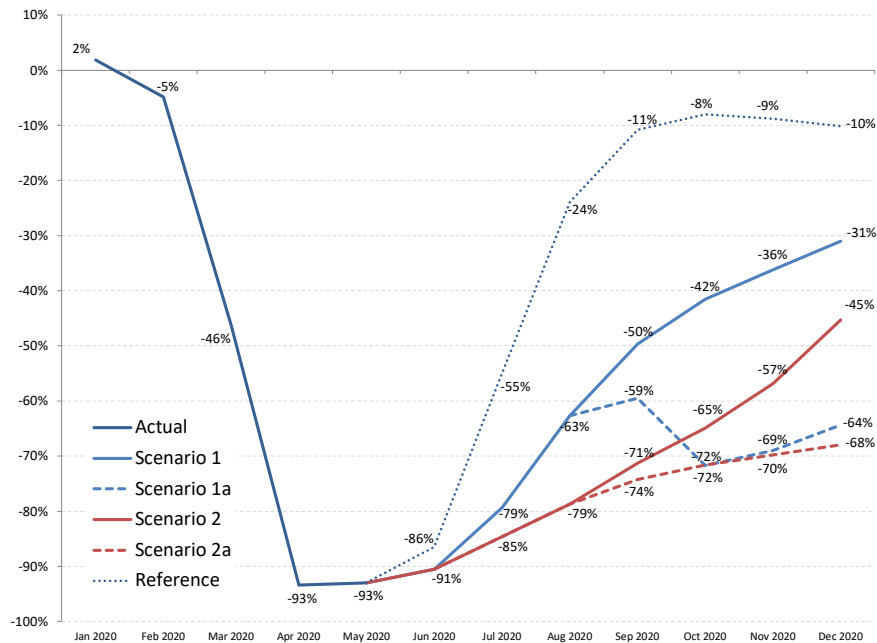


Domestic (-32% to -42% from Baseline)

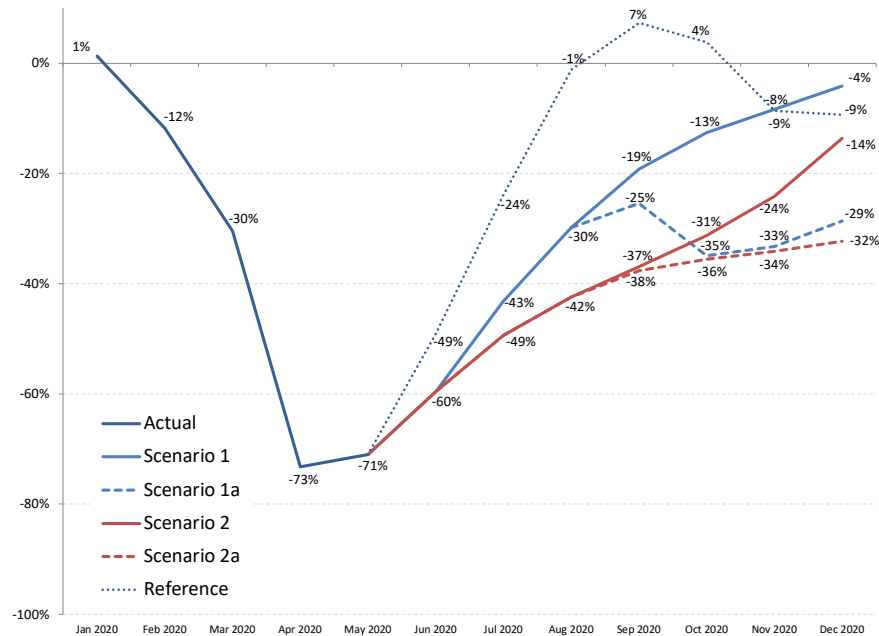


Scenarios 1 & 2 (World total): Seat capacity change compared to 2019

International (-54% to -66% YoY)

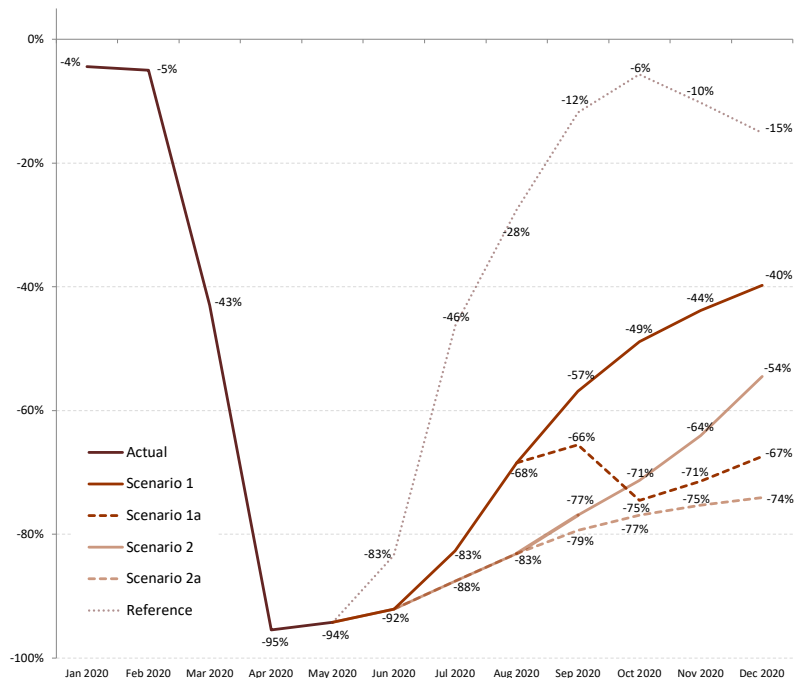


Domestic (-30% to -40% YoY)

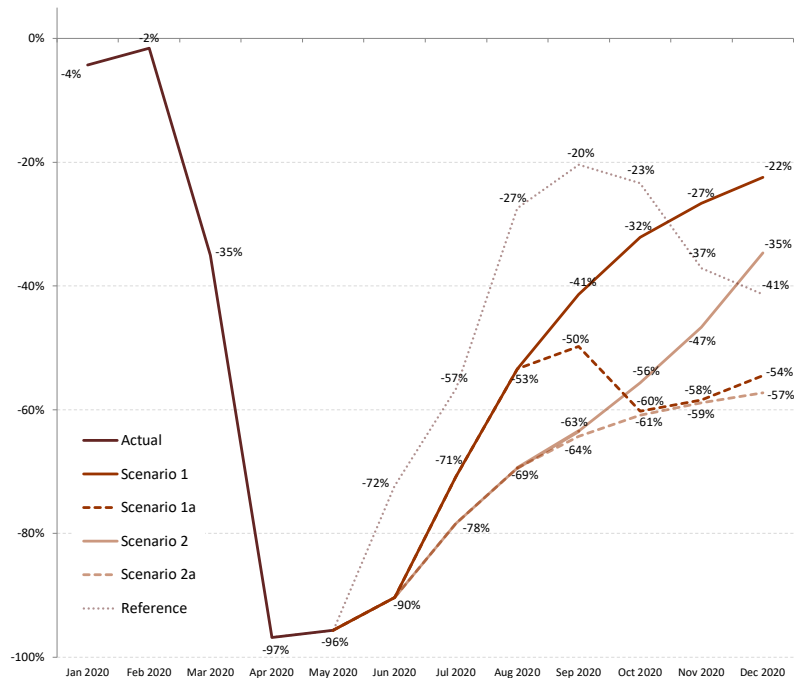


Scenarios 1 & 2 (Africa): Seat capacity change compared to Baseline

International (-57% to -68% from Baseline)

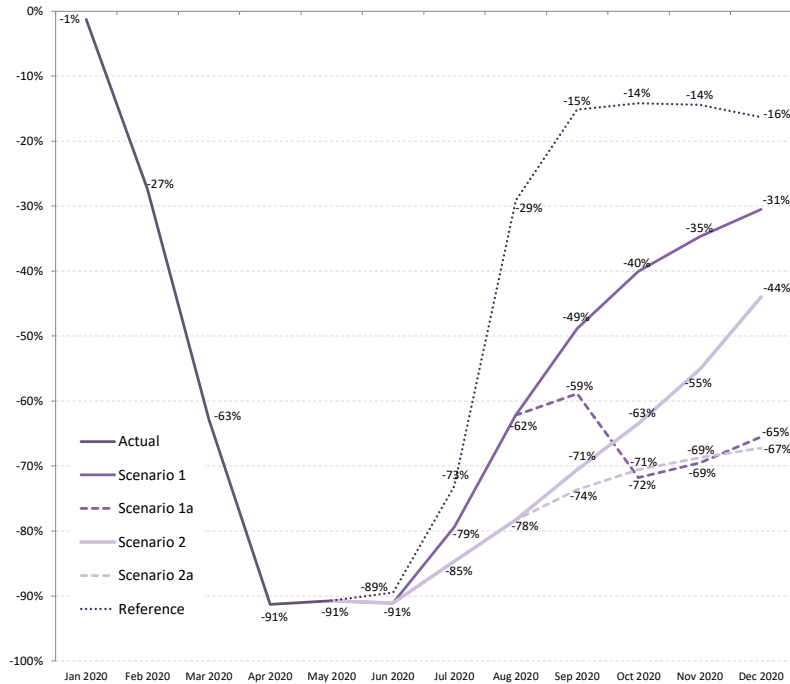


Domestic (-46% to -59% from Baseline)

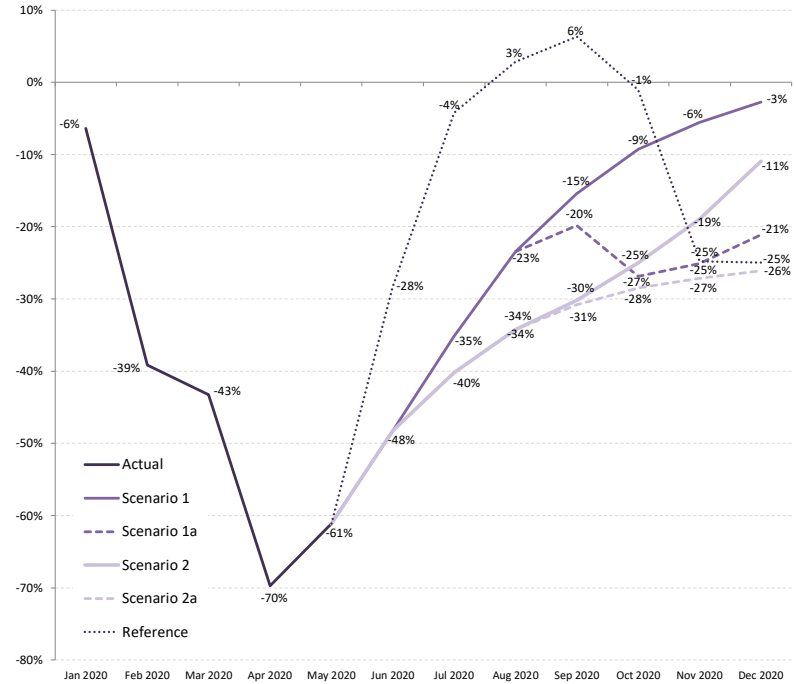


Scenarios 1 & 2 (Asia/Pacific): Seat capacity change compared to Baseline

International (-55% to -67% from Baseline)

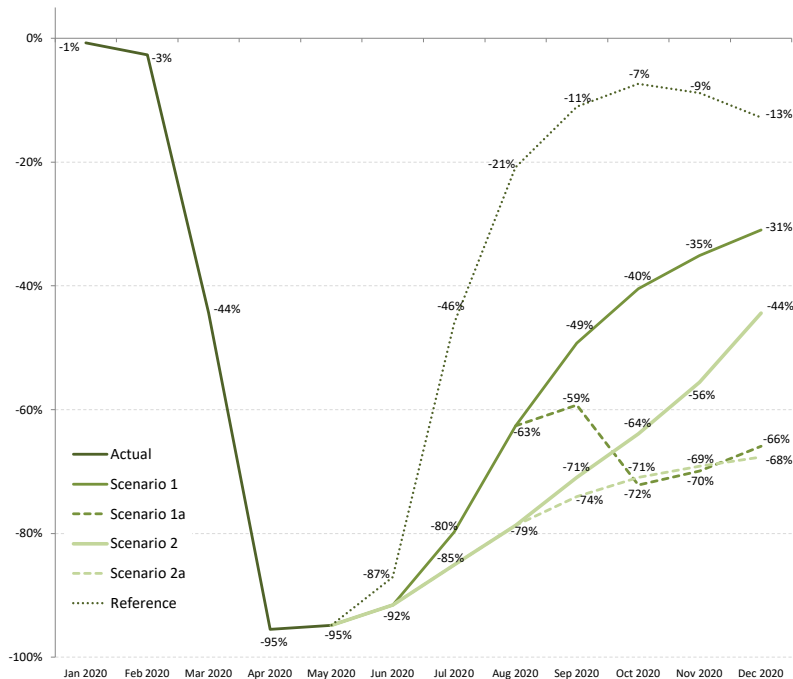


Domestic (-30% to -38% from Baseline)

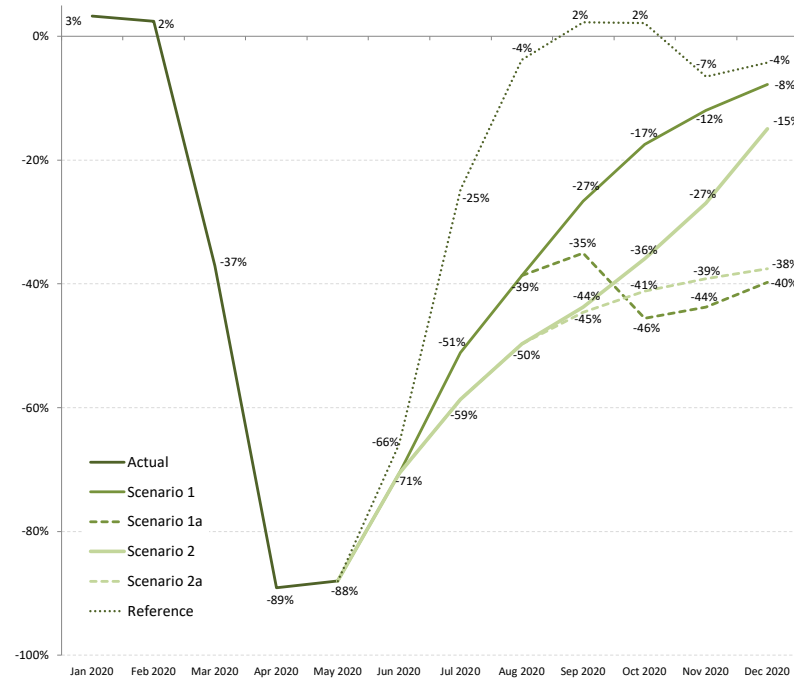


Scenarios 1 & 2 (Europe): Seat capacity change compared to Baseline

International (-56% to -68% from Baseline)

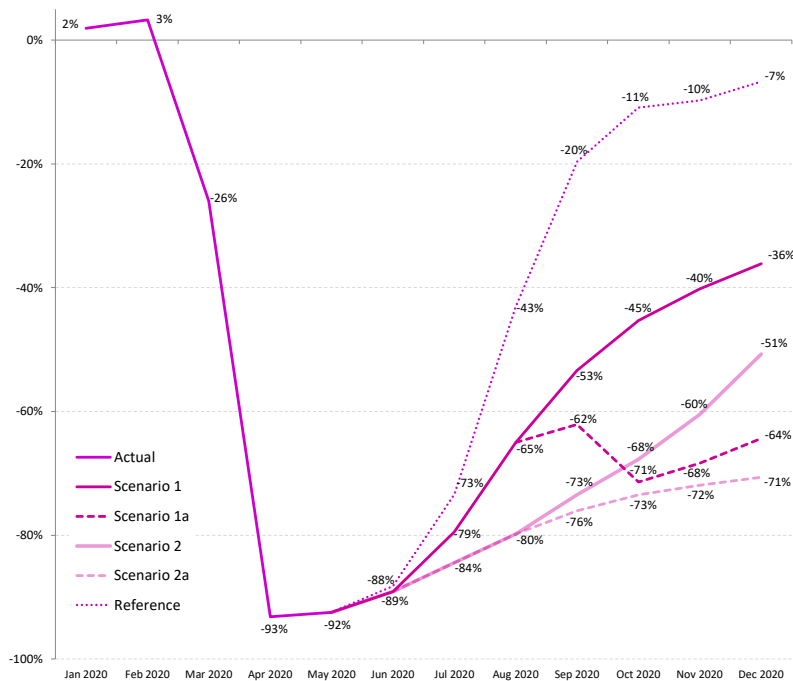


Domestic (-37% to -47% from Baseline)

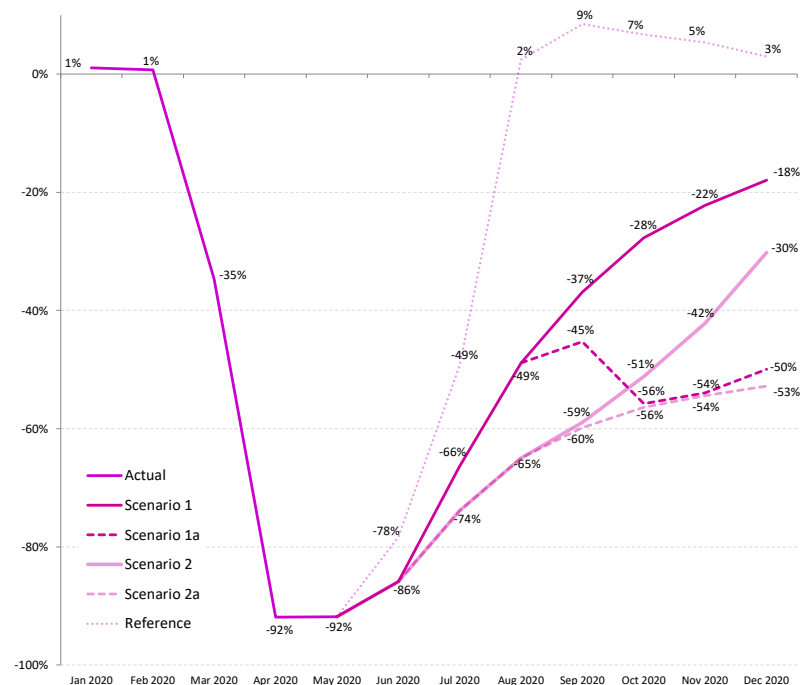


Scenarios 1 & 2 (Latina America/Caribbean): Seat capacity change compared to Baseline

International (-51% to -62% from Baseline)

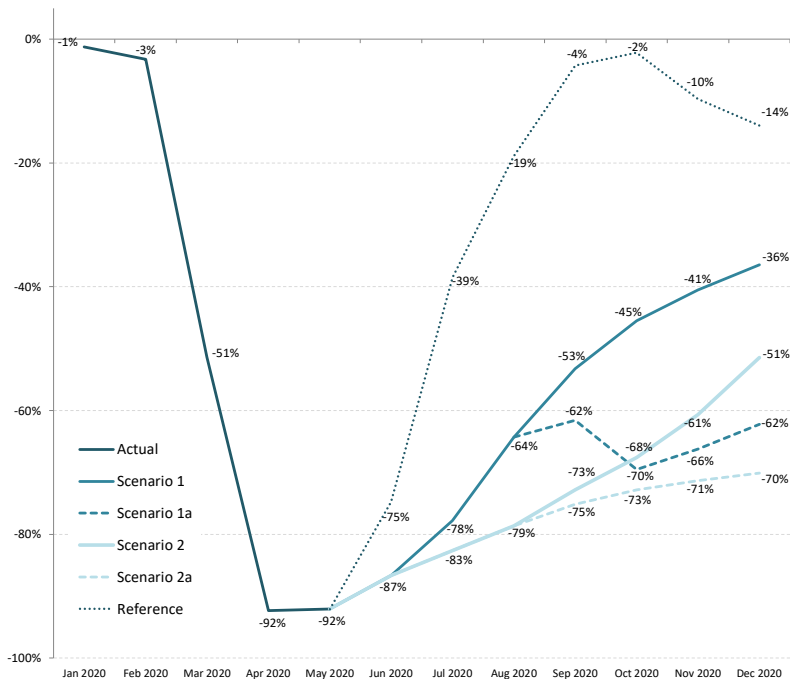


Domestic (-43% to -55% from Baseline)

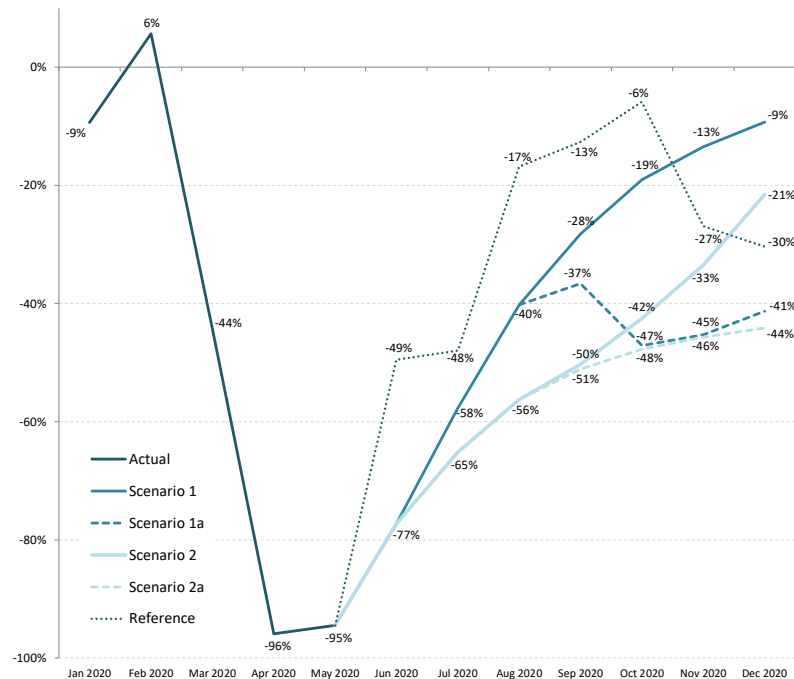


Scenarios 1 & 2 (Middle East): Seat capacity change compared to Baseline

International (-54% to -65% from Baseline)

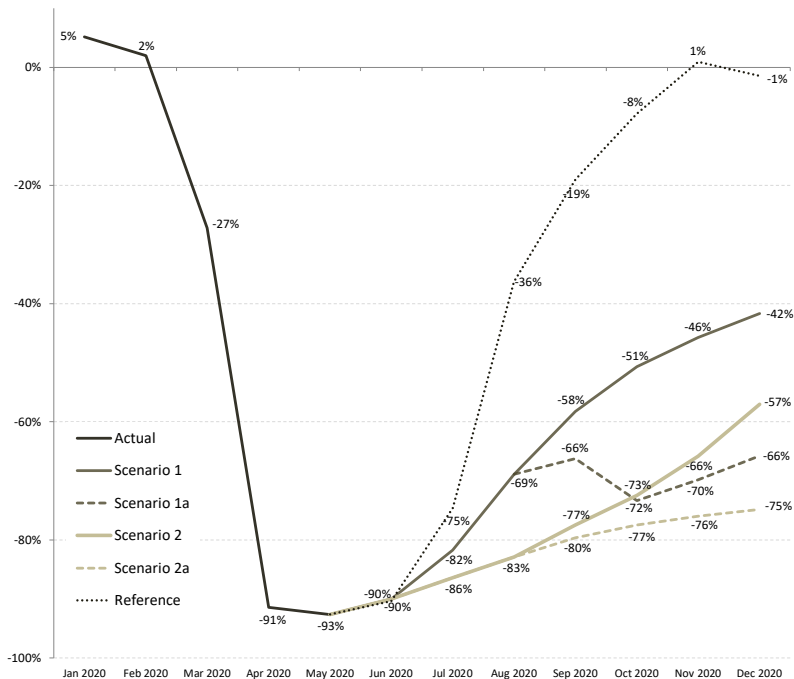


Domestic (-42% to -53% from Baseline)

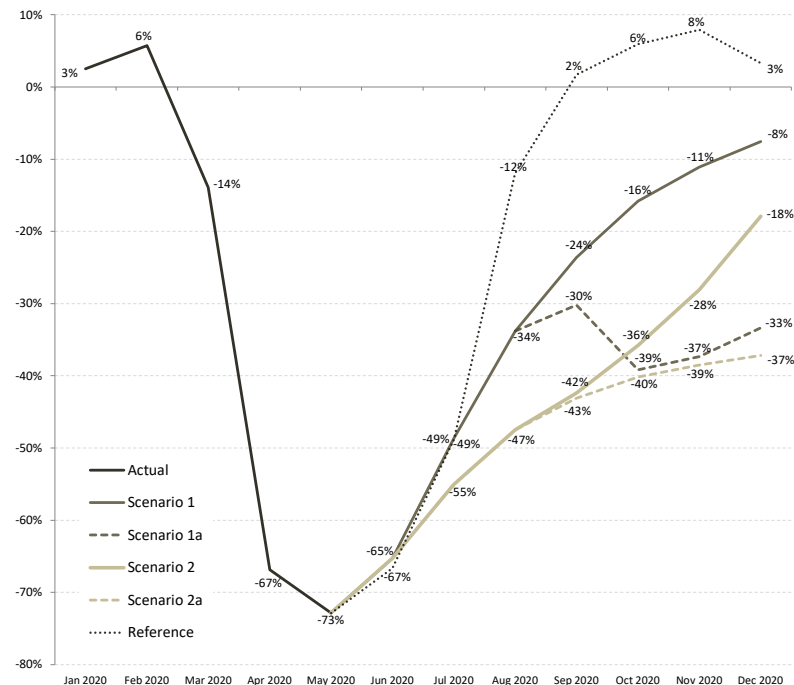


Scenarios 1 & 2 (North America): Seat capacity change compared to Baseline

International (-55% to -66% from Baseline)



Domestic (-30% to -40% from Baseline)



Impact on Passenger Numbers (Demand)

- Given the originally-planned seat capacity, passenger demand could have increased **151 million** for 2020 (international **57 million** and domestic **95 million**), compared to 2019.
- According to the latest estimates, passenger demand could instead drop from the above Baseline by **2,344 to 2,978 million** (international by **1,196 to 1,456 million** and domestic by **1,148 to 1,522 million**).
- This demand level would be **2,193 to 2,827 million** (international by **1,140 to 1,399 million** and domestic by **1,053 to 1,427 million**) below the 2019 level.
- The most substantial demand reduction (in total number) is expected to be in Asia/Pacific, followed by Europe, hitting its summer travel peak season.

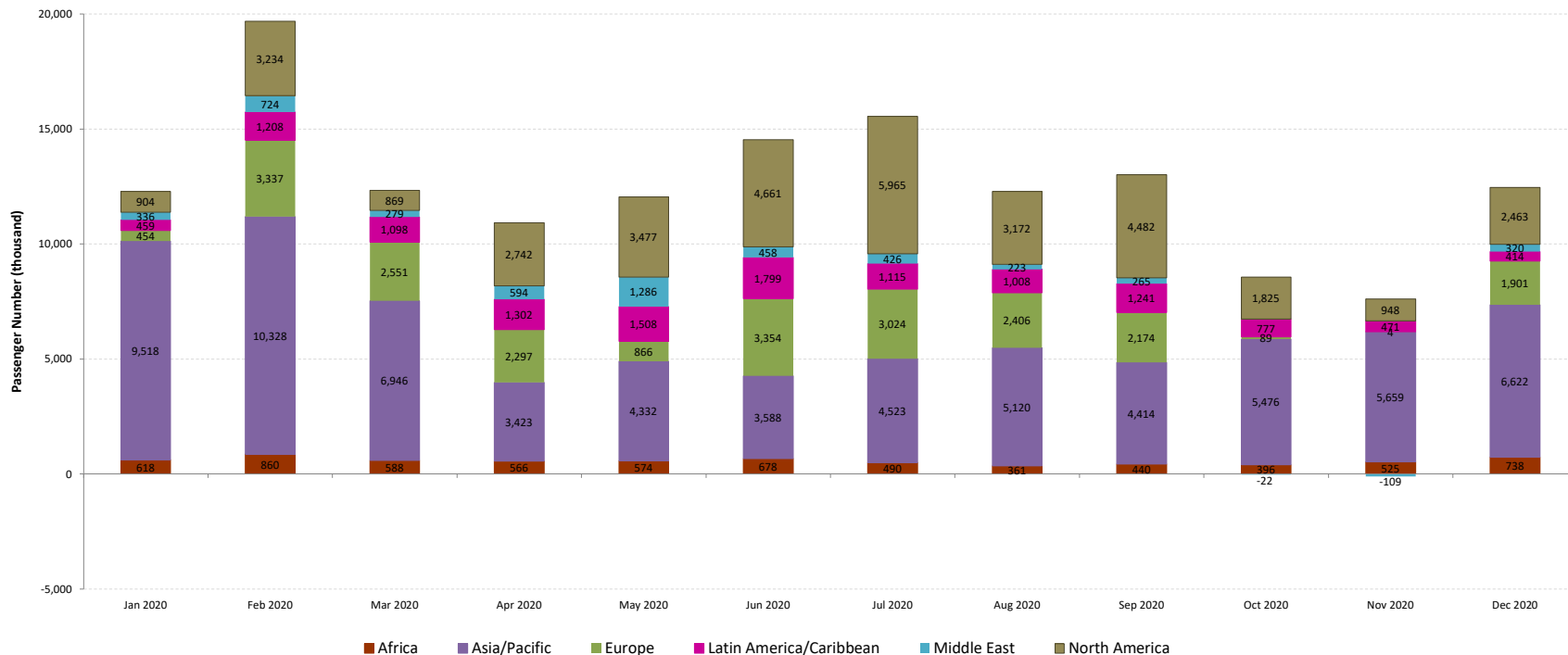


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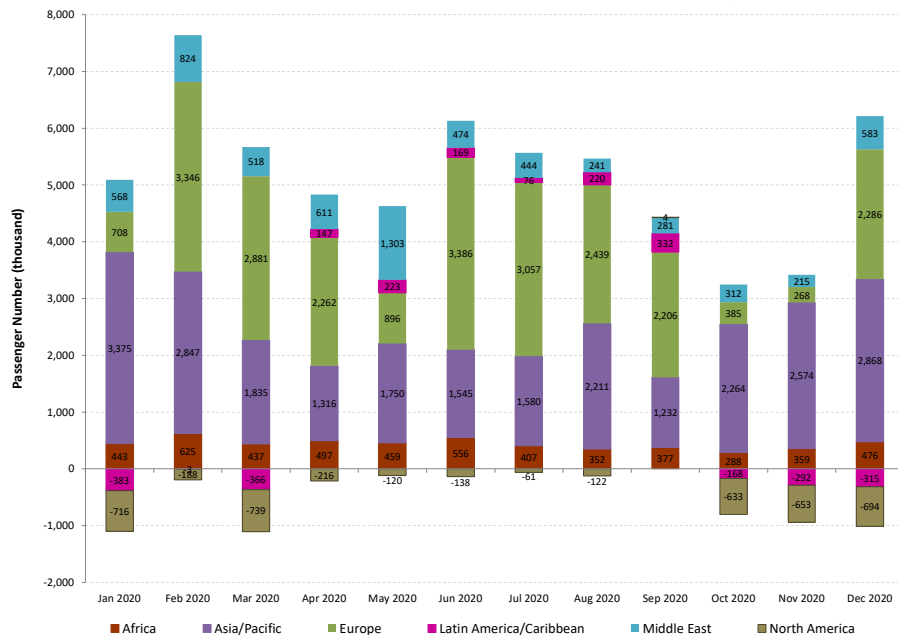
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Baseline passenger numbers compared to 2019

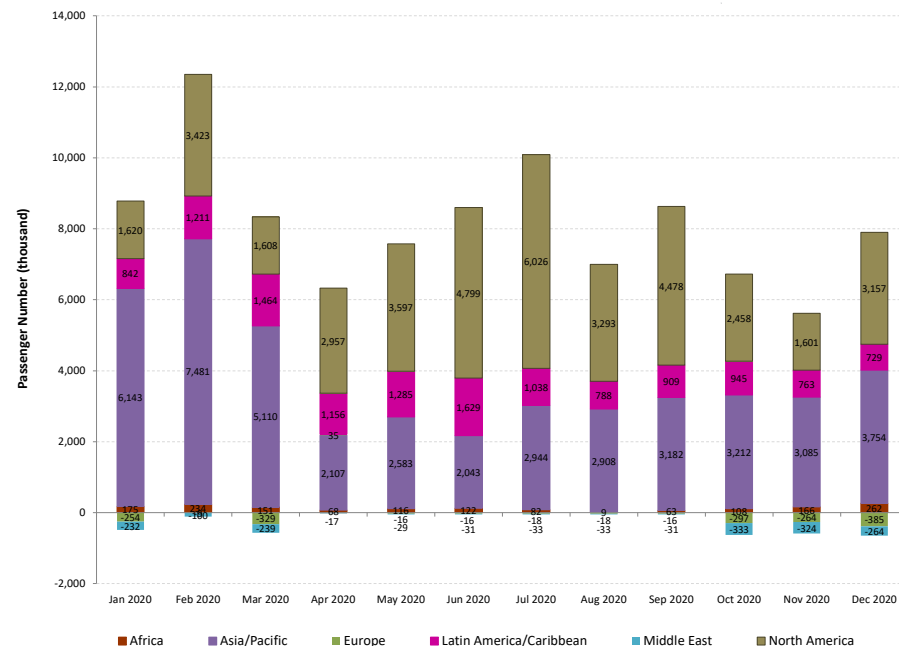
International + Domestic (+151 million)



International (+57 million)



Domestic (+95 million)



Note: Number of international passengers departing from each country and territory, which are aggregated at the regional level to avoid double counting



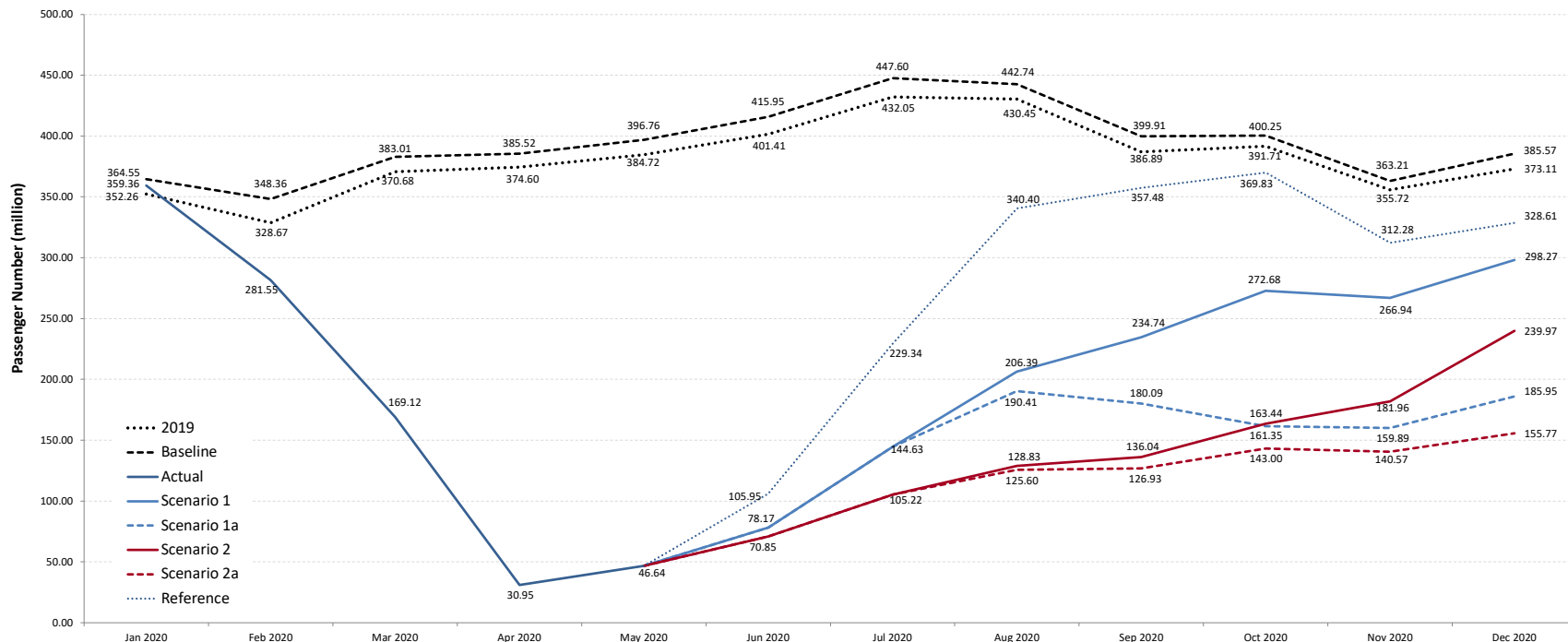
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Scenarios 1 & 2 (World total): Passenger numbers compared to Baseline & 2019

International + Domestic

(-2,344 to -2,978 million from Baseline and -2,193 to -2,827 million from 2019)





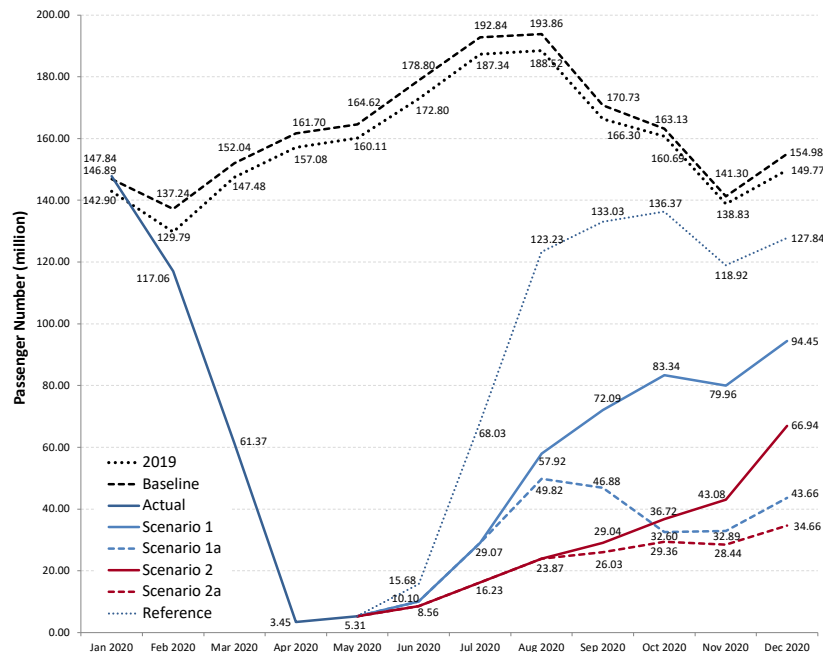
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Scenarios 1 & 2 (World total): Passenger numbers compared to Baseline & 2019

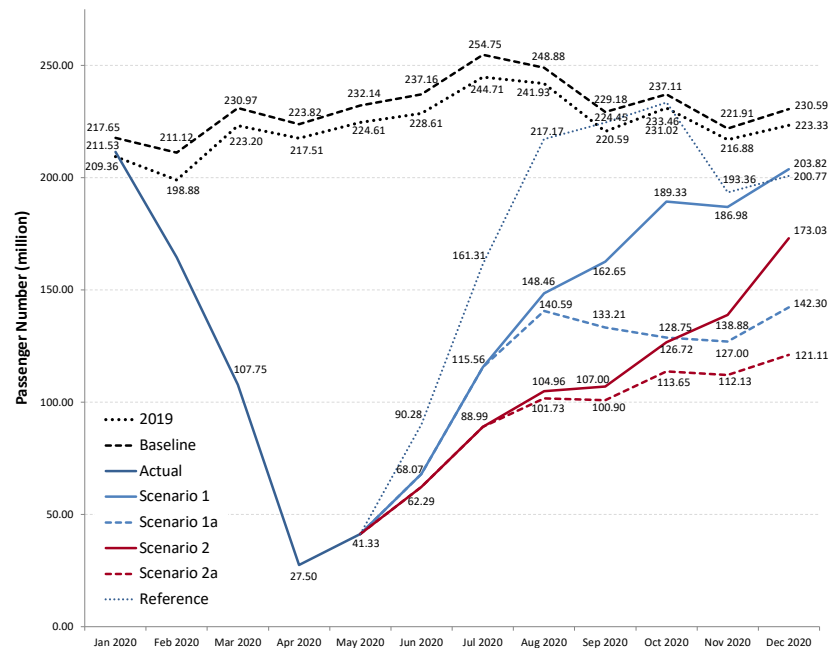
International

(-1,196 to -1,456 million from Baseline and -1,140 to -1,399 million from 2019)



Domestic

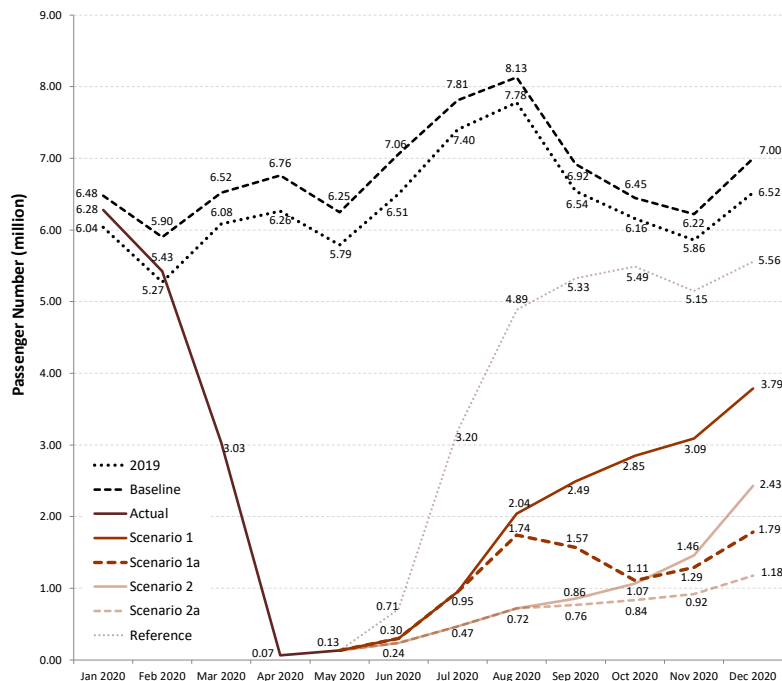
(-1,148 to -1,522 million from Baseline and -1,053 to -1,427 million from 2019)



Scenarios 1 & 2 (Africa): Passenger numbers compared to Baseline & 2019

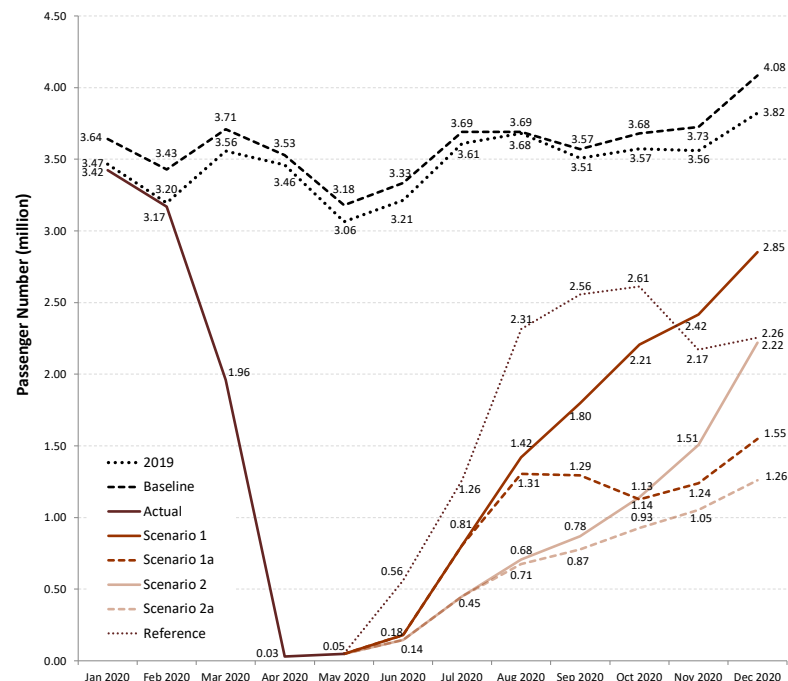
International

(-51 to -61 million from Baseline and -46 to -56 million from 2019)



Domestic

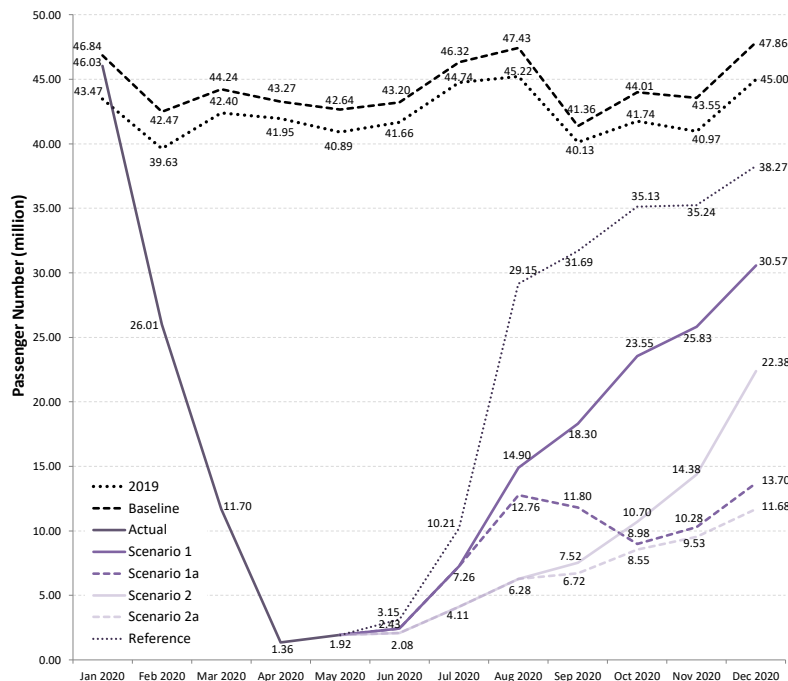
(-23 to -29 million from Baseline and -21 to -28 million from 2019)



Scenarios 1 & 2 (Asia/Pacific): Passenger numbers compared to Baseline & 2019

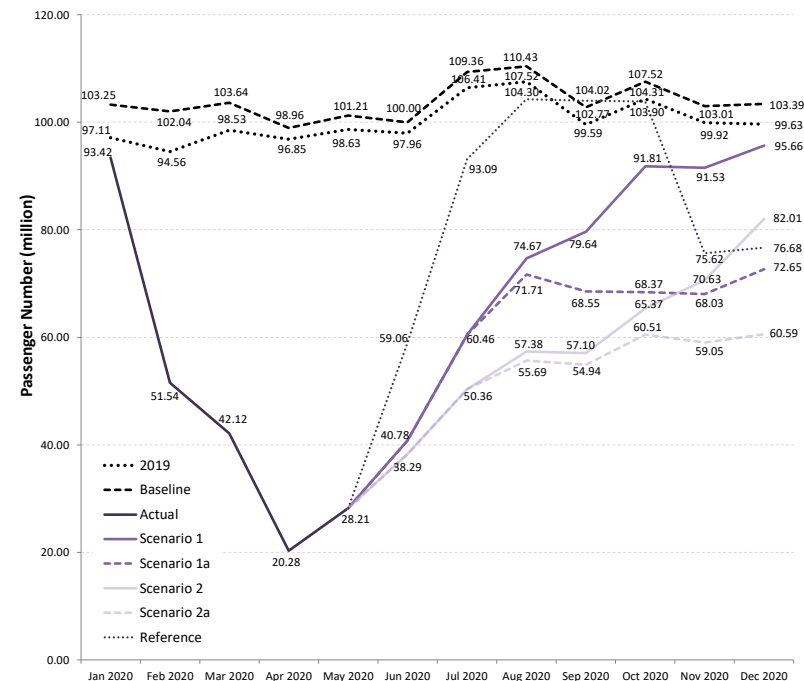
International

(-323 to -397 million from Baseline and -298 to -372 million from 2019)



Domestic

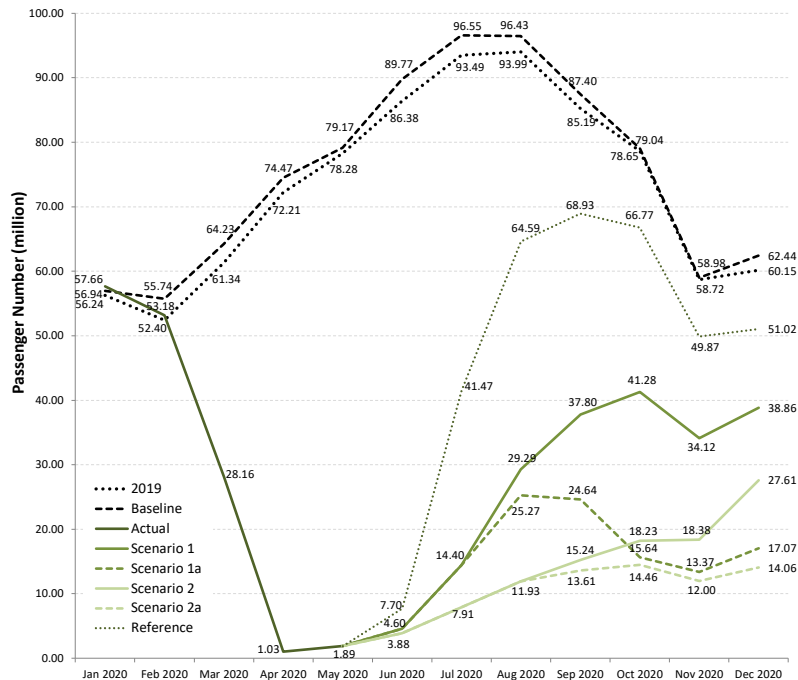
(-475 to -631 million from Baseline and -431 to -586 million from 2019)



Scenarios 1 & 2 (Europe): Passenger numbers compared to Baseline & 2019

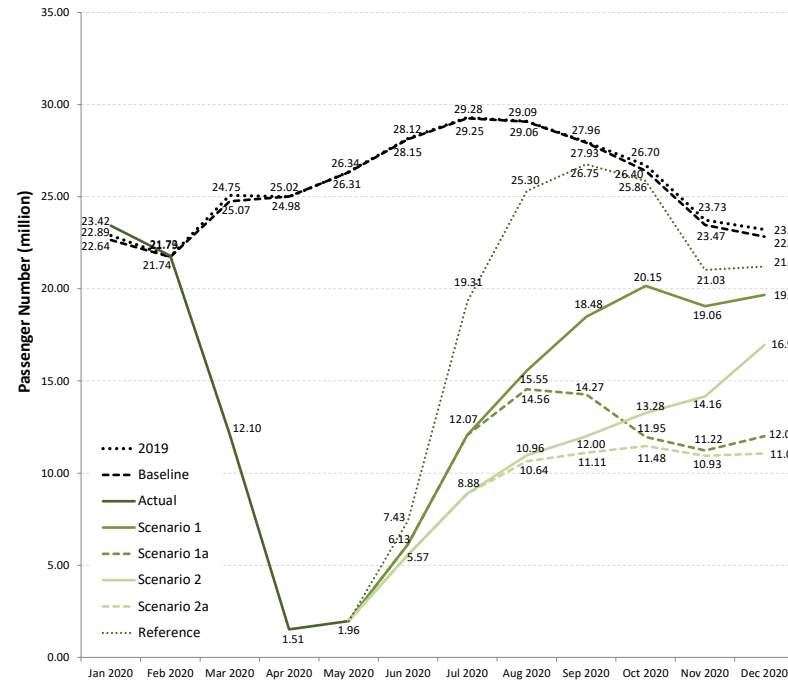
International

(-559 to -681 million from Baseline and -535 to -657 million from 2019)



Domestic

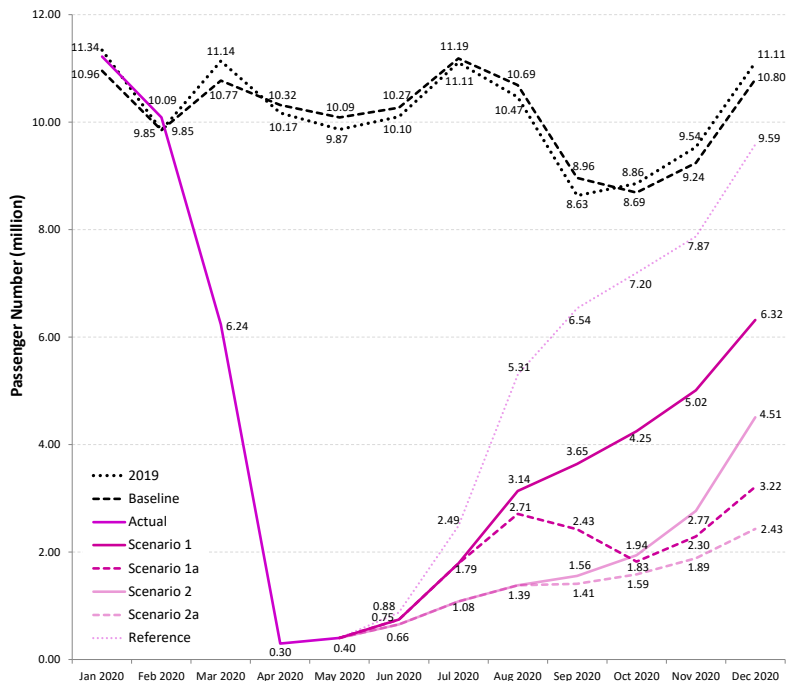
(-136 to -177 million from Baseline and -137 to -179 million from 2019)



Scenarios 1 & 2 (Latina America/Caribbean): Passenger numbers compared to Baseline & 2019

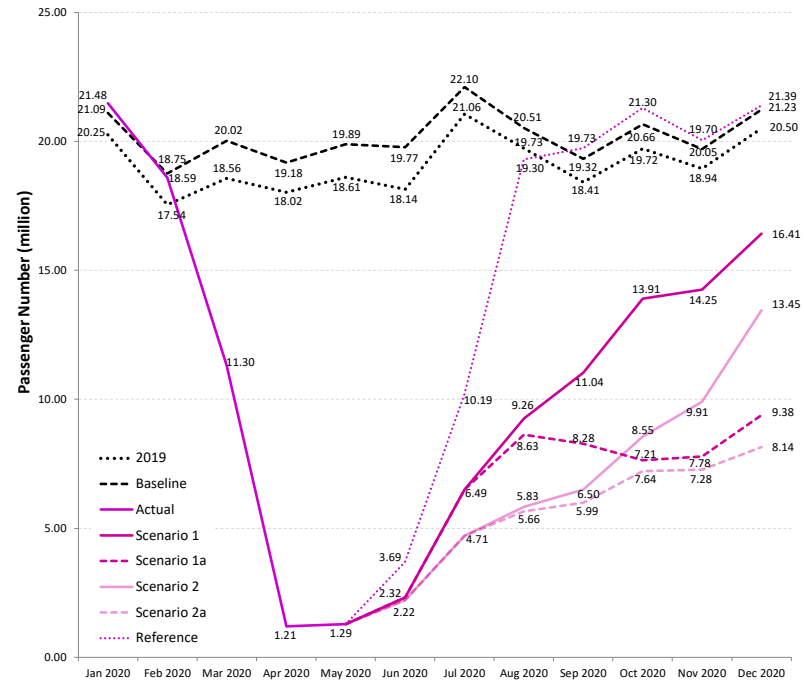
International

(-69 to -83 million from Baseline and -69 to -83 million from 2019)



Domestic

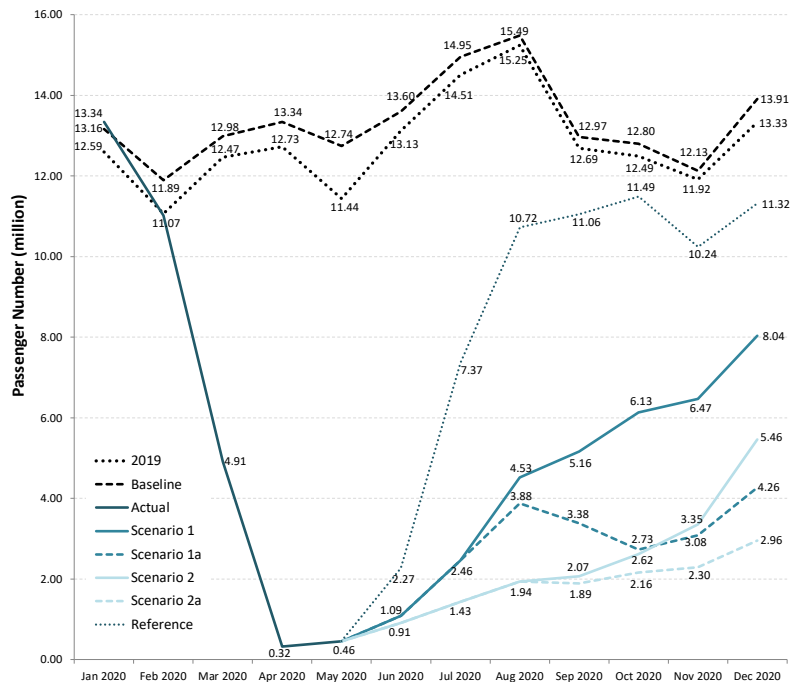
(-115 to -147 million from Baseline and -102 to -134 million from 2019)



Scenarios 1 & 2 (Middle East): Passenger numbers compared to Baseline & 2019

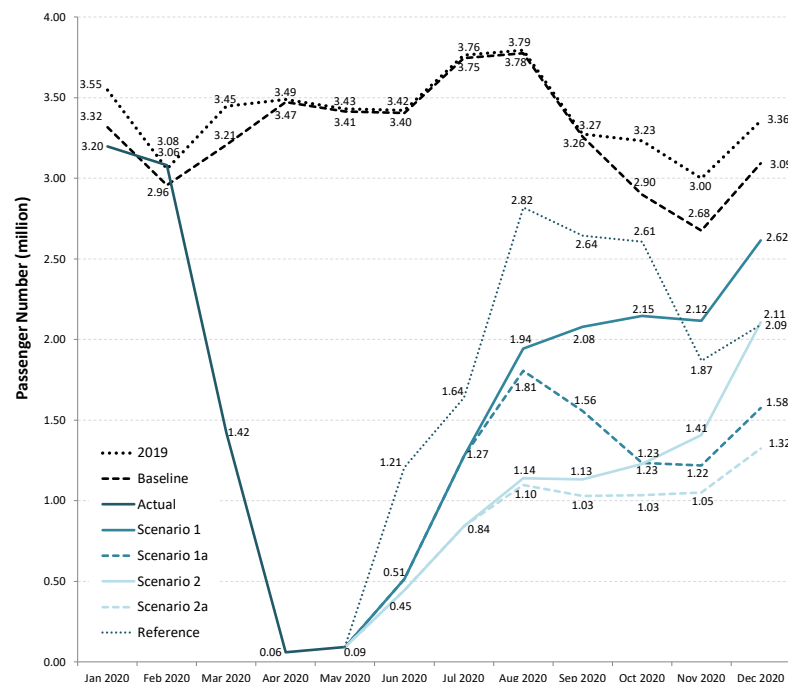
International

(-96 to -116 million from Baseline and -90 to -110 million from 2019)



Domestic

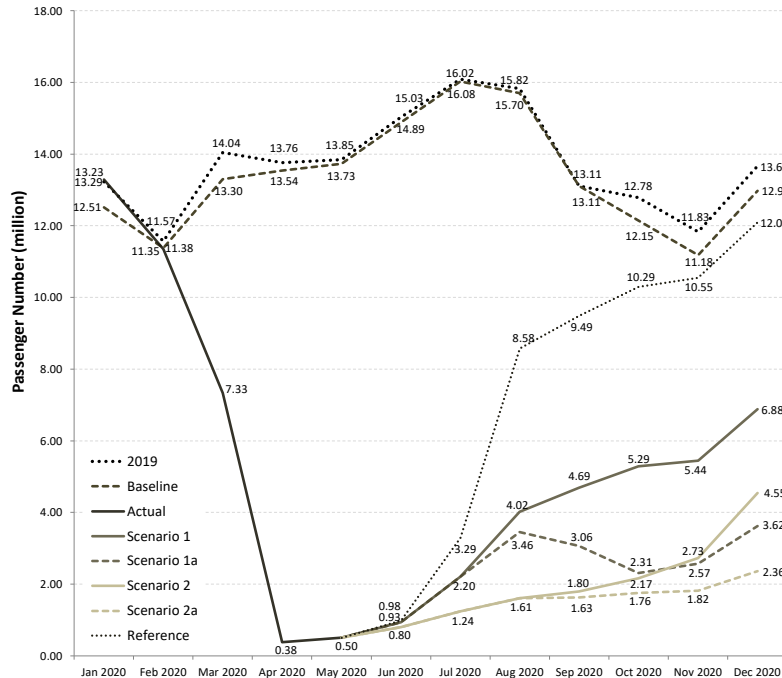
(-19 to -25 million from Baseline and -20 to -26 million from 2019)



Scenarios 1 & 2 (North America): Passenger numbers compared to Baseline & 2019

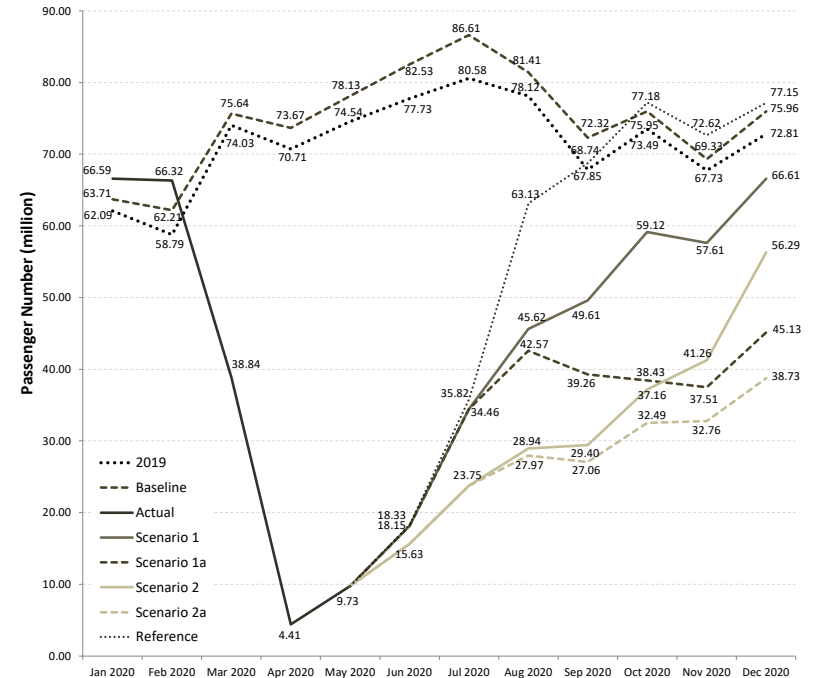
International

(-98 to -116 million from Baseline and -102 to -121 million from 2019)



Domestic

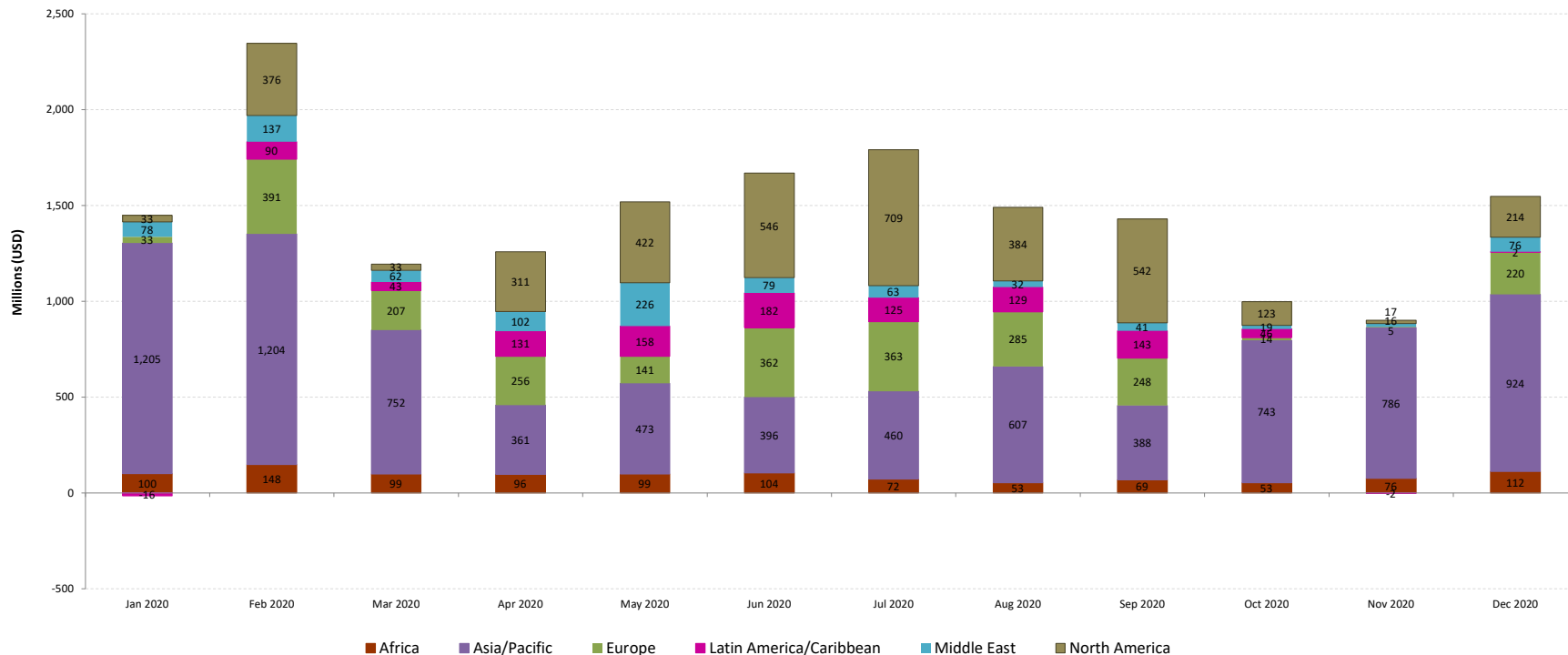
(-380 to -513 million from Baseline and -341 to -474 million from 2019)



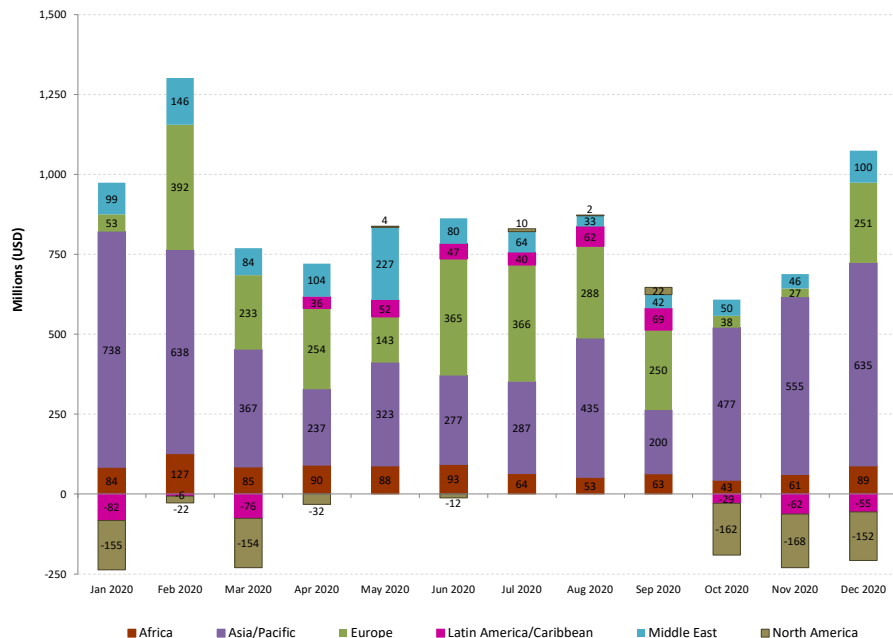
Impact on Gross Passenger Operating Revenues of Airlines

- With the originally-planned seat capacity and trend line growth of demand, airlines' gross passenger operating revenues could have increased **USD 18 billion** for 2020 (**USD 9 billion** from international and **USD 9 billion** from domestic), compared to 2019.
- According to the latest estimates, airlines' revenues could instead plummet **USD 308 to 391 billion** (international **USD 208 to 256 billion** and domestic **USD 101 to 135 billion**) below the Baseline, or **USD 291 to 373 billion** (international **USD 199 to 247 billion** and domestic **USD 92 to 127 billion**) below the 2019 level.
- Approximately 60% of revenue loss would be recorded by Asia/Pacific and Europe.

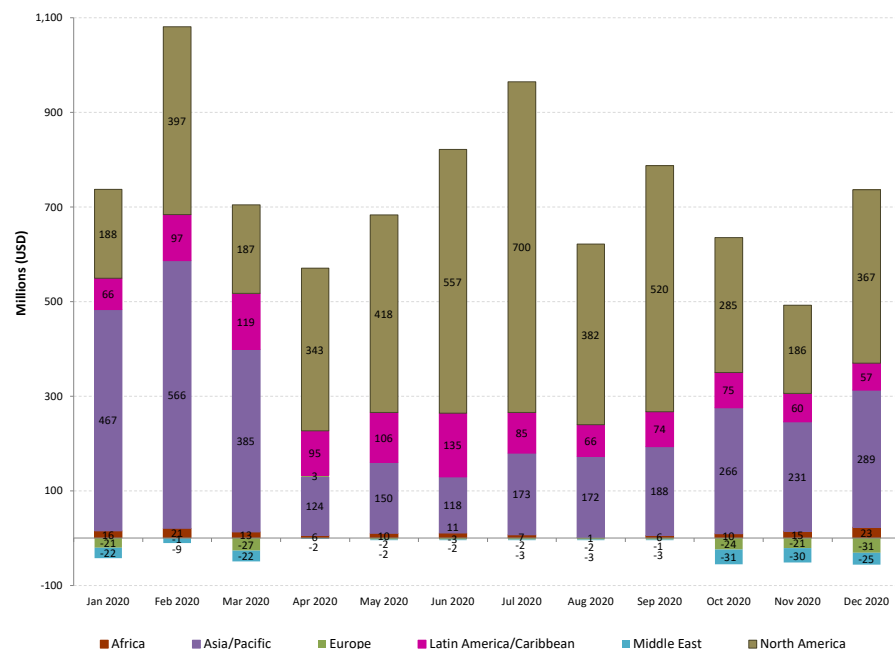
International + Domestic (+18 billion USD)



International (+9 billion USD)



Domestic (+9 billion USD)



Note: The international revenues are gross passenger operating revenues of all airlines serving international routes from each country and territory, which are aggregated at the regional level (revenues of international routes to each country and territory were removed to avoid double counting).



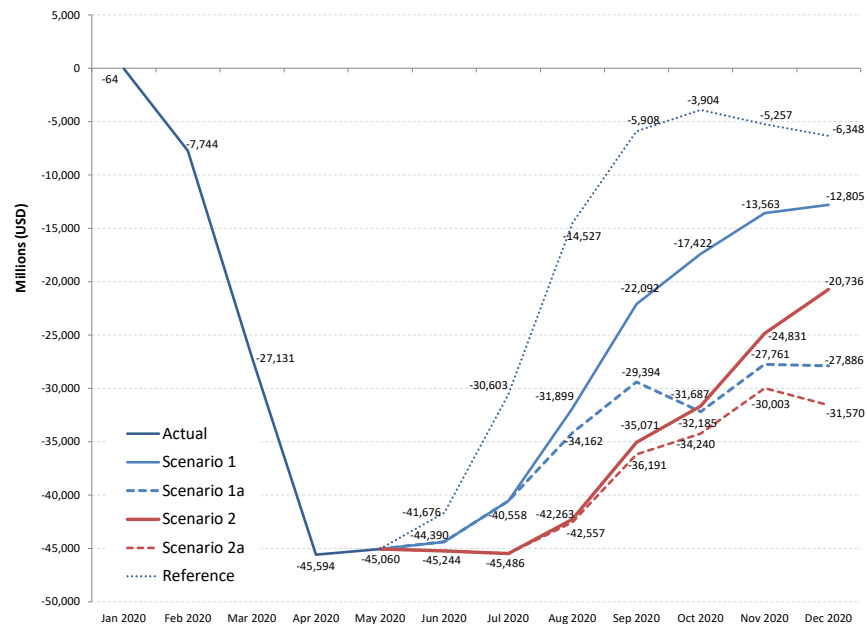
ICAO

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Scenarios 1 & 2 (World total): Passenger revenues compared to Baseline & 2019

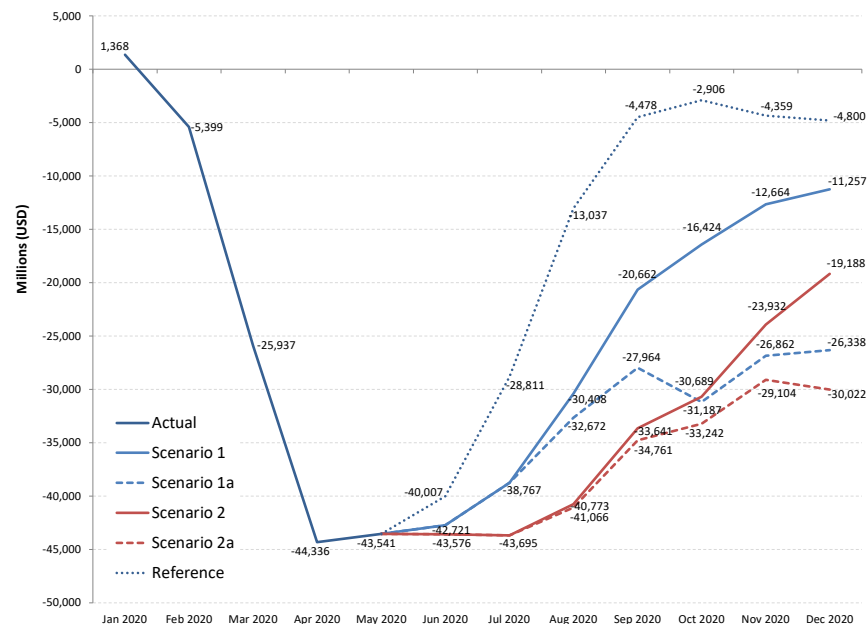
International + Domestic

(-308 to -391 billion USD from Baseline)



International + Domestic

(-291 to -373 billion USD from 2019)





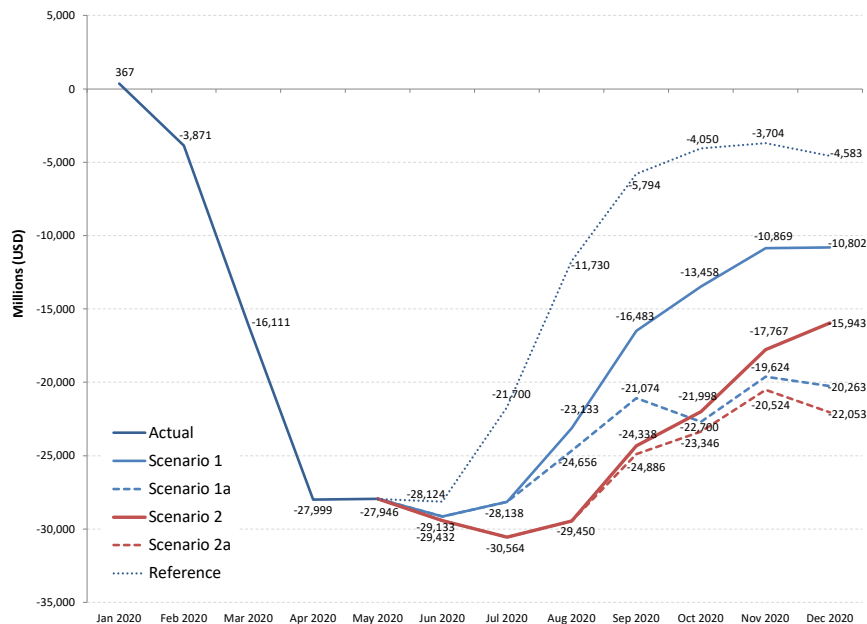
ICAO

UNITING AVIATION

Scenarios 1 & 2 (World total): Passenger revenues compared to Baseline

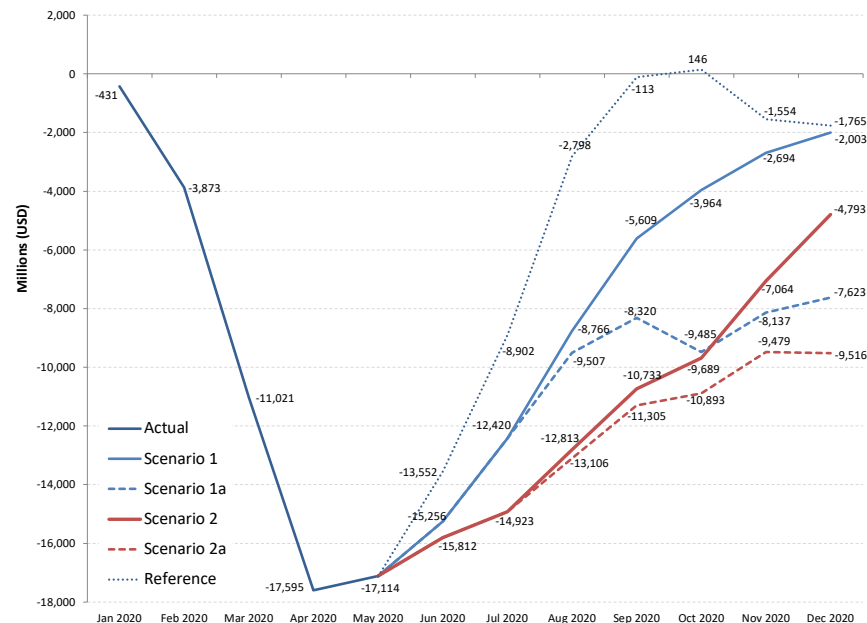
International

(-208 to -256 billion USD from Baseline)



Domestic

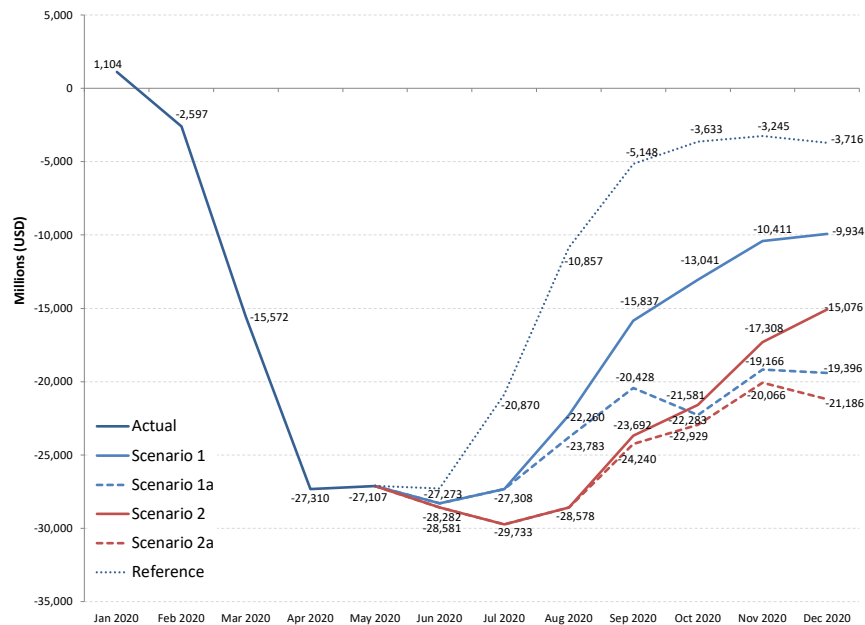
(-101 to -135 billion USD from Baseline)



Scenarios 1 & 2 (World total): Passenger revenues compared to 2019

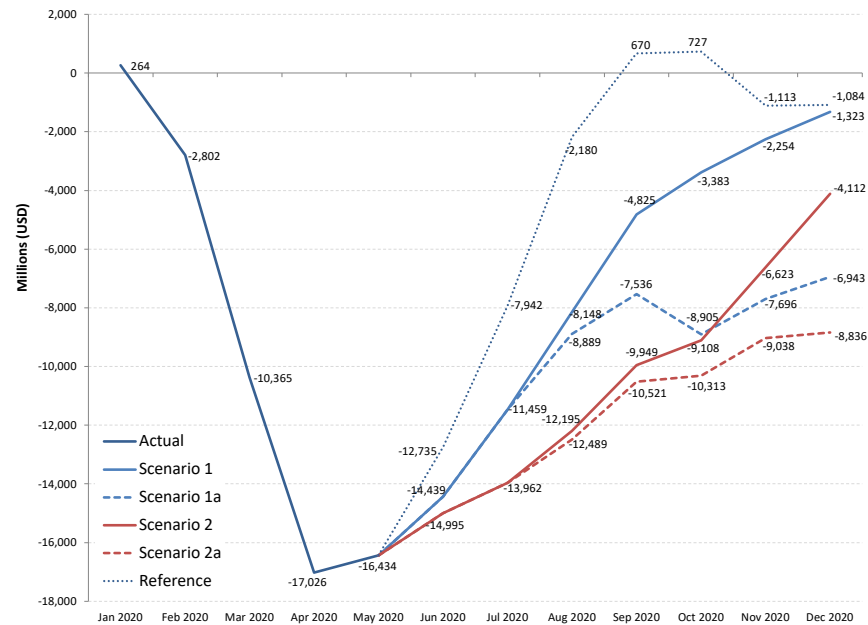
International

(-199 to -247 billion USD from 2019)



Domestic

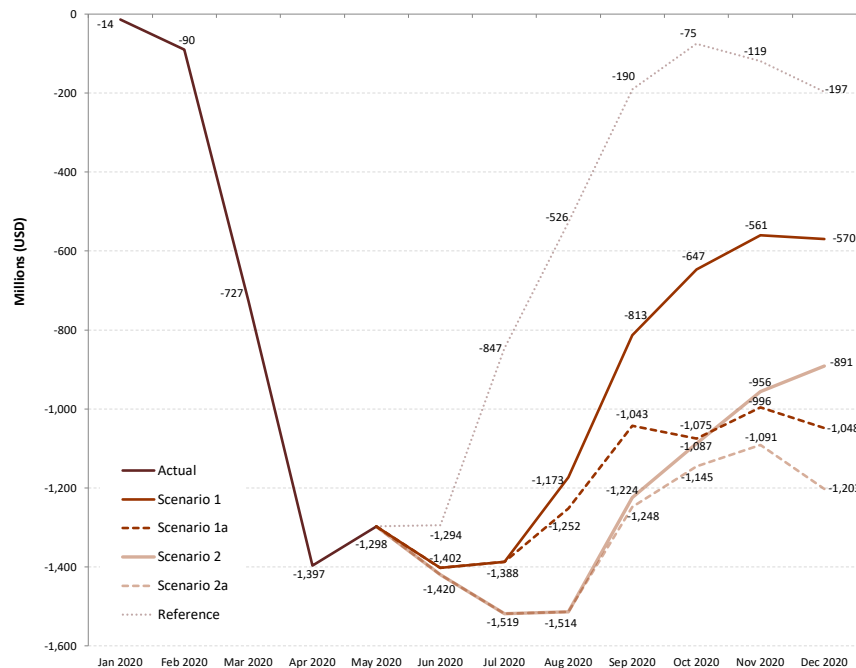
(-92 to -127 billion USD from 2019)



Scenarios 1 & 2 (Africa): Passenger revenues compared to Baseline

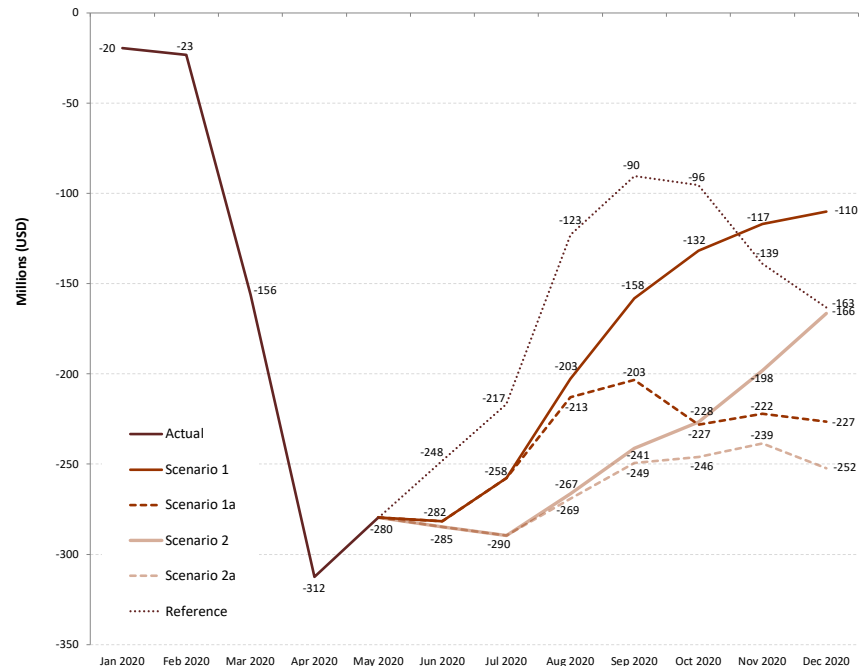
International

(-10 to -13 billion USD from Baseline)



Domestic

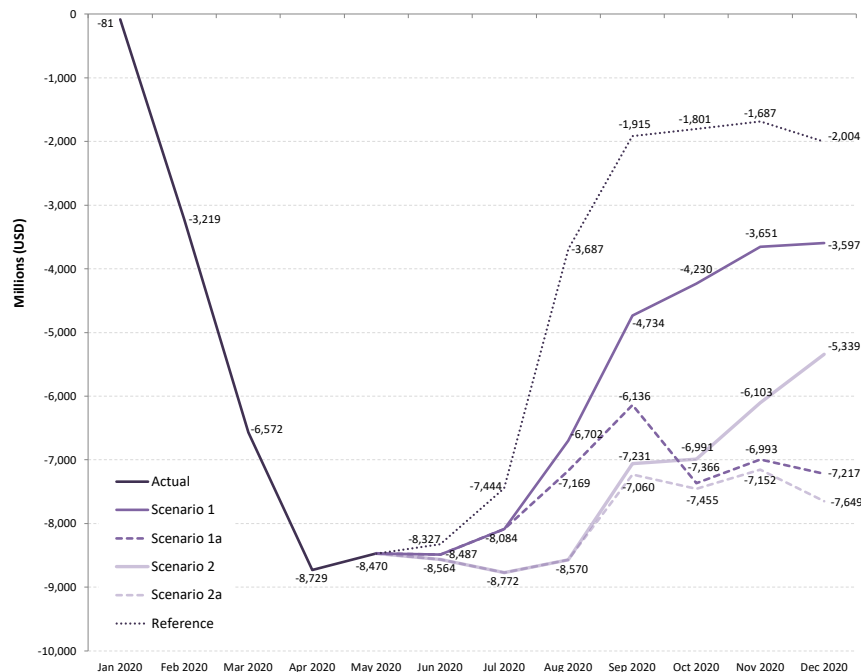
(-2 to -3 billion USD from Baseline)



Scenarios 1 & 2 (Asia/Pacific): Passenger revenues compared to Baseline

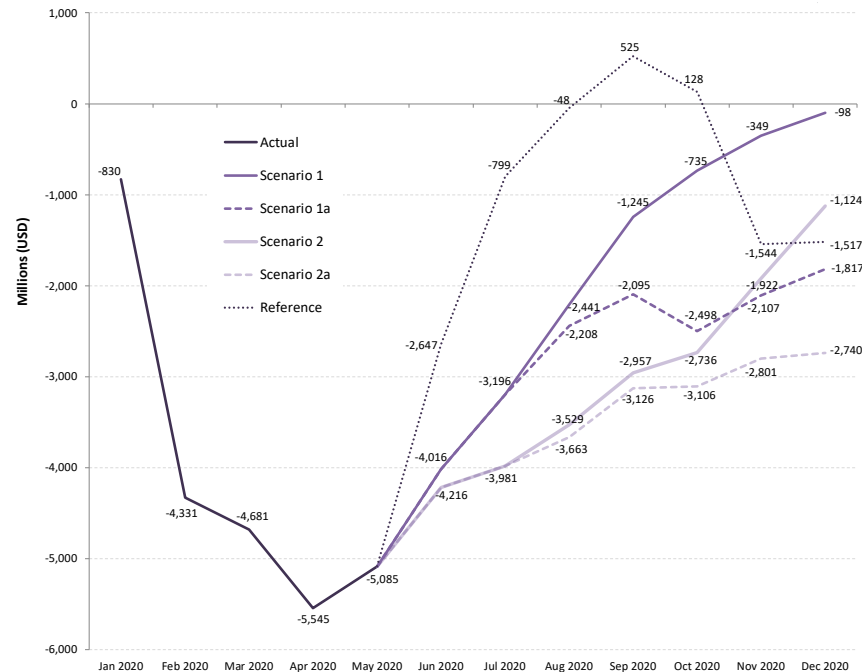
International

(-67 to -82 billion USD from Baseline)



Domestic

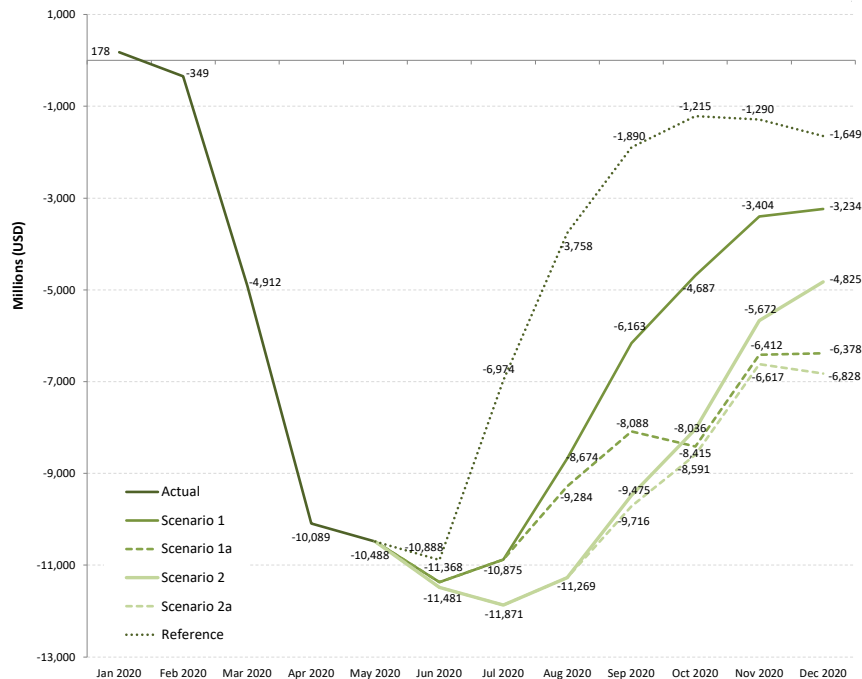
(-32 to -44 billion USD from Baseline)



Scenarios 1 & 2 (Europe): Passenger revenues compared to Baseline

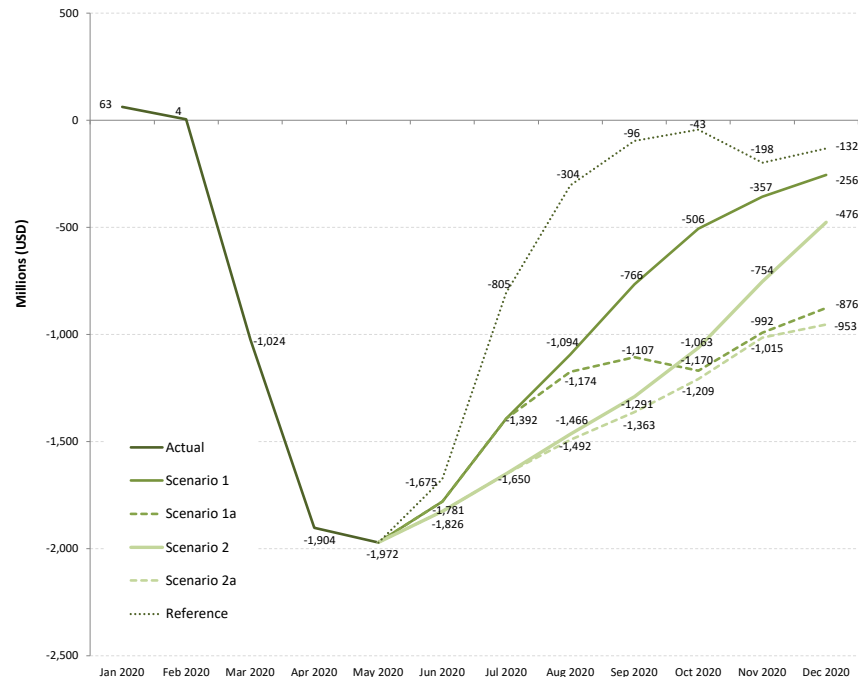
International

(-74 to -92 billion USD from Baseline)



Domestic

(-11 to -14 billion USD from Baseline)





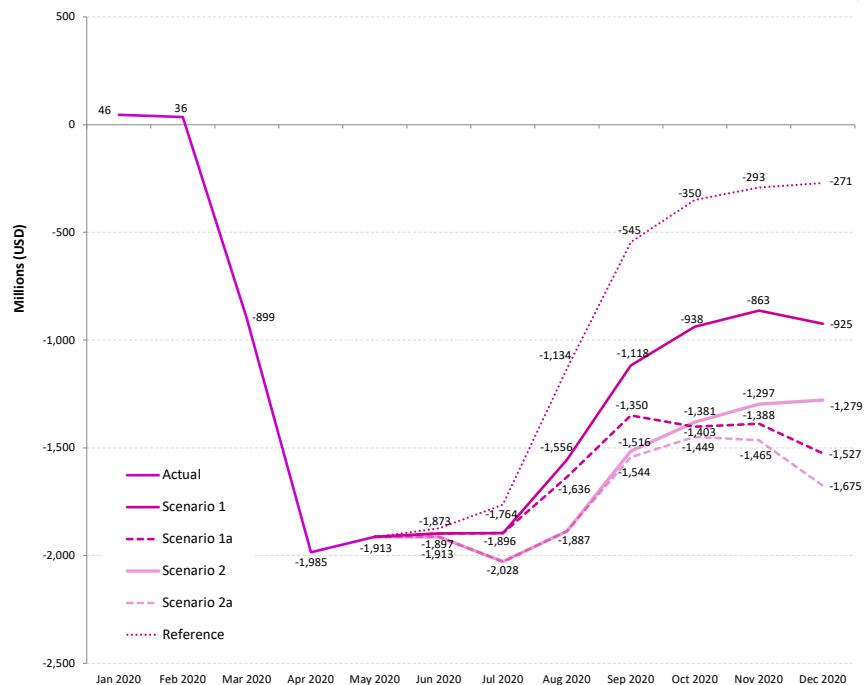
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Scenarios 1 & 2 (Latin America/Caribbean): Passenger revenues compared to Baseline

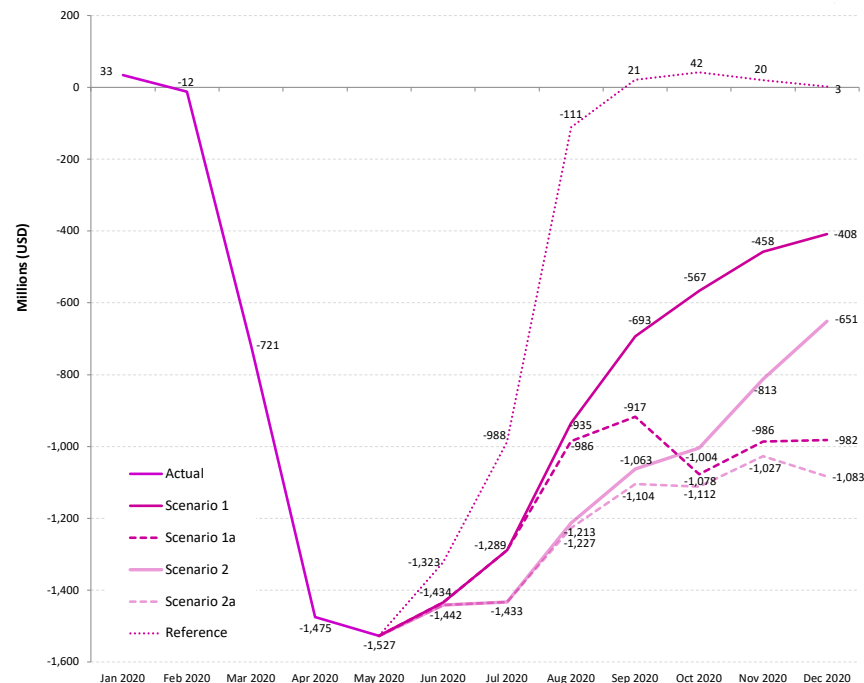
International

(-14 to -17 billion USD from Baseline)



Domestic

(-9 to -12 billion USD from Baseline)





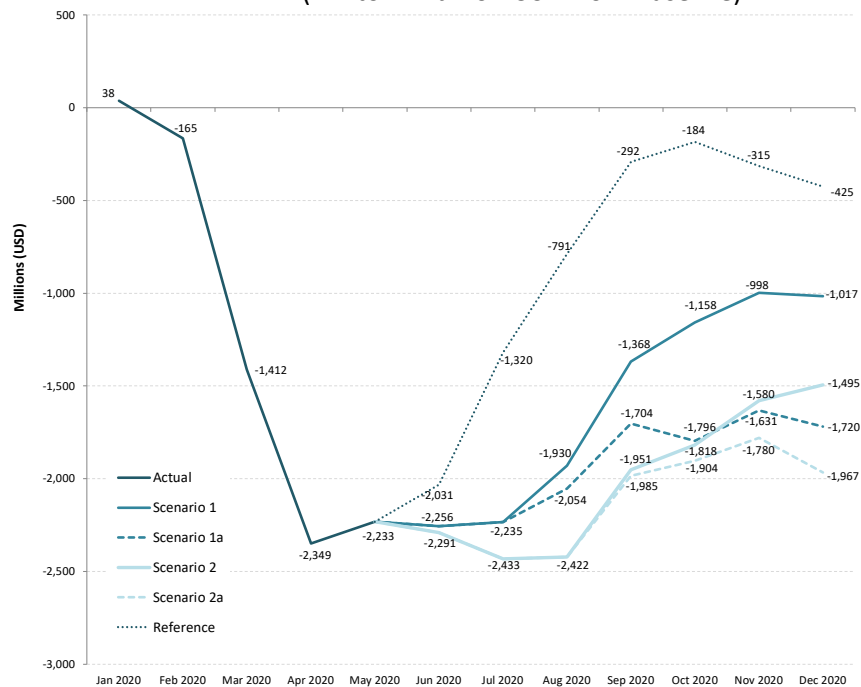
ICAO

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Scenarios 1 & 2 (Middle East): Passenger revenues compared to Baseline

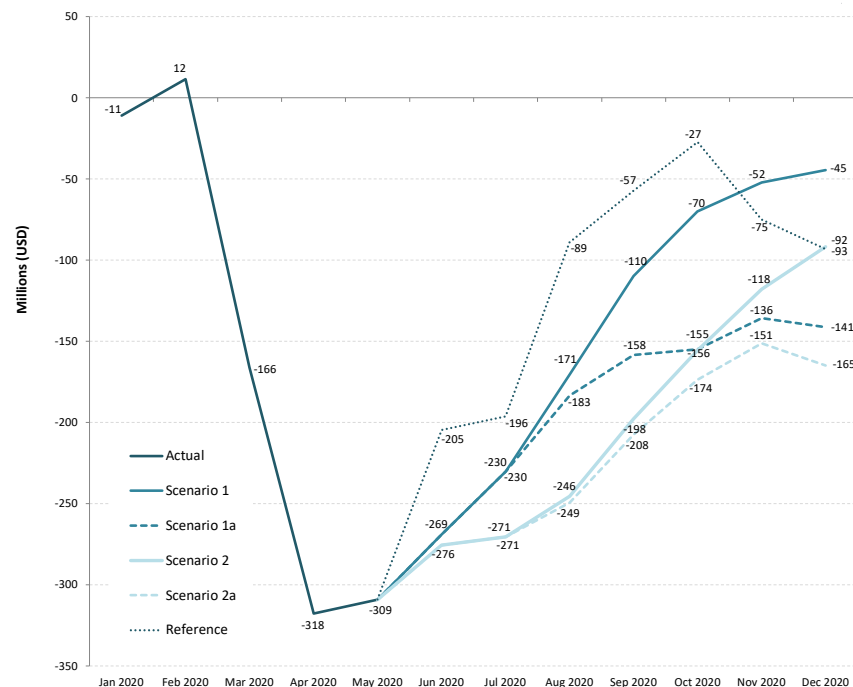
International

(-17 to -21 billion USD from Baseline)



Domestic

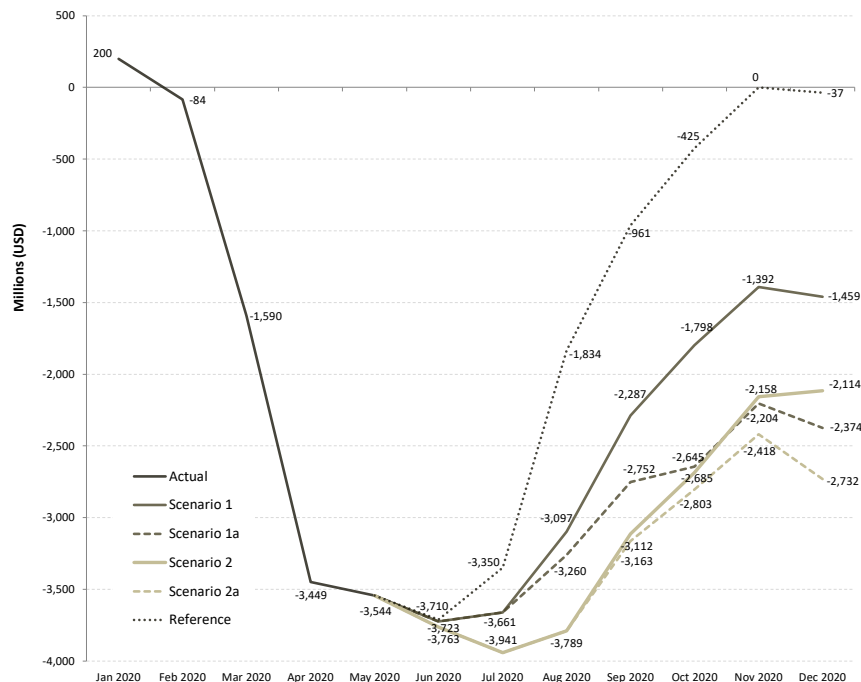
(-2 to -2 billion USD from Baseline)



Scenarios 1 & 2 (North America): Passenger revenues compared to Baseline

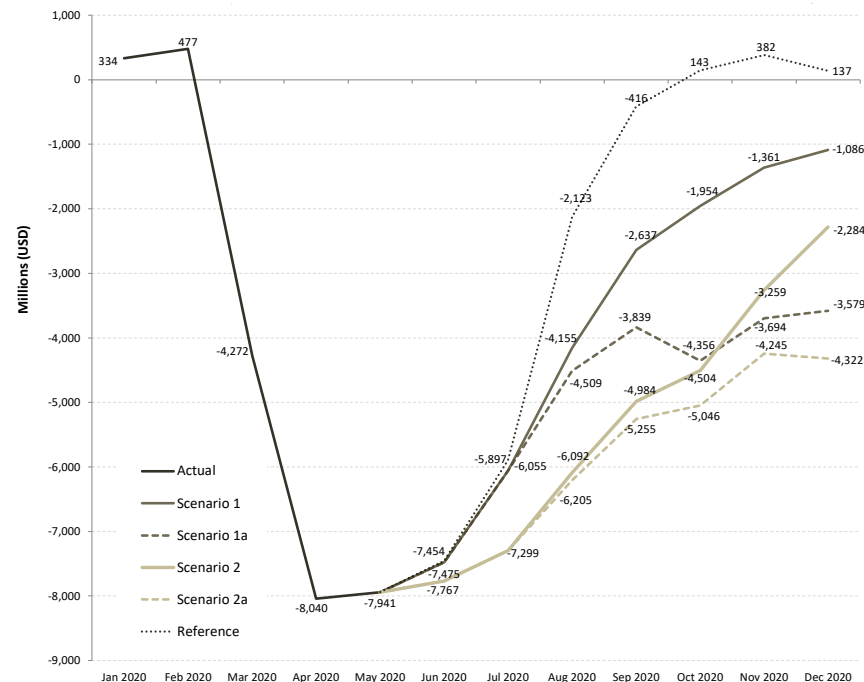
International

(-26 to -31 billion USD from Baseline)



Domestic

(-44 to -60 billion USD from Baseline)





Appendix A: Overview of Early Impact



COVID-19 outbreak has impacted air traffic of China starting from late January 2020



Note: The above includes a) international from mainland China, Hong Kong SAR of China, Macao SAR of China, Taiwan, Province of China; b) domestic within mainland China, and c) regional between mainland China and Hong Kong SAR, Macao SAR and Taiwan Province

A surge of COVID-19 confirmed cases occurred in several States by late February 2020

January 2020 International passenger seat capacity

Country/Territory	Capacity change from originally-planned	
Russian Federation	-89,778	-1%
Italy	-65,971	-1%
Turkey	-53,262	-1%
China	-45,484	0%
Morocco	-42,684	-2%
United Arab Emirates	-31,464	0%
Iraq	-29,326	-3%
Albania	-22,080	-7%
United Kingdom	-21,888	0%
South Africa	-21,476	-1%
Iran Islamic Republic of	-20,891	-2%
France	-19,537	0%
Poland	-18,154	0%
Romania	-17,493	-1%
Japan	-16,449	0%
United States	-13,067	0%
Indonesia	-12,114	0%
Bulgaria	-10,540	-1%
India	-10,342	0%
Cambodia	-10,158	-1%
Bahamas	-9,588	-2%
Denmark	-8,942	0%
Viet Nam	-8,489	0%
Malta	-7,372	-1%
Lebanon	-7,182	-1%
Bahrain	-7,123	-1%
Uzbekistan	-6,539	-1%
Tunisia	-6,362	-1%
Switzerland	-6,235	0%
Czechia	-5,642	0%

February 2020 International passenger seat capacity

Country/Territory	Capacity change from originally-planned	
China	-10,532,219	-61%
Hong Kong SAR of China (CN)	-2,363,320	-36%
Republic of Korea	-1,717,147	-19%
Japan	-1,592,429	-15%
Thailand	-1,452,478	-15%
Taiwan, Province of China (CN)	-1,446,686	-23%
Singapore	-807,608	-12%
Viet Nam	-731,936	-16%
Macao SAR of China (CN)	-721,489	-64%
Philippines	-646,104	-18%
United States	-620,296	-3%
Malaysia	-448,172	-8%
Indonesia	-426,102	-10%
Russian Federation	-317,890	-5%
Cambodia	-307,968	-4%
Turkey	-277,868	-21%
Italy	-268,846	-3%
United Arab Emirates	-253,548	-2%
Australia	-241,284	-5%
United Kingdom	-188,864	-1%
Iran Islamic Republic of	-169,782	-18%
France	-157,998	-1%
Myanmar	-147,487	-21%
Germany	-145,561	-1%
India	-116,823	-2%
Morocco	-108,186	-5%
Qatar	-99,338	-2%
Canada	-96,231	-1%
Lao People's Democratic Republi	-71,910	-21%
Finland	-71,413	-4%

In February 2020, international passenger capacity **reduced by 10%**, mainly related to traffic from/to States experiencing an early outbreak and States deeply interconnected to China.

	State/Territory with 100 to 999 confirmed cases*
	State/Territory with 1,000 to 9,999 confirmed cases*
	State/Territory with 10,000 to 49,999 confirmed cases*
	State/Territory with 50,000 or more confirmed cases*

*: Coronavirus Disease 2019 (COVID-19) Situation Report by WHO (29 February 2020)



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COVID-19 Pandemic was declared and accelerating in March 2020

March 2020 International Passenger Capacity

Country/Territory	Capacity change from originally-planned	
China	-14,841,792	-82%
Italy	-6,860,837	-60%
Republic of Korea	-6,536,917	-70%
Japan	-5,837,894	-51%
Germany	-5,771,162	-31%
Hong Kong SAR of China (CN)	-5,352,855	-77%
United Kingdom	-4,965,296	-22%
United States	-4,950,969	-19%
Thailand	-4,587,421	-46%
Taiwan, Province of China (CN)	-4,074,431	-62%
Spain	-3,792,140	-26%
United Arab Emirates	-3,400,833	-26%
Singapore	-3,297,434	-45%
France	-3,216,482	-25%
Turkey	-2,879,271	-35%
Viet Nam	-2,599,336	-55%
Malaysia	-2,500,355	-42%
India	-2,077,578	-29%
Saudi Arabia	-1,747,385	-31%
Switzerland	-1,691,017	-28%

Country/Territory	Capacity change from originally-planned	
Philippines	-1,669,456	-45%
Indonesia	-1,466,518	-34%
Netherlands	-1,292,472	-17%
Canada	-1,218,383	-16%
Austria	-1,200,864	-30%
Russian Federation	-1,177,704	-19%
Australia	-1,119,345	-25%
Portugal	-1,118,941	-26%
Belgium	-1,060,572	-31%
Qatar	-1,041,439	-21%
Denmark	-980,211	-28%
Israel	-972,061	-44%
Poland	-967,520	-24%
Macao SAR of China (CN)	-954,453	-80%
Egypt	-818,043	-28%
Morocco	-762,145	-31%
Sweden	-761,425	-24%
Ireland	-733,678	-21%
Greece	-635,039	-34%
Czechia	-610,048	-37%

In March 2020, global international passenger capacity **reduced by 48%**, with significant reduction not only in States experiencing an early outbreak but also worldwide.

	State/Territory with 100 to 999 confirmed cases*
	State/Territory with 1,000 to 9,999 confirmed cases*
	State/Territory with 10,000 to 49,999 confirmed cases*
	State/Territory with 50,000 or more confirmed cases*

*: Coronavirus Disease 2019 (COVID-19) Situation Report by WHO (31 March 2020)

The world reached 3 million confirmed COVID-19 cases in April 2020

April 2020 International Passenger Capacity

Country/Territory	Capacity change from originally-planned
United States	-22,976,621 -88%
United Kingdom	-22,345,210 -90%
Germany	-19,374,444 -92%
Spain	-18,041,897 -94%
China	-16,683,876 -95%
France	-13,480,021 -91%
Italy	-12,464,502 -94%
United Arab Emirates	-11,009,896 -89%
Japan	-9,501,833 -88%
Turkey	-8,798,224 -94%
Thailand	-8,441,105 -94%
Republic of Korea	-7,960,525 -86%
Hong Kong SAR of China (CN)	-7,122,206 -93%
Netherlands	-6,960,693 -89%
Singapore	-6,596,279 -93%
Canada	-6,288,656 -90%
India	-6,286,458 -89%
Switzerland	-5,990,424 -93%
Russian Federation	-5,747,918 -87%
Taiwan, Province of China (CN)	-5,400,277 -85%

Country/Territory	Capacity change from originally-planned
Malaysia	-4,959,606 -85%
Portugal	-4,913,803 -95%
Saudi Arabia	-4,193,572 -77%
Australia	-4,115,805 -92%
Mexico	-4,104,882 -78%
Austria	-3,812,866 -91%
Qatar	-3,760,492 -80%
Indonesia	-3,723,583 -87%
Viet Nam	-3,681,731 -89%
Ireland	-3,595,318 -92%
Poland	-3,449,632 -79%
Denmark	-3,417,729 -93%
Belgium	-3,323,135 -87%
Greece	-3,078,774 -94%
Philippines	-2,993,741 -86%
Sweden	-2,941,579 -89%
Norway	-2,476,519 -90%
Egypt	-2,248,437 -78%
Brazil	-2,214,850 -92%
Israel	-2,196,238 -91%

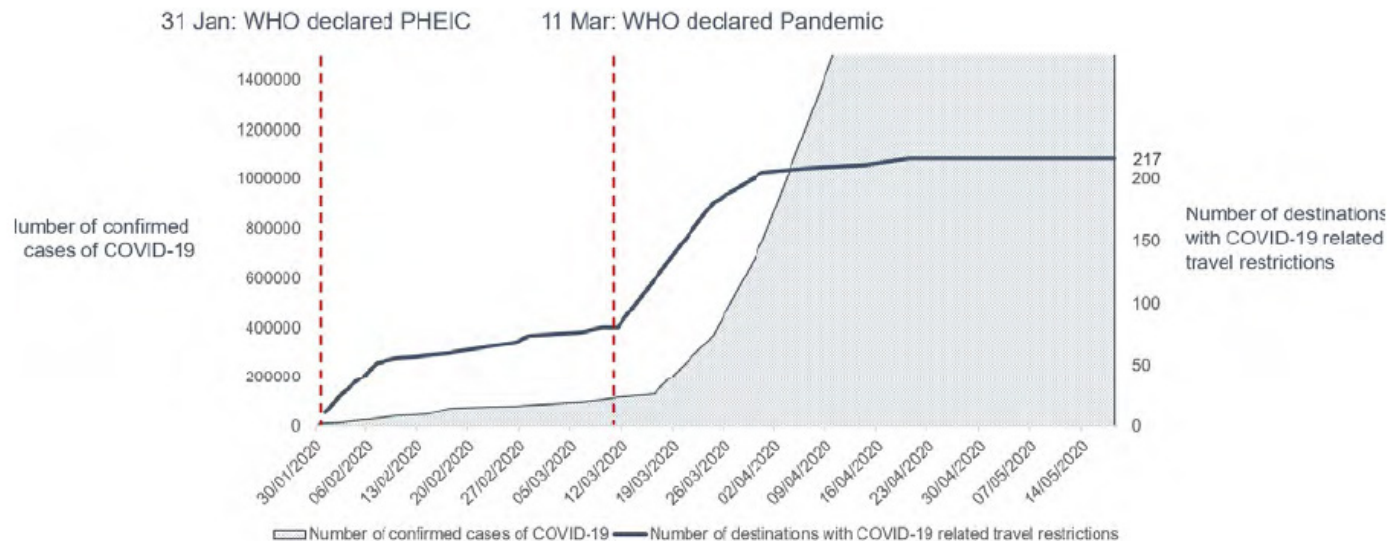
In April 2020, global international passenger capacity so far experienced by **unprecedented 94% reduction** (estimated)

	State/Territory with 100 to 999 confirmed cases*
	State/Territory with 1,000 to 9,999 confirmed cases*
	State/Territory with 10,000 to 49,999 confirmed cases*
	State/Territory with 50,000 or more confirmed cases*

*: Coronavirus Disease 2019 (COVID-19) Situation Report by WHO (30 April 2020)

Drastic reduction in passenger traffic amplified by travel restrictions

Number of confirmed cases and destinations with COVID-19-related travel restrictions

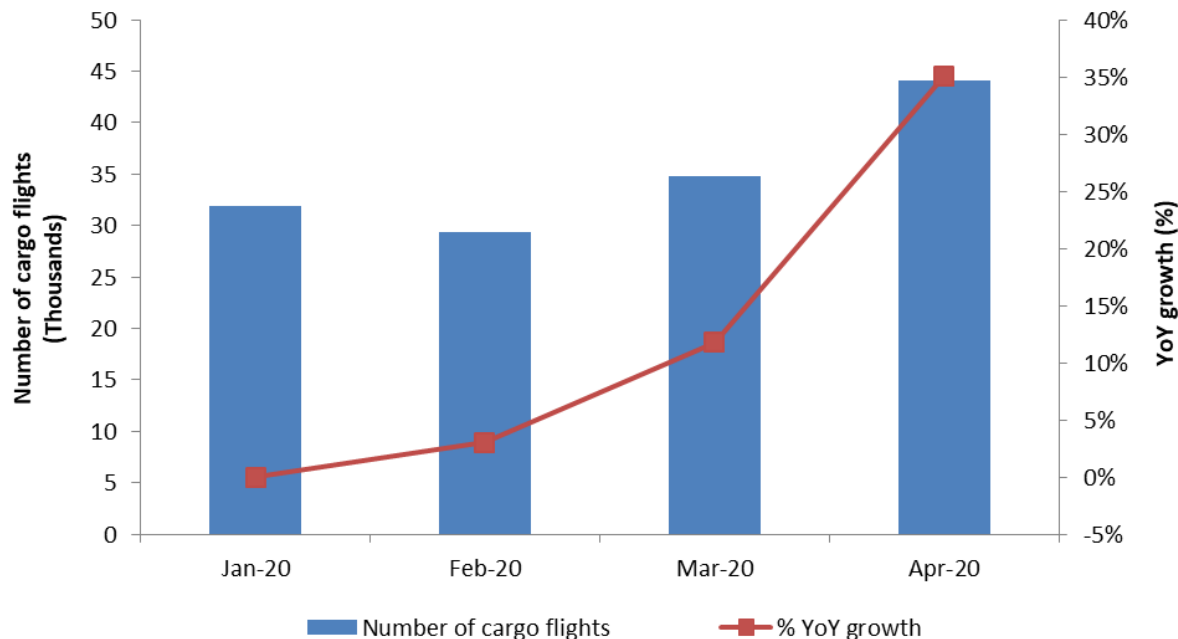


As of 18 May 2020, 100% of all world destinations have travel restrictions. About 185 (85%) destinations have completely or partially closed their borders, while 11 destinations (5%) have suspended completely or partially international flights.

<https://www.unwto.org/news/covid-19-response-travel-restrictions>

**In contrast, surge in cargo flights
since March 2020**

In contrast to the fall in passenger traffic, cargo flights surged with the increased cargo-only operations using passenger aircraft





Appendix B: Scenario Assumptions in Detail

(International and domestic)	Baseline (Originally-planned, business as usual)	
	Seat capacity	Passenger load factor
January 2020	Airlines' winter schedules filed with OAG as of 6 January 2020	Forecasted 2020 load factor by region/route group, based on ICAO long-term traffic forecasts (LTF), which was adjusted monthly by difference between 2019 actual monthly results (ICAO, IATA) and 2019 LTF forecasted load factor
February 2020		
March 2020		
April 2020		
May 2020	Maximum number of seats taken from airlines' summer schedules filed with OAG during the period from 6 January 2020 to 20 April 2020	
June 2020		
July 2020		
August 2020		
September 2020	Using 2019 winter schedule as the base, and applying the growth rate of 2019/2018	
October 2020		
November 2020		
December 2020		

(International and domestic)	Scenarios 1/1a, 2/2a and Reference	
	Seat capacity	Passenger load factor
January 2020	Actual capacity based on ICAO ADS-B data	Actual estimated results by region/route group
February 2020		
March 2020		43 percentage points (international) and 31 percentage points (domestic) lower than Baseline with adjustment of GDP impact by region/route group
April 2020		
May 2020	<p>Scenarios 1/1a & 2/2a: Application of monthly "base percentage" which incorporates impacts of intra-/inter-regional share difference (2019), or most recent airlines' schedules filed with OAG, whichever is smaller</p> <p>Reference: Most recent airlines' schedules filed with OAG</p> <p>Scenarios 1/1a & 2/2a: Application of monthly "base percentage" which incorporates impacts of intra-/inter-regional share difference (2019)</p> <p>Reference: Most recent airlines' schedules filed with OAG</p>	Application of "base percentage" which incorporates GDP impact by region/route group
June 2020		
July 2020		
August 2020		
September 2020		
October 2020		
November 2020		
December 2020		

International (world average)

Seat capacity	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-87%	-56%	-26%	-13%	-9%	-10%	-13%
Scenario 1	-91%	-80%	-64%	-51%	-42%	-37%	-33%
Scenario 1a	-91%	-80%	-64%	-60%	-72%	-69%	-65%
Scenario 2	-91%	-85%	-79%	-72%	-65%	-57%	-47%
Scenario 2a	-91%	-85%	-79%	-75%	-72%	-70%	-69%

Load factor	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-29%	-18%	-13%	-10%	-7%	-6%	-5%
Scenario 1	-33%	-22%	-16%	-13%	-10%	-9%	-8%
Scenario 1a	-33%	-22%	-26%	-26%	-24%	-20%	-16%
Scenario 2	-41%	-38%	-36%	-33%	-29%	-24%	-16%
Scenario 2a	-41%	-38%	-36%	-33%	-30%	-27%	-24%

Domestic (world average)

Seat capacity	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-51%	-27%	-4%	4%	2%	-10%	-12%
Scenario 1	-61%	-45%	-31%	-22%	-14%	-10%	-7%
Scenario 1a	-61%	-45%	-31%	-28%	-36%	-34%	-30%
Scenario 2	-61%	-51%	-44%	-39%	-33%	-25%	-16%
Scenario 2a	-61%	-51%	-44%	-40%	-37%	-35%	-34%

Load factor	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reference	-20%	-13%	-9%	-5%	-3%	-3%	-2%
Scenario 1	-23%	-16%	-12%	-8%	-6%	-6%	-5%
Scenario 1a	-23%	-16%	-16%	-17%	-13%	-11%	-10%
Scenario 2	-29%	-25%	-22%	-20%	-18%	-14%	-10%
Scenario 2a	-29%	-25%	-24%	-23%	-21%	-19%	-18%

- Base percentages of seat capacity already take into consideration short-/long-haul (intra-/inter-region) impacts and will be applied to Baseline level of seat capacity
- Base percentages of load factor already take into consideration economic (GDP) factors and will be added to 2019 load factor %

- **Seat capacity (seats available for sale):** OAG airlines schedule data; Route Online; airline websites and ICAO ADS-B operational data
- **Load factor (RPKs/ASKs):** ICAO long-term traffic forecasts (LTF); ICAO statistical reporting forms; IATA economics data; and airline news release
- **Historical passenger traffic (including ASKs, RPKs, passenger numbers and operating revenues):** ICAO Annual Report of the Council; and ICAO statistical reporting forms
- **Yield (passenger revenues/RPK):** ICAO revenue-cost analysis of airlines (RCA); and ICAO-ICM Marketing Information Data Transfer (MIDT passenger origin-destination)
- **Macroeconomic factors (GDP impact):** Income elasticity of demand estimated for ICAO LTF; and IMF and World Bank economic outlook data

Note 1: A list of route group is shown in **Appendix D**.

Note 2: Average air fares (i.e. passenger yield multiplied by average trip distance) for each region/route group are used to estimate gross passenger operating revenues.



Appendix C: Summary of Key Impact Indicators

Figures and estimates herein are subject to substantial changes, and will be updated with the situation evolving and more information available.

Baseline

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	5.7%	6.83	1.08
Asia/Pacific	3.6%	69.95	8.30
Europe	1.2%	22.46	2.52
Latin America/Caribbean	2.9%	12.40	1.03
Middle East	2.1%	4.78	0.93
North America	3.0%	34.74	3.71
Total	2.8%	151.16	17.57

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	3.0%	12.29	1.43
February 2020	5.4%	19.69	2.35
March 2020	2.8%	12.33	1.19
April 2020	2.4%	10.92	1.26
May 2020	2.7%	12.04	1.52
June 2020	3.1%	14.54	1.67
July 2020	3.1%	15.54	1.79
August 2020	2.4%	12.29	1.49
September 2020	2.9%	13.02	1.43
October 2020	1.7%	8.54	1.00
November 2020	1.6%	7.50	0.90
December 2020	2.8%	12.46	1.55
Total	2.8%	151.16	17.57

Reference

	Reference (compared to Baseline)			Reference (compared to 2019)		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-38.8%	-57.14	-8.64	-35.3%	-50.31	-7.56
Asia/Pacific	-29.9%	-656.69	-80.31	-27.4%	-586.75	-72.01
Europe	-35.2%	-508.73	-61.41	-34.4%	-486.27	-58.89
Latin America/Caribbean	-30.4%	-126.41	-16.98	-28.4%	-114.01	-15.95
Middle East	-34.2%	-81.94	-13.01	-32.8%	-77.15	-12.09
North America	-24.7%	-371.01	-53.46	-22.4%	-336.26	-49.74
Total	-30.6%	-1,801.92	-233.82	-28.7%	-1,650.76	-216.24

	Reference (compared to Baseline)			Reference (compared to 2019)		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-1.4%	-5.19	-0.06	1.5%	7.10	1.37
February 2020	-13.7%	-66.82	-7.74	-9.0%	-47.13	-5.40
March 2020	-38.6%	-213.89	-27.13	-36.9%	-201.56	-25.94
April 2020	-82.2%	-354.57	-45.59	-81.7%	-343.65	-44.34
May 2020	-80.8%	-350.12	-45.06	-80.3%	-338.08	-43.54
June 2020	-66.4%	-310.00	-41.68	-65.4%	-295.46	-40.01
July 2020	-39.4%	-218.26	-30.60	-37.6%	-202.71	-28.81
August 2020	-13.2%	-102.34	-14.53	-11.2%	-90.05	-13.04
September 2020	-3.3%	-42.43	-5.91	-0.5%	-29.41	-4.48
October 2020	-2.8%	-30.41	-3.90	-1.1%	-21.87	-2.91
November 2020	-10.2%	-50.94	-5.26	-8.7%	-43.44	-4.36
December 2020	-12.2%	-56.96	-6.35	-9.7%	-44.50	-4.80
Total	-30.6%	-1,801.92	-233.82	-28.7%	-1,650.76	-216.24



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Estimated results: Scenario 1 (World total)

Compared to Baseline (business as usual)	Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-53.3%	-74.00	-12.13	-61.2%	-84.94	-14.15
Asia/Pacific	-37.3%	-798.80	-98.88	-43.7%	-938.43	-117.16
Europe	-51.2%	-694.53	-85.05	-59.7%	-808.77	-99.80
Latin America/Caribbean	-46.0%	-183.36	-23.39	-54.0%	-216.40	-27.19
Middle East	-51.6%	-114.71	-18.82	-58.6%	-131.21	-21.58
North America	-34.2%	-478.60	-70.05	-40.9%	-565.56	-82.04
Total	-41.9%	-2,344.01	-308.32	-49.1%	-2,745.32	-361.93

Compared to Baseline (business as usual)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-1.4%	-5.19	-0.06	-1.4%	-5.19	-0.06
February 2020	-13.7%	-66.82	-7.74	-13.7%	-66.82	-7.74
March 2020	-38.6%	-213.89	-27.13	-38.6%	-213.89	-27.13
April 2020	-82.2%	-354.57	-45.59	-82.2%	-354.57	-45.59
May 2020	-80.8%	-350.12	-45.06	-80.8%	-350.12	-45.06
June 2020	-73.9%	-337.79	-44.39	-73.9%	-337.79	-44.39
July 2020	-60.2%	-302.97	-40.56	-60.2%	-302.97	-40.56
August 2020	-45.6%	-236.35	-31.90	-45.6%	-252.33	-34.16
September 2020	-34.2%	-165.16	-22.09	-41.8%	-219.81	-29.39
October 2020	-26.0%	-127.57	-17.42	-51.2%	-238.89	-32.19
November 2020	-20.8%	-96.27	-13.56	-48.4%	-203.32	-27.76
December 2020	-17.4%	-87.30	-12.80	-44.7%	-199.61	-27.89
Total	-41.9%	-2,344.01	-308.32	-49.1%	-2,745.32	-361.93

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-50.6%	-67.17	-11.05	-59.0%	-78.11	-13.07
Asia/Pacific	-35.1%	-728.85	-90.58	-41.7%	-868.48	-108.87
Europe	-50.6%	-672.08	-82.53	-59.2%	-786.31	-97.28
Latin America/Caribbean	-44.4%	-170.96	-22.36	-52.7%	-204.00	-26.16
Middle East	-50.6%	-109.93	-17.89	-57.8%	-126.43	-20.65
North America	-32.3%	-443.86	-66.34	-39.1%	-530.82	-78.33
Total	-40.3%	-2,192.84	-290.75	-47.7%	-2,594.16	-344.36

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.5%	7.10	1.37	1.5%	7.10	1.37
February 2020	-9.0%	-47.13	-5.40	-9.0%	-47.13	-5.40
March 2020	-36.9%	-201.56	-25.94	-36.9%	-201.56	-25.94
April 2020	-81.7%	-343.65	-44.34	-81.7%	-343.65	-44.34
May 2020	-80.3%	-338.08	-43.54	-80.3%	-338.08	-43.54
June 2020	-73.1%	-323.25	-42.72	-73.1%	-323.25	-42.72
July 2020	-58.9%	-287.43	-38.77	-58.9%	-287.43	-38.77
August 2020	-44.3%	-224.06	-30.41	-44.3%	-240.04	-32.67
September 2020	-32.4%	-152.15	-20.66	-40.2%	-206.80	-27.96
October 2020	-24.7%	-119.03	-16.42	-50.3%	-230.35	-31.19
November 2020	-19.5%	-88.78	-12.66	-47.5%	-195.82	-26.86
December 2020	-15.0%	-74.84	-11.26	-43.1%	-187.15	-26.34
Total	-40.3%	-2,192.84	-290.75	-47.7%	-2,594.16	-344.36



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Estimated results: Scenario 2 (World total)

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-61.7%	-86.92	-14.60	-65.1%	-90.78	-15.29
Asia/Pacific	-43.9%	-967.60	-119.41	-46.7%	-1,027.81	-126.57
Europe	-59.3%	-821.00	-101.65	-62.7%	-858.47	-106.37
Latin America/Caribbean	-54.2%	-216.87	-27.34	-57.6%	-230.28	-28.81
Middle East	-59.7%	-135.19	-22.26	-62.7%	-140.87	-23.19
North America	-41.6%	-591.92	-85.66	-44.4%	-629.64	-90.66
Total	-49.3%	-2,819.49	-370.91	-52.3%	-2,977.85	-390.88

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-1.4%	-5.19	-0.06	-1.4%	-5.19	-0.06
February 2020	-13.7%	-66.82	-7.74	-13.7%	-66.82	-7.74
March 2020	-38.6%	-213.89	-27.13	-38.6%	-213.89	-27.13
April 2020	-82.2%	-354.57	-45.59	-82.2%	-354.57	-45.59
May 2020	-80.8%	-350.12	-45.06	-80.8%	-350.12	-45.06
June 2020	-73.9%	-345.10	-45.24	-73.9%	-345.10	-45.24
July 2020	-65.8%	-342.37	-45.49	-65.8%	-342.37	-45.49
August 2020	-59.4%	-313.91	-42.26	-59.4%	-317.14	-42.56
September 2020	-53.2%	-263.86	-35.07	-54.8%	-272.97	-36.19
October 2020	-46.3%	-236.81	-31.69	-51.5%	-257.24	-34.24
November 2020	-38.2%	-181.25	-24.83	-49.2%	-222.64	-30.00
December 2020	-28.5%	-145.60	-20.74	-48.2%	-229.80	-31.57
Total	-49.3%	-2,819.49	-370.91	-52.3%	-2,977.85	-390.88

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-59.5%	-80.08	-13.52	-63.1%	-83.94	-14.21
Asia/Pacific	-41.9%	-897.65	-111.11	-44.8%	-957.86	-118.27
Europe	-58.8%	-798.54	-99.12	-62.3%	-836.01	-103.85
Latin America/Caribbean	-52.9%	-204.47	-26.31	-56.3%	-217.88	-27.78
Middle East	-58.8%	-130.41	-21.33	-62.0%	-136.09	-22.26
North America	-39.8%	-557.18	-81.95	-42.8%	-594.90	-86.95
Total	-47.9%	-2,668.33	-353.34	-51.0%	-2,826.69	-373.31

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.5%	7.10	1.37	1.5%	7.10	1.37
February 2020	-9.0%	-47.13	-5.40	-9.0%	-47.13	-5.40
March 2020	-36.9%	-201.56	-25.94	-36.9%	-201.56	-25.94
April 2020	-81.7%	-343.65	-44.34	-81.7%	-343.65	-44.34
May 2020	-80.3%	-338.08	-43.54	-80.3%	-338.08	-43.54
June 2020	-73.1%	-330.56	-43.58	-73.1%	-330.56	-43.58
July 2020	-64.8%	-326.83	-43.69	-64.8%	-326.83	-43.69
August 2020	-58.4%	-301.62	-40.77	-58.4%	-304.85	-41.07
September 2020	-51.8%	-250.85	-33.64	-53.5%	-259.95	-34.76
October 2020	-45.4%	-228.27	-30.69	-50.7%	-248.70	-33.24
November 2020	-37.2%	-173.76	-23.93	-48.4%	-215.14	-29.10
December 2020	-26.5%	-133.14	-19.19	-46.8%	-217.34	-30.02
Total	-47.9%	-2,668.33	-353.34	-51.0%	-2,826.69	-373.31

Baseline

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	6.8%	5.28	0.94
Asia/Pacific	4.6%	25.40	5.17
Europe	2.0%	24.12	2.66
Latin America/Caribbean	-0.7%	-0.36	-0.01
Middle East	3.9%	6.37	1.08
North America	-2.9%	-4.28	-0.82
Total	2.5%	56.53	9.02

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	2.3%	3.99	0.74
February 2020	5.2%	7.45	1.27
March 2020	2.6%	4.57	0.54
April 2020	2.4%	4.62	0.69
May 2020	2.4%	4.51	0.84
June 2020	3.0%	5.99	0.85
July 2020	2.4%	5.50	0.83
August 2020	2.3%	5.34	0.87
September 2020	2.2%	4.43	0.65
October 2020	1.1%	2.45	0.42
November 2020	1.3%	2.47	0.46
December 2020	3.0%	5.20	0.87
Total	2.5%	56.53	9.02

Reference

	Reference (compared to Baseline)			Reference (compared to 2019)		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-37.0%	-36.23	-6.77	-32.8%	-30.96	-5.83
Asia/Pacific	-43.3%	-263.34	-53.94	-40.7%	-237.95	-48.77
Europe	-38.3%	-408.91	-53.32	-37.1%	-384.79	-50.67
Latin America/Caribbean	-38.4%	-53.70	-10.95	-38.9%	-54.06	-10.95
Middle East	-33.6%	-65.45	-11.48	-31.0%	-59.07	-10.40
North America	-38.3%	-72.38	-18.79	-40.1%	-76.66	-19.60
Total	-39.3%	-900.01	-155.25	-37.7%	-843.48	-146.22

	Reference (compared to Baseline)			Reference (compared to 2019)		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-0.4%	0.94	0.37	1.9%	4.94	1.10
February 2020	-9.6%	-20.18	-3.87	-4.9%	-12.73	-2.60
March 2020	-47.6%	-90.67	-16.11	-46.2%	-86.11	-15.57
April 2020	-93.6%	-158.25	-28.00	-93.4%	-153.63	-27.31
May 2020	-93.2%	-159.31	-27.95	-93.0%	-154.80	-27.11
June 2020	-86.9%	-163.12	-28.12	-86.5%	-157.13	-27.27
July 2020	-56.2%	-124.82	-21.70	-55.1%	-119.31	-20.87
August 2020	-25.6%	-70.63	-11.73	-23.9%	-65.28	-10.86
September 2020	-12.7%	-37.70	-5.79	-10.8%	-33.26	-5.15
October 2020	-9.0%	-26.76	-4.05	-8.0%	-24.31	-3.63
November 2020	-10.0%	-22.39	-3.70	-8.8%	-19.92	-3.25
December 2020	-12.8%	-27.14	-4.58	-10.1%	-21.93	-3.72
Total	-39.3%	-900.01	-155.25	-37.7%	-843.48	-146.22



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UNITING AVIATION

Estimated results: Scenario 1 (International)

Compared to Baseline (business as usual)	Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-57.0%	-51.04	-10.08	-64.4%	-57.80	-11.73
Asia/Pacific	-54.6%	-323.34	-66.56	-64.1%	-378.97	-78.52
Europe	-56.2%	-558.91	-74.07	-64.7%	-644.26	-86.48
Latin America/Caribbean	-50.9%	-68.67	-13.91	-58.1%	-78.56	-15.81
Middle East	-54.2%	-96.04	-17.08	-61.0%	-109.03	-19.52
North America	-55.1%	-98.18	-25.89	-61.2%	-109.48	-29.09
Total	-55.2%	-1,196.18	-207.58	-63.5%	-1,378.10	-241.15

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-54.1%	-45.77	-9.14	-61.9%	-52.53	-10.79
Asia/Pacific	-52.5%	-297.94	-61.39	-62.4%	-353.57	-73.35
Europe	-55.3%	-534.79	-71.41	-64.0%	-620.14	-83.82
Latin America/Caribbean	-51.2%	-69.03	-13.91	-58.4%	-78.92	-15.82
Middle East	-52.4%	-89.66	-16.00	-59.5%	-102.65	-18.44
North America	-56.4%	-102.46	-26.70	-62.3%	-113.76	-29.91
Total	-54.1%	-1,139.65	-198.55	-62.6%	-1,321.57	-232.13

Compared to Baseline (business as usual)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-0.4%	0.94	0.37	-0.4%	0.94	0.37
February 2020	-9.6%	-20.18	-3.87	-9.6%	-20.18	-3.87
March 2020	-47.6%	-90.67	-16.11	-47.6%	-90.67	-16.11
April 2020	-93.6%	-158.25	-28.00	-93.6%	-158.25	-28.00
May 2020	-93.2%	-159.31	-27.95	-93.2%	-159.31	-27.95
June 2020	-90.8%	-168.70	-29.13	-90.8%	-168.70	-29.13
July 2020	-79.8%	-163.78	-28.14	-79.8%	-163.78	-28.14
August 2020	-63.6%	-135.94	-23.13	-63.6%	-144.04	-24.66
September 2020	-50.7%	-98.64	-16.48	-60.3%	-123.85	-21.07
October 2020	-42.2%	-79.79	-13.46	-72.0%	-130.53	-22.70
November 2020	-37.1%	-61.34	-10.87	-69.4%	-108.41	-19.62
December 2020	-33.0%	-60.53	-10.80	-65.4%	-111.32	-20.26
Total	-55.2%	-1,196.18	-207.58	-63.5%	-1,378.10	-241.15

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.9%	4.94	1.10	1.9%	4.94	1.10
February 2020	-4.9%	-12.73	-2.60	-4.9%	-12.73	-2.60
March 2020	-46.2%	-86.11	-15.57	-46.2%	-86.11	-15.57
April 2020	-93.4%	-153.63	-27.31	-93.4%	-153.63	-27.31
May 2020	-93.0%	-154.80	-27.11	-93.0%	-154.80	-27.11
June 2020	-90.5%	-162.71	-28.28	-90.5%	-162.71	-28.28
July 2020	-79.3%	-158.28	-27.31	-79.3%	-158.28	-27.31
August 2020	-62.7%	-130.59	-22.26	-62.7%	-138.70	-23.78
September 2020	-49.6%	-94.20	-15.84	-59.5%	-119.41	-20.43
October 2020	-41.5%	-77.34	-13.04	-71.7%	-128.08	-22.28
November 2020	-36.2%	-58.87	-10.41	-69.0%	-105.94	-19.17
December 2020	-31.0%	-55.33	-9.93	-64.4%	-106.12	-19.40
Total	-54.1%	-1,139.65	-198.55	-62.6%	-1,321.57	-232.13



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UNITING AVIATION

Estimated results: Scenario 2 (International)

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-65.2%	-59.32	-12.14	-68.4%	-61.43	-12.67
Asia/Pacific	-63.1%	-378.72	-78.47	-67.1%	-397.21	-82.46
Europe	-64.8%	-656.08	-88.29	-68.3%	-681.41	-92.03
Latin America/Caribbean	-58.5%	-79.67	-16.02	-61.8%	-83.13	-16.68
Middle East	-62.2%	-112.12	-20.11	-65.2%	-116.32	-20.90
North America	-62.8%	-112.74	-30.03	-65.6%	-116.44	-31.08
Total	-63.6%	-1,398.66	-245.05	-67.1%	-1,455.94	-255.82

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-0.4%	0.94	0.37	-0.4%	0.94	0.37
February 2020	-9.6%	-20.18	-3.87	-9.6%	-20.18	-3.87
March 2020	-47.6%	-90.67	-16.11	-47.6%	-90.67	-16.11
April 2020	-93.6%	-158.25	-28.00	-93.6%	-158.25	-28.00
May 2020	-93.2%	-159.31	-27.95	-93.2%	-159.31	-27.95
June 2020	-90.8%	-170.23	-29.43	-90.8%	-170.23	-29.43
July 2020	-85.0%	-176.61	-30.56	-85.0%	-176.61	-30.56
August 2020	-79.2%	-169.99	-29.45	-79.2%	-169.99	-29.45
September 2020	-71.9%	-141.68	-24.34	-74.8%	-144.69	-24.89
October 2020	-65.3%	-126.42	-22.00	-71.9%	-133.78	-23.35
November 2020	-57.4%	-98.22	-17.77	-70.2%	-112.86	-20.52
December 2020	-46.9%	-88.04	-15.94	-68.9%	-120.32	-22.05
Total	-63.6%	-1,398.66	-245.05	-67.1%	-1,455.94	-255.82

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-62.8%	-54.04	-11.20	-66.3%	-56.16	-11.72
Asia/Pacific	-61.4%	-353.33	-73.30	-65.6%	-371.82	-77.29
Europe	-64.1%	-631.96	-85.63	-67.6%	-657.29	-89.37
Latin America/Caribbean	-58.8%	-80.03	-16.02	-62.1%	-83.49	-16.68
Middle East	-60.7%	-105.75	-19.03	-63.9%	-109.95	-19.82
North America	-63.9%	-117.02	-30.85	-66.6%	-120.71	-31.90
Total	-62.7%	-1,342.13	-236.03	-66.3%	-1,399.41	-246.79

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.9%	4.94	1.10	1.9%	4.94	1.10
February 2020	-4.9%	-12.73	-2.60	-4.9%	-12.73	-2.60
March 2020	-46.2%	-86.11	-15.57	-46.2%	-86.11	-15.57
April 2020	-93.4%	-153.63	-27.31	-93.4%	-153.63	-27.31
May 2020	-93.0%	-154.80	-27.11	-93.0%	-154.80	-27.11
June 2020	-90.5%	-164.24	-28.58	-90.5%	-164.24	-28.58
July 2020	-84.6%	-171.11	-29.73	-84.6%	-171.11	-29.73
August 2020	-78.7%	-164.65	-28.58	-78.7%	-164.65	-28.58
September 2020	-71.3%	-137.25	-23.69	-74.3%	-140.26	-24.24
October 2020	-64.9%	-123.97	-21.58	-71.6%	-131.33	-22.93
November 2020	-56.9%	-95.75	-17.31	-69.8%	-110.39	-20.07
December 2020	-45.3%	-82.83	-15.08	-67.9%	-115.11	-21.19
Total	-62.7%	-1,342.13	-236.03	-66.3%	-1,399.41	-246.79

Baseline

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	3.7%	1.56	0.14
Asia/Pacific	3.2%	44.55	3.13
Europe	-1.1%	-1.66	-0.13
Latin America/Caribbean	4.9%	12.76	1.04
Middle East	-4.2%	-1.59	-0.15
North America	4.1%	39.02	4.53
Total	3.0%	94.63	8.55

Compared to 2019 (year-on-year)	Baseline (Originally-planned or business as usual)		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	3.4%	8.29	0.70
February 2020	5.6%	12.24	1.07
March 2020	3.0%	7.77	0.66
April 2020	2.4%	6.31	0.57
May 2020	2.8%	7.53	0.68
June 2020	3.2%	8.55	0.82
July 2020	3.5%	10.04	0.96
August 2020	2.4%	6.95	0.62
September 2020	3.4%	8.59	0.78
October 2020	2.1%	6.09	0.58
November 2020	1.8%	5.03	0.44
December 2020	2.7%	7.25	0.68
Total	3.0%	94.63	8.55

Reference

	Reference (compared to Baseline)			Reference (compared to 2019)		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-41.9%	-20.90	-1.87	-39.8%	-19.35	-1.73
Asia/Pacific	-24.0%	-393.35	-26.37	-21.6%	-348.80	-23.25
Europe	-26.3%	-99.82	-8.09	-27.2%	-101.48	-8.22
Latin America/Caribbean	-26.3%	-72.71	-6.04	-22.7%	-59.95	-5.00
Middle East	-36.4%	-16.49	-1.54	-39.1%	-18.08	-1.68
North America	-22.1%	-298.63	-34.67	-18.9%	-259.61	-30.14
Total	-24.4%	-901.91	-78.57	-22.1%	-807.28	-70.02

	Reference (compared to Baseline)			Reference (compared to 2019)		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-2.0%	-6.13	-0.43	1.3%	2.17	0.26
February 2020	-16.4%	-46.64	-3.87	-11.8%	-34.40	-2.80
March 2020	-32.4%	-123.22	-11.02	-30.4%	-115.45	-10.37
April 2020	-73.8%	-196.33	-17.60	-73.2%	-190.02	-17.03
May 2020	-71.8%	-190.81	-17.11	-71.0%	-183.28	-16.43
June 2020	-50.7%	-146.88	-13.55	-49.2%	-138.33	-12.73
July 2020	-26.6%	-93.44	-8.90	-24.0%	-83.40	-7.94
August 2020	-3.5%	-31.71	-2.80	-1.2%	-24.76	-2.18
September 2020	3.8%	-4.73	-0.11	7.3%	3.85	0.67
October 2020	1.7%	-3.65	0.15	3.8%	2.44	0.73
November 2020	-10.3%	-28.55	-1.55	-8.7%	-23.53	-1.11
December 2020	-11.8%	-29.82	-1.76	-9.4%	-22.56	-1.08
Total	-24.4%	-901.91	-78.57	-22.1%	-807.28	-70.02



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Estimated results: Scenario 1 (Domestic)

Compared to Baseline (business as usual)	Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-46.4%	-22.96	-2.05	-55.3%	-27.14	-2.42
Asia/Pacific	-29.6%	-475.46	-32.32	-34.6%	-559.46	-38.64
Europe	-37.2%	-135.62	-10.99	-45.3%	-164.51	-13.33
Latin America/Caribbean	-43.4%	-114.69	-9.49	-51.9%	-137.84	-11.37
Middle East	-41.5%	-18.68	-1.74	-49.2%	-22.19	-2.07
North America	-30.3%	-380.42	-44.17	-37.1%	-456.08	-52.95
Total	-32.4%	-1,147.83	-100.75	-38.7%	-1,367.22	-120.78

Compared to Baseline (business as usual)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-2.0%	-6.13	-0.43	-2.0%	-6.13	-0.43
February 2020	-16.4%	-46.64	-3.87	-16.4%	-46.64	-3.87
March 2020	-32.4%	-123.22	-11.02	-32.4%	-123.22	-11.02
April 2020	-73.8%	-196.33	-17.60	-73.8%	-196.33	-17.60
May 2020	-71.8%	-190.81	-17.11	-71.8%	-190.81	-17.11
June 2020	-60.9%	-169.09	-15.26	-60.9%	-169.09	-15.26
July 2020	-45.1%	-139.19	-12.42	-45.1%	-139.19	-12.42
August 2020	-31.5%	-100.42	-8.77	-31.5%	-108.29	-9.51
September 2020	-21.8%	-66.53	-5.61	-27.9%	-95.97	-8.32
October 2020	-14.4%	-47.78	-3.96	-36.3%	-108.36	-9.49
November 2020	-10.0%	-34.93	-2.69	-34.4%	-94.91	-8.14
December 2020	-6.7%	-26.77	-2.00	-30.5%	-88.29	-7.62
Total	-32.4%	-1,147.83	-100.75	-38.7%	-1,367.22	-120.78

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-44.4%	-21.40	-1.91	-53.7%	-25.58	-2.28
Asia/Pacific	-27.4%	-430.91	-29.19	-32.6%	-514.91	-35.51
Europe	-37.9%	-137.28	-11.12	-45.9%	-166.17	-13.46
Latin America/Caribbean	-40.7%	-101.93	-8.45	-49.5%	-125.08	-10.34
Middle East	-44.0%	-20.27	-1.89	-51.3%	-23.78	-2.21
North America	-27.4%	-341.40	-39.64	-34.5%	-417.06	-48.42
Total	-30.3%	-1,053.19	-92.19	-36.9%	-1,272.59	-112.23

Compared to 2019 (year-on-year)	Scenario 1 Path 1			Scenario 1 Path 1a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.3%	2.17	0.26	1.3%	2.17	0.26
February 2020	-11.8%	-34.40	-2.80	-11.8%	-34.40	-2.80
March 2020	-30.4%	-115.45	-10.37	-30.4%	-115.45	-10.37
April 2020	-73.2%	-190.02	-17.03	-73.2%	-190.02	-17.03
May 2020	-71.0%	-183.28	-16.43	-71.0%	-183.28	-16.43
June 2020	-59.6%	-160.54	-14.44	-59.6%	-160.54	-14.44
July 2020	-43.1%	-129.15	-11.46	-43.1%	-129.15	-11.46
August 2020	-29.8%	-93.47	-8.15	-29.8%	-101.34	-8.89
September 2020	-19.2%	-57.94	-4.83	-25.5%	-87.38	-7.54
October 2020	-12.6%	-41.69	-3.38	-34.9%	-102.27	-8.90
November 2020	-8.4%	-29.90	-2.25	-33.3%	-89.88	-7.70
December 2020	-4.2%	-19.52	-1.32	-28.6%	-81.04	-6.94
Total	-30.3%	-1,053.19	-92.19	-36.9%	-1,272.59	-112.23



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Estimated results: Scenario 2 (Domestic)

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-55.1%	-27.60	-2.46	-58.8%	-29.35	-2.62
Asia/Pacific	-35.3%	-588.88	-40.94	-37.6%	-630.60	-44.11
Europe	-43.7%	-164.92	-13.36	-46.9%	-177.06	-14.34
Latin America/Caribbean	-51.9%	-137.20	-11.32	-55.4%	-147.15	-12.13
Middle East	-49.7%	-23.06	-2.15	-52.8%	-24.55	-2.29
North America	-37.6%	-479.17	-55.63	-40.4%	-513.20	-59.58
Total	-39.0%	-1,420.83	-125.86	-41.7%	-1,521.91	-135.07

Compared to Baseline (business as usual)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	-2.0%	-6.13	-0.43	-2.0%	-6.13	-0.43
February 2020	-16.4%	-46.64	-3.87	-16.4%	-46.64	-3.87
March 2020	-32.4%	-123.22	-11.02	-32.4%	-123.22	-11.02
April 2020	-73.8%	-196.33	-17.60	-73.8%	-196.33	-17.60
May 2020	-71.8%	-190.81	-17.11	-71.8%	-190.81	-17.11
June 2020	-60.9%	-174.87	-15.81	-60.9%	-174.87	-15.81
July 2020	-51.1%	-165.77	-14.92	-51.1%	-165.77	-14.92
August 2020	-43.8%	-143.92	-12.81	-43.8%	-147.15	-13.11
September 2020	-39.0%	-122.18	-10.73	-39.7%	-128.28	-11.30
October 2020	-32.7%	-110.39	-9.69	-36.9%	-123.47	-10.89
November 2020	-25.5%	-83.03	-7.06	-35.3%	-109.78	-9.48
December 2020	-15.9%	-57.56	-4.79	-34.1%	-109.48	-9.52
Total	-39.0%	-1,420.83	-125.86	-41.7%	-1,521.91	-135.07

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Region	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
Africa	-53.5%	-26.04	-2.33	-57.3%	-27.79	-2.48
Asia/Pacific	-33.3%	-544.33	-37.81	-35.6%	-586.05	-40.98
Europe	-44.3%	-166.58	-13.49	-47.5%	-178.72	-14.48
Latin America/Caribbean	-49.6%	-124.44	-10.28	-53.2%	-134.39	-11.09
Middle East	-51.8%	-24.66	-2.30	-54.8%	-26.14	-2.43
North America	-35.0%	-440.15	-51.10	-38.0%	-474.18	-55.05
Total	-37.2%	-1,326.20	-117.31	-40.0%	-1,427.27	-126.52

Compared to 2019 (year-on-year)	Scenario 2 Path 2			Scenario 2 Path 2a		
Month	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)	Seat Capacity (%)	Passenger number (million)	Passenger revenue (USD, billion)
January 2020	1.3%	2.17	0.26	1.3%	2.17	0.26
February 2020	-11.8%	-34.40	-2.80	-11.8%	-34.40	-2.80
March 2020	-30.4%	-115.45	-10.37	-30.4%	-115.45	-10.37
April 2020	-73.2%	-190.02	-17.03	-73.2%	-190.02	-17.03
May 2020	-71.0%	-183.28	-16.43	-71.0%	-183.28	-16.43
June 2020	-59.6%	-166.32	-14.99	-59.6%	-166.32	-14.99
July 2020	-49.4%	-155.73	-13.96	-49.4%	-155.73	-13.96
August 2020	-42.5%	-136.97	-12.19	-42.5%	-140.20	-12.49
September 2020	-37.0%	-113.59	-9.95	-37.7%	-119.69	-10.52
October 2020	-31.3%	-104.30	-9.11	-35.6%	-117.37	-10.31
November 2020	-24.2%	-78.00	-6.62	-34.1%	-104.75	-9.04
December 2020	-13.7%	-50.30	-4.11	-32.3%	-102.23	-8.84
Total	-37.2%	-1,326.20	-117.31	-40.0%	-1,427.27	-126.52

Appendix D: Estimated Results at Route Group Level

More detailed break-down of the information is available in the COVID-19 Air Traffic Dashboard (<https://www.icao.int/sustainability/Pages/COVID-19-Air-Traffic-Dashboard.aspx>).

In case of any discrepancy and inconsistency of information contained in this Appendix and the Dashboard, the Appendix information shall prevail as the Dashboard uses non-cleaned operational data.



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Estimated results by route group for Jan-May 2020 (compared to Baseline)

Route Group	DOM/INT	Seat capacity					Scheduled passenger (thousand)					Gross revenue (USD, million)				
		Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20
Africa	Domestic	-4.3%	-1.6%	-35.1%	-96.8%	-95.7%	-219	-262	-1,748	-3,498	-3,131	-20	-23	-156	-312	-280
Africa - Asia/Pacific	International	5.2%	-18.7%	-45.8%	-94.6%	-90.5%	18	-115	-239	-379	-361	10	-64	-132	-210	-200
Africa - Middle East	International	-5.2%	-5.9%	-55.8%	-95.9%	-94.5%	-69	-174	-1,595	-2,563	-2,480	-15	-38	-349	-561	-543
Africa - North America	International	-7.9%	-2.1%	-25.4%	-87.1%	-87.1%	-15	-8	-87	-191	-190	-11	-6	-64	-141	-140
Africa & Middle East - Central America/Caribbean	International						0	0	0	0	0	0	0	0	0	0
Africa & Middle East - South America	International	2.5%	5.4%	-22.3%	-83.7%	-89.3%	4	-8	-52	-116	-115	2	-3	-22	-48	-48
Central America/Caribbean	Domestic	-2.1%	-2.3%	-20.4%	-83.9%	-85.9%	-87	-150	-1,642	-4,399	-4,593	-6	-11	-123	-330	-344
Central America/Caribbean - Europe	International	-0.2%	1.2%	-18.7%	-94.6%	-91.5%	31	16	-522	-1,411	-1,178	11	5	-178	-482	-403
Central America/Caribbean - North America	International	5.4%	5.2%	-19.9%	-91.3%	-91.4%	490	348	-3,389	-7,668	-6,920	77	55	-532	-1,203	-1,086
Central America/Caribbean - South America	International	5.7%	5.7%	-25.7%	-96.6%	-94.8%	77	54	-463	-1,193	-1,248	14	10	-84	-218	-228
China	Domestic	-9.9%	-75.4%	-60.1%	-55.4%	-36.7%	-8,447	-46,714	-37,003	-30,975	-26,757	-743	-4,111	-3,256	-2,726	-2,355
China - Europe	International	2.6%	-51.8%	-73.9%	-93.0%	-90.8%	70	-908	-1,514	-2,020	-2,017	21	-276	-459	-613	-612
China - Middle East	International	5.7%	-56.2%	-76.5%	-91.7%	-95.7%	38	-330	-485	-581	-575	9	-81	-119	-142	-141
China - North America	International	3.6%	-44.6%	-66.2%	-92.4%	-87.4%	56	-666	-1,078	-1,529	-1,508	22	-267	-433	-614	-605
China & South West Asia - North Asia	International	-0.1%	-43.3%	-84.2%	-89.6%	-88.6%	-63	-3,428	-5,914	-5,873	-5,718	-11	-610	-1,052	-1,045	-1,017
China & South West Asia - Pacific South East Asia	International	-1.5%	-47.1%	-71.9%	-90.9%	-90.4%	-268	-5,529	-7,999	-9,107	-8,821	-58	-1,197	-1,731	-1,971	-1,909
Europe	Domestic	3.2%	2.4%	-37.1%	-89.1%	-88.0%	777	55	-12,641	-23,505	-24,348	63	4	-1,024	-1,904	-1,972
Europe - Middle East	International	1.5%	0.2%	-43.5%	-89.7%	-89.3%	345	11	-4,194	-7,572	-7,200	63	2	-772	-1,393	-1,325



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Estimated results by route group for Jan-May 2020 (compared to Baseline)

Route Group	DOM/INT	Seat capacity					Scheduled passenger (thousand)					Gross revenue (USD, million)				
		Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20
Europe - North Africa	International	0.6%	1.6%	-40.6%	-97.8%	-96.7%	69	4	-1,768	-4,009	-3,162	10	1	-261	-591	-466
Europe - North America	International	6.8%	5.4%	-34.1%	-91.2%	-93.4%	521	263	-3,016	-7,311	-8,391	164	82	-947	-2,295	-2,634
Europe - North Asia	International	5.6%	5.2%	-41.7%	-89.7%	-90.6%	62	-8	-529	-1,083	-1,095	29	-4	-248	-508	-514
Europe - Pacific South East Asia	International	-2.6%	0.1%	-13.8%	-91.5%	-90.8%	-24	-97	-555	-1,420	-1,274	-12	-49	-277	-709	-637
Europe - South America	International	-4.9%	-4.8%	-36.7%	-95.5%	-93.3%	-39	-64	-677	-1,351	-1,338	-14	-23	-242	-483	-479
Europe - South West Asia	International	1.8%	2.9%	-36.4%	-89.9%	-88.5%	56	-56	-958	-1,806	-1,754	15	-15	-258	-487	-473
Europe - Sub Saharan Africa	International	3.1%	3.4%	-26.4%	-90.3%	-91.0%	102	46	-729	-1,586	-1,521	43	19	-309	-671	-644
Intra Africa	International	-9.7%	-10.1%	-44.0%	-95.4%	-94.3%	-251	-348	-1,273	-2,307	-2,239	-33	-45	-166	-301	-292
Intra Central America/Caribbean	International	5.2%	4.3%	-27.0%	-89.7%	-88.1%	73	43	-554	-1,260	-1,316	6	4	-46	-105	-110
Intra China & South West Asia	International	-9.6%	-60.5%	-78.8%	-88.7%	-86.8%	-498	-3,012	-4,007	-4,571	-4,424	-63	-383	-510	-582	-563
Intra Europe	International	-1.6%	-3.0%	-46.1%	-96.4%	-95.6%	124	-2,171	-28,839	-58,663	-62,817	13	-221	-2,936	-5,972	-6,395
Intra Middle East	International	-2.9%	-4.4%	-67.9%	-94.8%	-94.8%	53	-175	-2,664	-3,703	-3,368	6	-20	-305	-424	-386
Intra North America	International	4.1%	3.4%	-23.1%	-93.3%	-96.8%	126	23	-1,236	-2,730	-2,615	17	3	-165	-364	-349
Intra North Asia	International	-1.5%	-2.0%	-78.6%	-96.4%	-96.2%	-25	-221	-1,072	-1,665	-1,651	-1	-12	-58	-89	-89
Intra Pacific South East Asia	International	-0.6%	-4.8%	-45.3%	-94.9%	-95.9%	-89	-1,590	-4,857	-7,706	-7,511	-13	-237	-723	-1,147	-1,118
Intra South America	International	-8.9%	-0.6%	-39.5%	-96.9%	-96.0%	-174	-29	-885	-1,625	-1,664	-30	-5	-154	-282	-289
Latin America/Caribbean - China	International	5.7%					0	0	0	0	0	0	0	0	0	0
Latin America/Caribbean - North Asia & Pacific South East Asia	International	3.6%	0.9%	-17.4%	-78.8%	-86.6%	3	-8	-29	-67	-66	2	-5	-19	-45	-45



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Estimated results by route group for Jan-May 2020 (compared to Baseline)

Route Group	DOM/INT	Seat capacity					Scheduled passenger (thousand)					Gross revenue (USD, million)				
		Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20
Middle East	Domestic	-9.4%	5.7%	-44.1%	-95.9%	-94.5%	-118	124	-1,784	-3,413	-3,321	-11	12	-166	-318	-309
Middle East - North America	International	2.7%	3.4%	-26.9%	-90.1%	-92.7%	46	23	-329	-747	-754	22	11	-156	-355	-359
Middle East - North Asia & Pacific South East Asia	International	-0.8%	-1.6%	-35.7%	-82.0%	-85.4%	-5	-318	-1,304	-2,260	-2,099	-1	-85	-349	-605	-562
Middle East - South West Asia	International	-2.4%	-0.9%	-43.7%	-96.6%	-93.5%	-97	-609	-2,872	-4,826	-4,648	-15	-96	-453	-762	-734
North America	Domestic	2.5%	5.7%	-13.9%	-66.8%	-72.9%	2,873	4,110	-36,799	-69,253	-68,398	334	477	-4,272	-8,040	-7,941
North America - North Asia	International	5.7%	5.7%	-24.6%	-85.0%	-86.7%	76	-86	-602	-1,332	-1,349	24	-27	-190	-420	-425
North America - Pacific South East Asia	International	4.8%	5.7%	-17.2%	-88.6%	-86.7%	36	-48	-282	-639	-627	28	-38	-225	-510	-500
North America - South America	International	5.6%	5.7%	-27.1%	-94.0%	-94.8%	87	64	-598	-1,263	-1,305	34	25	-235	-498	-514
North America - South West Asia	International	4.4%	5.6%	-27.8%	-91.9%	-87.9%	8	-13	-91	-183	-173	6	-9	-67	-135	-128
North Asia	Domestic	1.0%	-1.8%	-18.7%	-54.6%	-68.8%	205	-1,094	-6,885	-9,227	-9,248	10	-55	-344	-461	-462
North Asia - Pacific South East Asia	International	0.5%	-6.9%	-63.3%	-89.0%	-88.8%	-12	-1,055	-3,415	-3,928	-3,820	-3	-272	-882	-1,015	-987
Pacific South East Asia	Domestic	-4.3%	-5.2%	-30.1%	-88.1%	-84.6%	-811	-2,362	-11,897	-25,117	-23,079	-50	-145	-729	-1,539	-1,414
South America	Domestic	2.0%	1.7%	-39.4%	-94.8%	-93.9%	473	-11	-7,080	-13,573	-14,012	40	-1	-598	-1,145	-1,182
South West Asia	Domestic	-3.8%	2.2%	-30.4%	-98.8%	-94.4%	-775	-334	-5,742	-13,365	-13,924	-47	-20	-352	-819	-853
Domestic		-2.0%	-16.4%	-32.4%	-73.8%	-71.8%	-6,129	-46,637	-123,220	-196,325	-190,811	-431	-3,873	-11,021	-17,595	-17,114
International		-0.4%	-9.6%	-47.6%	-93.6%	-93.2%	941	-20,179	-90,673	-158,246	-159,313	367	-3,871	-16,111	-27,999	-27,946
Total		-1.4%	-13.7%	-38.6%	-82.2%	-80.8%	-5,188	-66,816	-213,893	-354,571	-350,124	-64	-7,744	-27,131	-45,594	-45,060

* May results are tentative



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Estimated results by route group for Jan-May 2020 (compared to Jan-May 2019)

Route Group	DOM/INT	Seat capacity					Scheduled passenger (thousand)					Gross revenue (USD, million)				
		Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20
Africa	Domestic	0.4%	5.5%	-32.4%	-96.7%	-95.5%	-44	-27	-1,597	-3,430	-3,016	-4	-2	-143	-306	-269
Africa - Asia/Pacific	International	18.1%	-1.2%	-37.9%	-94.0%	-89.6%	65	-48	-187	-337	-324	36	-27	-104	-186	-179
Africa - Middle East	International	7.2%	9.6%	-50.1%	-95.6%	-94.1%	246	160	-1,298	-2,329	-2,267	54	35	-284	-510	-497
Africa - North America	International	7.6%	22.2%	-13.0%	-86.0%	-85.4%	16	28	-57	-175	-165	12	20	-42	-129	-122
Africa & Middle East - Central America/Caribbean	International		-100.0%				0	0	0	0	0	0	0	0	0	0
Africa & Middle East - South America	International	-5.7%	1.9%	-26.8%	-81.8%	-87.7%	-7	-12	-59	-104	-98	-3	-5	-25	-43	-41
Central America/Caribbean	Domestic	9.2%	11.7%	-12.0%	-82.8%	-85.1%	426	425	-1,173	-4,089	-4,319	32	32	-88	-307	-324
Central America/Caribbean - Europe	International	-1.7%	2.6%	-21.0%	-94.4%	-91.2%	12	36	-560	-1,358	-1,137	4	12	-192	-464	-388
Central America/Caribbean - North America	International	0.0%	3.9%	-24.4%	-91.5%	-91.5%	89	295	-3,860	-7,803	-6,940	14	46	-606	-1,224	-1,089
Central America/Caribbean - South America	International	3.5%	3.6%	-28.4%	-96.4%	-94.6%	50	32	-507	-1,144	-1,202	9	6	-93	-209	-219
China	Domestic	-3.7%	-73.4%	-58.0%	-55.7%	-37.2%	-4,915	-42,473	-34,259	-31,137	-26,922	-433	-3,738	-3,015	-2,740	-2,369
China - Europe	International	4.0%	-49.0%	-73.1%	-93.1%	-90.9%	98	-813	-1,457	-2,033	-2,041	30	-247	-442	-617	-619
China - Middle East	International	6.2%	-56.4%	-77.1%	-91.8%	-95.6%	43	-330	-500	-586	-567	10	-81	-122	-144	-139
China - North America	International	-5.7%	-48.2%	-70.1%	-92.8%	-88.1%	-91	-755	-1,263	-1,618	-1,599	-37	-303	-507	-650	-642
China & South West Asia - North Asia	International	21.7%	-31.8%	-81.5%	-89.1%	-88.2%	1,222	-2,322	-4,935	-5,605	-5,510	217	-413	-878	-997	-980
China & South West Asia - Pacific South East Asia	International	6.7%	-45.6%	-71.3%	-91.0%	-90.4%	635	-5,202	-7,747	-9,090	-8,754	137	-1,126	-1,677	-1,967	-1,895
Europe	Domestic	1.5%	1.8%	-38.3%	-89.1%	-88.1%	523	45	-12,971	-23,470	-24,378	42	4	-1,051	-1,901	-1,975
Europe - Middle East	International	4.9%	6.1%	-42.6%	-89.6%	-88.1%	591	397	-4,061	-7,492	-6,431	109	73	-747	-1,379	-1,183



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Estimated results by route group for Jan-May 2020 (compared to Jan-May 2019)

Route Group	DOM/INT	Seat capacity					Scheduled passenger (thousand)					Gross revenue (USD, million)				
		Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20
Europe - North Africa	International	-0.9%	5.6%	-42.3%	-97.7%	-96.7%	52	145	-1,836	-3,753	-3,156	8	21	-271	-553	-465
Europe - North America	International	0.4%	4.1%	-36.2%	-91.3%	-93.5%	176	203	-3,227	-7,404	-8,453	55	64	-1,013	-2,324	-2,653
Europe - North Asia	International	4.3%	6.4%	-41.9%	-89.4%	-90.4%	52	2	-529	-1,050	-1,072	24	1	-248	-492	-503
Europe - Pacific South East Asia	International	5.5%	6.7%	-19.2%	-91.3%	-90.7%	118	9	-661	-1,377	-1,251	59	5	-330	-688	-625
Europe - South America	International	-2.7%	0.0%	-36.9%	-95.4%	-93.1%	-4	1	-675	-1,310	-1,302	-1	1	-241	-468	-466
Europe - South West Asia	International	-8.3%	-3.9%	-43.0%	-89.9%	-87.9%	-142	-174	-1,169	-1,793	-1,665	-38	-47	-315	-483	-449
Europe - Sub Saharan Africa	International	0.6%	5.2%	-27.5%	-90.4%	-90.9%	59	75	-755	-1,600	-1,502	25	32	-320	-677	-636
Intra Africa	International	1.5%	5.3%	-36.4%	-95.0%	-93.4%	27	-25	-977	-2,080	-1,933	4	-3	-127	-272	-252
Intra Central America/Caribbean	International	1.1%	3.9%	-30.3%	-90.0%	-88.6%	21	42	-614	-1,297	-1,369	2	3	-51	-108	-114
Intra China & South West Asia	International	-2.0%	-57.0%	-76.9%	-87.4%	-85.0%	-104	-2,624	-3,594	-4,059	-3,847	-13	-334	-457	-517	-490
Intra Europe	International	-0.6%	3.4%	-43.0%	-96.3%	-95.6%	922	837	-25,724	-56,601	-62,382	94	85	-2,619	-5,763	-6,351
Intra Middle East	International	0.3%	0.6%	-66.7%	-94.5%	-94.1%	188	4	-2,517	-3,510	-2,977	22	0	-288	-402	-341
Intra North America	International	-4.0%	-1.1%	-29.5%	-93.6%	-96.9%	-74	-72	-1,481	-2,820	-2,736	-10	-10	-198	-376	-365
Intra North Asia	International	-32.5%	-31.0%	-85.0%	-96.6%	-96.4%	-610	-708	-1,609	-1,760	-1,728	-33	-38	-86	-95	-93
Intra Pacific South East Asia	International	7.1%	2.0%	-42.7%	-94.7%	-95.7%	526	-1,081	-4,490	-7,439	-7,104	78	-161	-668	-1,107	-1,058
Intra South America	International	-9.5%	2.5%	-37.3%	-96.5%	-95.5%	-176	32	-818	-1,463	-1,470	-31	6	-142	-254	-255
Latin America/Caribbean - China	International	-66.0%	-100.0%	-100.0%	-100.0%	-100.0%	-5	-7	-8	-10	-10	-4	-6	-6	-7	-7
Latin America/Caribbean - North Asia & Pacific South East Asia	International	2.9%	0.7%	-19.3%	-77.2%	-84.7%	2	-8	-30	-62	-57	2	-5	-20	-42	-39



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Estimated results by route group for Jan-May 2020 (compared to Jan-May 2019)

Route Group	DOM/INT	Seat capacity					Scheduled passenger (thousand)					Gross revenue (USD, million)				
		Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jan 20	Feb 20	Mar 20	Apr 20	May 20
Middle East	Domestic	-15.5%	2.0%	-48.1%	-96.0%	-94.5%	-351	24	-2,023	-3,430	-3,337	-33	2	-188	-319	-311
Middle East - North America	International	4.8%	6.6%	-27.6%	-90.0%	-92.4%	62	44	-336	-734	-716	29	21	-160	-349	-341
Middle East - North Asia & Pacific South East Asia	International	-0.5%	2.8%	-36.0%	-81.4%	-83.6%	11	-214	-1,308	-2,176	-1,841	3	-57	-350	-583	-493
Middle East - South West Asia	International	2.9%	9.5%	-39.7%	-96.3%	-92.7%	180	-160	-2,530	-4,406	-4,121	28	-25	-400	-696	-651
North America	Domestic	4.8%	11.5%	-12.4%	-65.6%	-71.6%	4,494	7,533	-35,191	-66,295	-64,801	522	875	-4,086	-7,697	-7,523
North America - North Asia	International	3.5%	5.0%	-26.7%	-84.8%	-86.2%	50	-93	-636	-1,315	-1,300	16	-29	-201	-415	-410
North America - Pacific South East Asia	International	6.5%	12.0%	-18.2%	-88.8%	-86.5%	50	-9	-288	-650	-616	40	-7	-230	-519	-491
North America - South America	International	-8.0%	-2.8%	-34.1%	-94.1%	-94.8%	-114	-38	-732	-1,286	-1,304	-45	-15	-289	-507	-514
North America - South West Asia	International	20.4%	24.4%	-14.9%	-88.7%	-83.0%	34	14	-62	-129	-119	25	10	-46	-95	-88
North Asia	Domestic	3.1%	2.3%	-18.5%	-54.5%	-68.0%	503	-597	-6,755	-9,122	-8,882	25	-30	-338	-456	-444
North Asia - Pacific South East Asia	International	15.9%	8.6%	-59.9%	-88.9%	-88.6%	668	-388	-3,010	-3,876	-3,733	172	-100	-778	-1,001	-964
Pacific South East Asia	Domestic	1.3%	3.1%	-26.2%	-87.5%	-83.7%	691	-371	-10,437	-23,697	-21,500	42	-23	-640	-1,452	-1,318
South America	Domestic	3.2%	5.6%	-35.7%	-94.5%	-93.5%	803	625	-6,085	-12,727	-13,001	68	53	-514	-1,074	-1,097
South West Asia	Domestic	0.2%	6.6%	-27.4%	-98.7%	-94.1%	37	418	-4,965	-12,621	-13,122	2	26	-304	-773	-804
Domestic		1.3%	-11.8%	-30.4%	-73.2%	-71.0%	2,166	-34,398	-115,455	-190,018	-183,277	264	-2,802	-10,365	-17,026	-16,434
International		1.9%	-4.9%	-46.2%	-93.4%	-93.0%	4,936	-12,728	-86,107	-153,629	-154,802	1,104	-2,597	-15,572	-27,310	-27,107
Total		1.5%	-9.0%	-36.9%	-81.7%	-80.3%	7,102	-47,126	-201,562	-343,647	-338,079	1,368	-5,399	-25,937	-44,336	-43,541

* May results are tentative

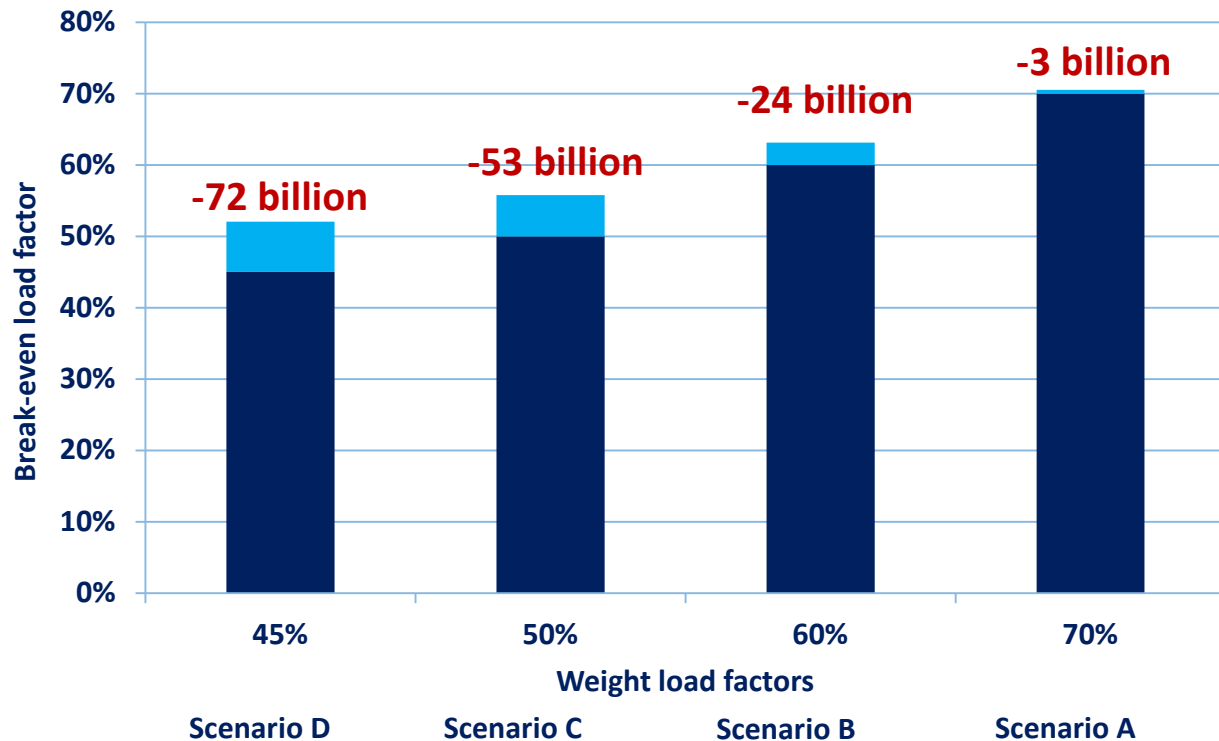
Appendix E: Airline Financial Analysis

Figures and estimates herein are subject to substantial changes, and will be updated with the situation evolving and more information available.

Scenarios are based on the assumption that air traffic, measured in Revenue Tonnes-Kilometres (RTKs, both international and domestic), will **decrease by 50% in 2020** compared to 2019

	Scenario A Weight load factor = 70%	Scenario B Weight load factor = 60%	Scenario C Weight load factor = 50%	Scenario D Weight load factor = 45%
	Load factor remains high, rebound of demand in Q3 and Q4 with severe capacity cuts	Load factor moderate-high and rebound during Q4, with capacity cuts in all regions	Low load factor and moderate return of normal capacity in Q3 and Q4	Low load factors (social distancing) and airlines increase capacity in Q2 2020
Total capacity reduction	-51%	-42%	-31%	-23%
Fuel costs (USD, billion) <i>Oil price: 49% decrease compared to 2019 levels</i>	46	54	65	72
Break-even weight load factor <i>(excluding depreciation and amortization costs)</i>	70.5%	63.1%	55.8%	52.1%

Airlines close to break even as load factor increases



Operating loss
Excluding
depreciation and
amortizations
costs

Difference between
load factor and break-
even load factors in
each scenario



Appendix F: Summary of Analysis by Other Organizations

ACI: Airport would lose USD 97.4 billion gross revenues in 2020

Region	Passenger number - both international and domestic for full year 2020		Airport revenue - both aeronautical and non-aeronautical for full year 2020	
	million and % change from 2020 "business as usual" baseline scenario		USD billion and % change from 2020 "business as usual" baseline scenario	
Africa	-114	-47.3%	-2.2	-51.2%
Asia/Pacific	-1,797	-52.9%	-29.4	-58.9%
Europe	-1,416	-57.1%	-37.1	-62.6%
Latin America/Caribbean	-289	-44.2%	-5.3	-50.5%
Middle East	-201	-46.9%	-7.0	-53.0%
North America	-859	-41.1%	-16.4	-47.3%
Total	-4,676	-50.4%	-97.4	-56.7%

<https://aci.aero/wp-content/uploads/2020/05/200505-Third-Economic-Impact-Bulletin-FINAL.pdf>



IATA: Airlines would lose USD 84 billion net profits in 2020

IATA's estimates are based on "region of airline registration" while ICAO uses "all traffic from States in each region" for the regional break-down.

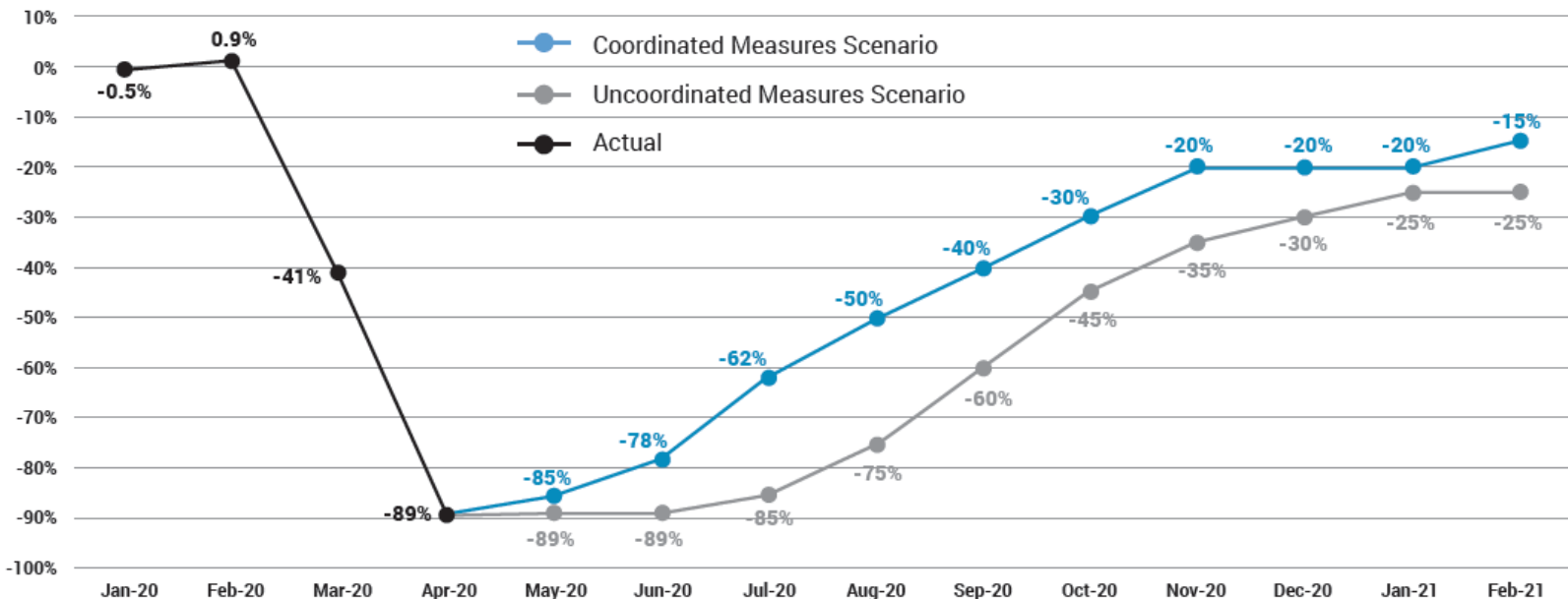
IATA recently updated its estimated loss of gross passenger revenues from **USD 314 billion to USD 371 billion** (USD 419 billion including passengers, cargo and others) but no regional break-down was released.

Region of airline registration	Revenue Passenger Kilometres (RPKs) - both international and domestic for full year 2020	Net profit for full year 2020
	year-on-year % change from 2019 level	USD billion, compared to 2019 level
Africa	-58.5%	-2.0
Asia/Pacific	-53.8%	-29.0
Europe	-56.4%	-21.5
Latin America/Caribbean	-57.4%	-4.0
Middle East	-56.1%	-4.8
North America	-52.6%	-23.1
Total	-54.7%	-84.3

<https://www.iata.org/en/iata-repository/publications/economic-reports/airline-industry-economic-performance-june-2020-data-tables/>

EUOCONTROL: A loss of € 110 billion for airlines, airports and ANSPs in Europe in 2020

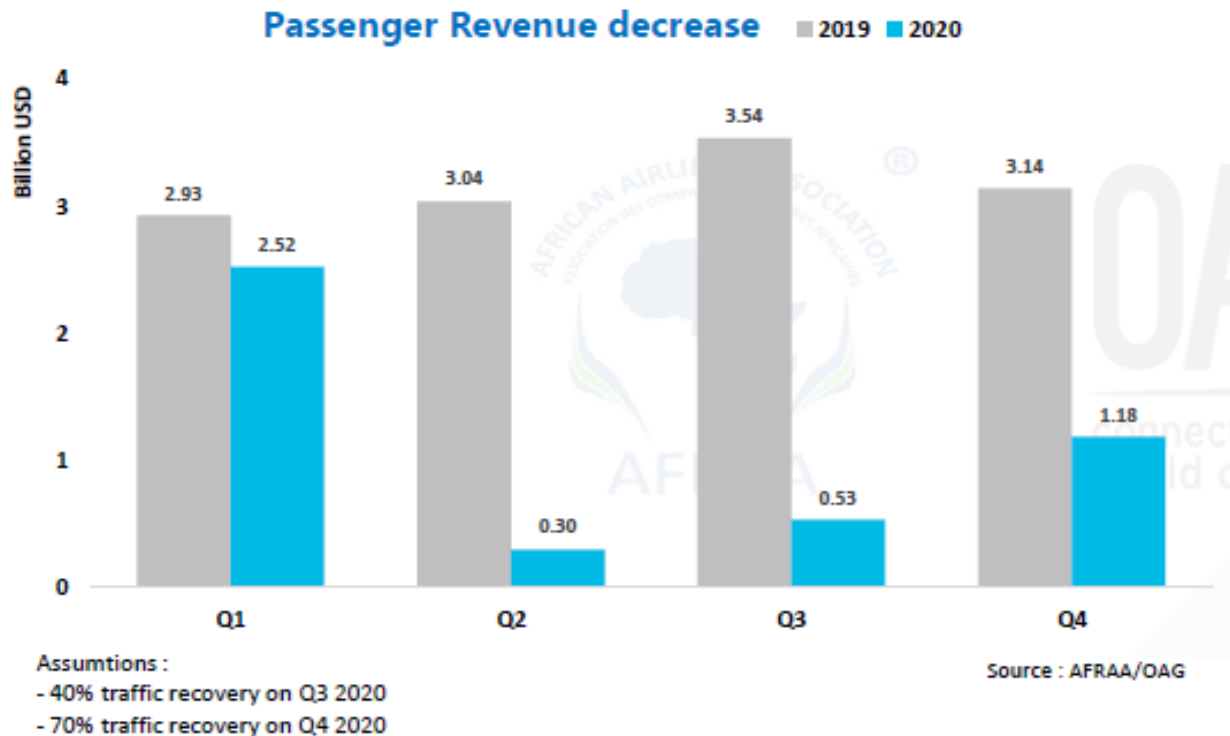
EUROCONTROL Draft Traffic Scenarios - 24 April 2020 (base year 2019)



The Coordinated Measures Scenario envisages a loss of 45% of flights (5 million) in 2020, while the Uncoordinated Measures Scenario would result in the loss of 57% of flights (6.2 million).

<https://www.eurocontrol.int/covid19#traffic-scenarios>

AFRAA: African Airlines would lose USD 8.1 billion passenger revenues in 2020

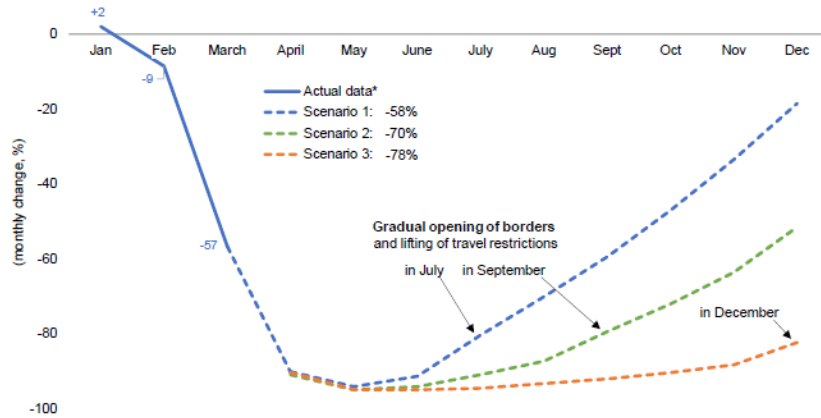


AFRAA's estimates (USD 8.1 billion loss) is greater than IATA's estimates (USD 6 billion loss). Both estimates are for airlines registered in Africa.

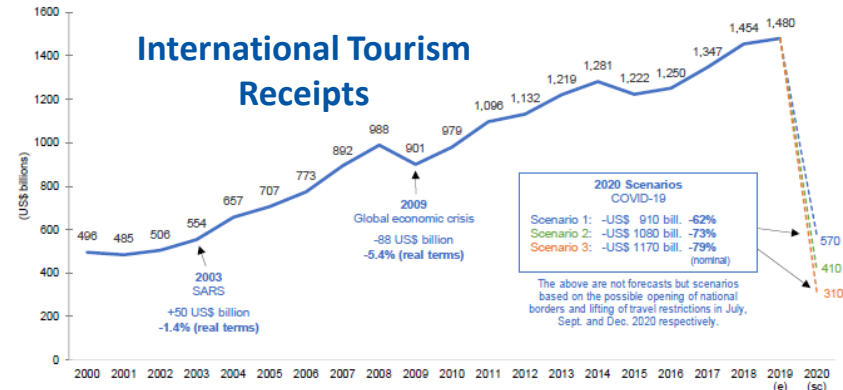
<http://afraa.org/wp-content/uploads/2020/06/CoVID-19-Impact-assessment.pdf>

UNWTO: A loss of USD 910 to 1,170 billion in international tourism receipts in 2020

Three scenarios dependent upon re-opening of borders International Tourism Arrivals (year-on-year % change from 2019 level)



<https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-05/Barometer%20-%20May%202020%20-%20Short.pdf>



WTTC: A loss of 100 million jobs in travel and tourism sector in 2020

2020 forecasts – COVID-19 impact on travel and tourism sector

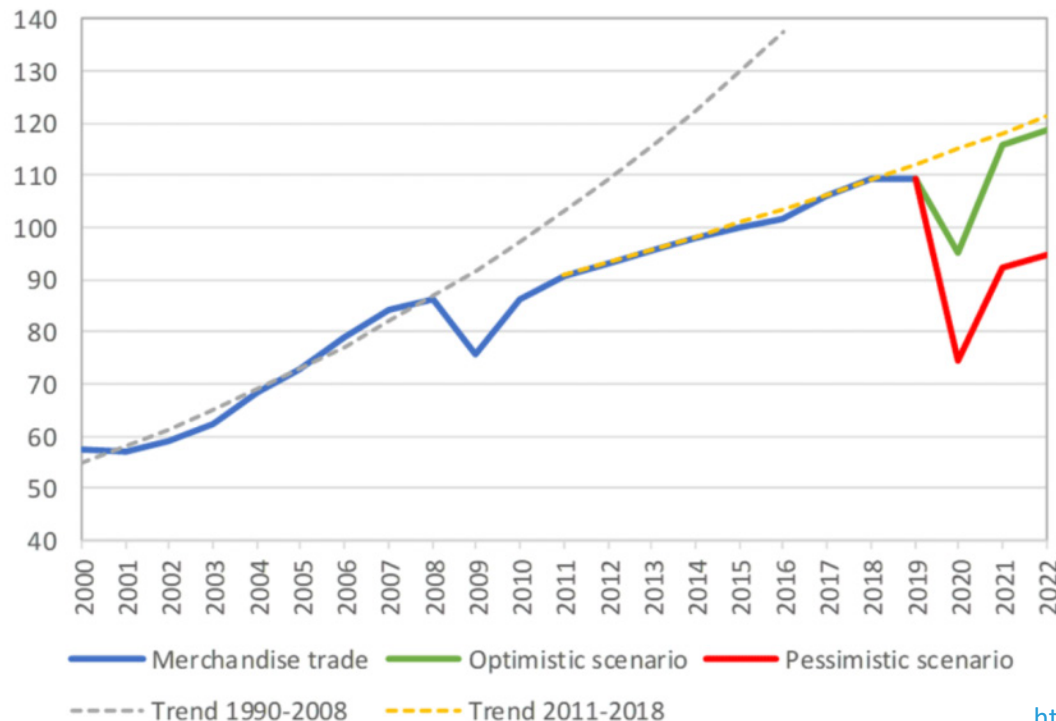
Region	Potential Total Job Losses (million)	Total GDP Loss (USD billion*)
Africa	-7.6	-52.8
Asia/Pacific	-63.4	-1,041.0
Europe	-13.0	-708.5
Latin America/Caribbean	-5.9	-110.2
Middle East	-2.6	-96.2
North America	-8.2	-680.7
Total	-100.8	-2689.4

* based on 2019 prices and exchange rates

<https://wtcc.org/About/News-Media/Press-Releases>

Index, 2015=100

World merchandise trade volume, 2000-2022



- World merchandise trade is set to plummet by between 13 and 32% in 2020 due to the COVID-19 pandemic.
- A 2021 recovery in trade is expected, but dependent on the duration of the outbreak and the effectiveness of the policy responses.
- Nearly all regions will suffer double-digit declines in trade volumes in 2020, with exports from North America and Asia hit hardest.

https://www.wto.org/english/news_e/pres20_e/pr855_e.htm

IMF & World Bank: Global economy is projected to contract by -3% to -5.2% in 2020

The Projections assume that the pandemic fades in the second half of 2020 and containment efforts can be gradually unwound

Real GDP (Percent change from previous year)	IMF			World Bank		
	2019	2020	2021	2019	2020	2021
World	2.9	-3.0	5.8	2.4	-5.2	4.2
Advanced economies	1.7	-6.1	4.5	1.6	-7.0	3.9
United States	2.3	-5.9	4.7	2.3	-6.1	4.0
Euro Area	1.2	-7.5	4.7	1.2	-9.1	4.5
Japan	0.7	-5.2	3.0	0.7	-6.1	2.5
Emerging market and developing economies	3.7	-1.0	6.6	3.5	-2.5	4.6
Emerging and Developing Asia	5.5	1.0	8.5			
East Asia and Pacific				5.9	0.5	6.6
China	6.1	1.2	9.2	6.1	1.0	6.9
South Asia				4.7	-2.7	2.8
India	4.2	1.9	7.4	4.2	-3.2	3.1
Emerging and Developing Europe	2.1	-5.2	4.2			
Europe and Central Asia				2.2	-4.7	3.6
Russia	1.3	-5.5	3.5	1.3	-6.0	2.7

Real GDP (Percent change from previous year)	IMF			World Bank		
	2019	2020	2021	2019	2020	2021
Emerging market and developing economies						
Middle East and Central Asia	1.2	-2.8	4.0			
Middle East and North Africa				-0.2	-4.2	2.3
Saudi Arabia	0.3	-2.3	2.9	0.3	-3.8	2.5
Sub-Saharan Africa	3.1	-1.6	4.1	2.2	-2.8	3.1
Nigeria	2.2	-3.4	2.4	2.2	-3.2	1.7
South Africa	0.2	-5.8	4.0	0.2	-7.1	2.9
Latin America and the Caribbean	0.1	-5.2	3.4	0.8	-7.2	2.8
Brazil	1.1	-5.3	2.9	1.1	-8.0	2.2
Mexico	-0.1	-6.6	3.0	-0.3	-7.5	3.0
High-income countries				1.7	-6.8	3.8
Developing countries				3.7	-2.4	4.7
Low-income countries	5.1	0.4	5.6	5.0	1.0	4.6

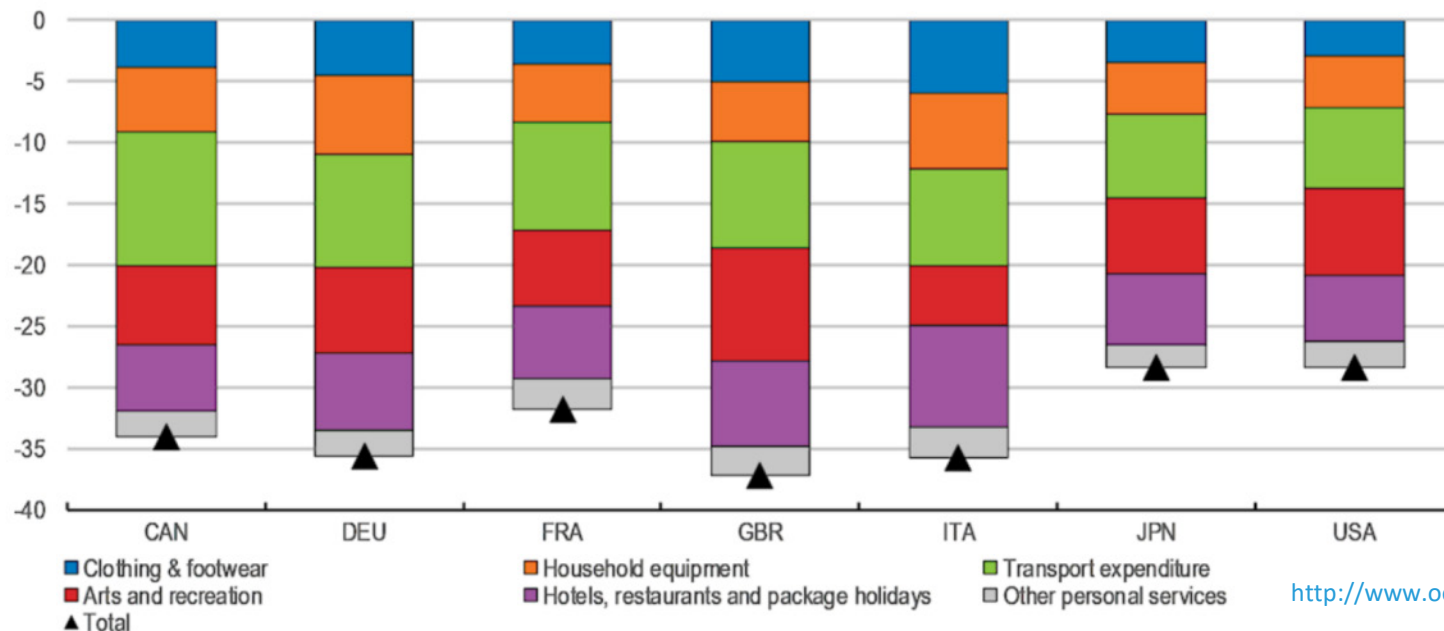
* IMF and World Bank use different Region/State classification; 2019: estimates; 2020 and 2021: projections

<https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020>
<https://www.worldbank.org/en/publication/global-economic-prospects>

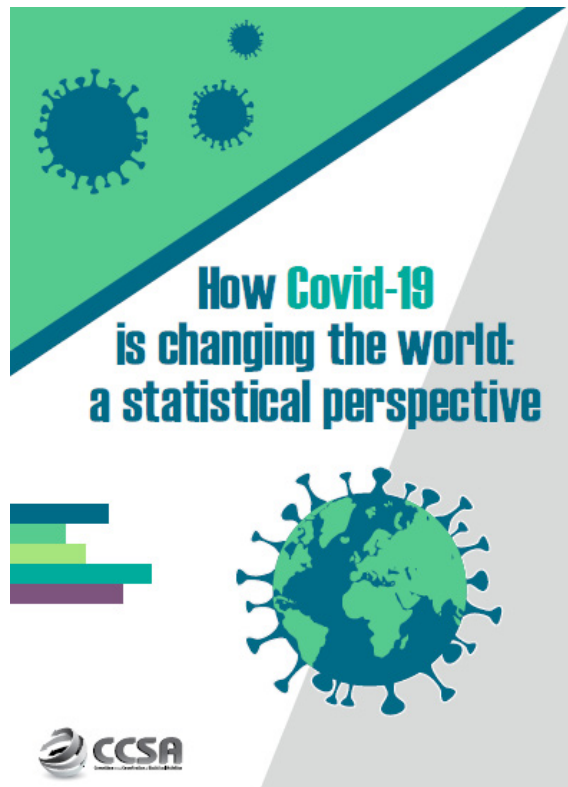
OECD: Sharp decrease in consumers' expenditures for air travel due to containment measures

The potential initial impact of partial or complete shutdowns on private consumption in the G7 economies

Per cent of total consumers' expenditure



<http://www.oecd.org/coronavirus/en/>



The new report will be published by the Committee for the Coordination of Statistical Activities (CCSA) under the auspice of the UN-DESA

ECONOMIC

Aviation industry facing deepest crisis ever in history

The aviation industry bears the weight of the consequences of the COVID-19 outbreak heavier than other industries as its "raison d'être" is the transport of people and goods all across the globe for travel, tourism, business and trade.

<https://unstats.un.org/unsd/ccsa/documents/covid19-report-ccsa.pdf>



ICAO

UNITING AVIATION

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<https://www.icao.int/sustainability/Pages/COVID-19-Air-Traffic-Dashboard.aspx>

<https://www.icao.int/Newsroom/Pages/Billion-fewer-international-air-travellers-this-year-according-to-latest-ICAO-forecast.aspx>

THANK YOU

<https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx>

<https://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx>